



Thursday, February 27

Military Allergy Program

0001 28th Annual Harold S. Nelson Military Allergy/ Immunology Symposium

7:20 am to 5:00 pm

Convention Center, Upper Level, Room 3

Pre-registration and ticket required. No fee for approved and registered military members. \$60 fee for non-military members. Continental breakfast and box lunch included.

Credit: 7.00 CME / 8.00 CE

Moderator: Kimberly S. Johnson, MD

Kimberly S. Johnson, MD

8:00 Morning Address: Dermatology for the Military Allergist

Timothy Straight, MD PhD

9:00 Break

Fellow Original Research

9:30 Safety of Cluster Allergen Immunotherapy During Refill Dosing

Tiffany J. Owens, MD

9:50 Demographics and Retention Patterns for 1999-2011 U.S. Air Force Allergy Graduates

Michelle Bandino, MD

10:10 Serologic Specific IgE (sIgE) Testing in a Closed Healthcare System

Daniel A. Steigelman, MD

10:30 Safety and Efficacy of a 12-Week Maintenance Interval in Patients Treated With Imported Fire Ant Immunotherapy

Karla E. Adams, MD

Staff Original Research

10:50 Vitamin D Supplementation Improve Urticaria Symptoms in Adult Chronic Urticaria

Tadech Boonpiyathad, MD

11:10 Increased Respiratory Illness and Transient Immune Alterations Seen with Multiple Vaccinations Administered in a Stressful Environment

Rachel Umi Lee, MD FAAAAI

11:30 Lunch and Bruton Lecture: Treatment Options for Refractory Urticaria

David A. Khan, MD FAAAAI

Fellow Case Reports

1:00 Selective IgM Deficiency Presenting as Cryptogenic Organizing Pneumonia

Cory A. Lundberg, DO

1:20 A Devastating Outcome in Undiagnosed X-Linked Agammaglobulinemia: A Call for Earlier Screening

Karen Elizabeth Bruner, MD

1:40 Intractable Burkholderia Vietnamiensis and Hemophagocytic Lymphohistiocytosis in Homozygous Interleukin-12 Receptor Beta-1 Deficiency

Ki Lee Milligan, MD

2:00 Break

2:30 Vaccine Healthcare Center Update

Limone C. Collins Jr., MD

3:00 Military Aeroallergen Extract Laboratory Updates

Susan E. Kosisky, BS MHA

Consultants to the Surgeons General Updates:

3:30 VHA Allergy Committee

Joseph S. Yusin, MD FAAAAI

3:45 Air Force

Kevin M. White, MD

4:00 Army

Michael R. Nelson, MD PhD FAAAAI

4:15 Navy

Michael R. Kaplan, DO FAAAAI

4:30 Business Meeting and Award Presentations

Upon completion of this session, participants should be able to: Discuss the approach to identifying allergic skin disorders in the military environment and the role of biopsy in the diagnosis and management; Identify the differential diagnosis of chronic urticaria and explain the diagnostic approach; Discuss the application of novel therapy in the treatment of chronic urticaria.

Fellows-In-Training and New Allergist/Immunologist Assembly Joint Reception

7:00 to 8:00 pm

Marriott North Tower, Lobby Level, Rancho Santa Fe 1-3

Reception is open to current Chrysalis participants, FITs and NAIA members.

Friday, February 28

Fellows-in-Training Program

1011 FIT Symposium

7:00 am to 2:00 pm

Marriott North Tower, Lobby Level, San Diego Ballroom Salon B

Pre-registration and ticket required. No fee. Continental breakfast and box lunch included.

Credit: No CME / No CE

7:00 Networking Breakfast

8:00 Introductions

Taylor A. Banks, MD

Mary Beth Fasano, MD FAAAAI

8:05 Networking Organizations

8:15 American Board of Allergy and Immunology

Stephen I. Wasserman, MD FAAAAI

8:20 Allergy Immunotherapy: The Basics

Michael R. Nelson, MD PhD FAAAAI

8:50 Immunotherapy Extracts

Robert G. Hamilton, PhD D.ABMLI FAAAAI

9:20 Break

9:35 Welcome from the AAAAI President

Linda Cox, MD FAAAAI

9:45 Immunotherapy: New and Emerging Issues

Linda Cox, MD FAAAAI

10:15 Immunomodulation with Immunotherapy

Joann C. Blessing-Moore, MD FAAAAI

10:45 Pearls and Pitfalls of Diagnostic Testing

Michael S. Blaiss, MD FAAAAI

11:15 Venom Immunotherapy

David B.K. Golden, MD FAAAAI

11:45 Difficult AIT Cases

David A. Khan, MD FAAAAI

12:15 Networking Lunch

1:00 AIT Prescription Workshop

Upon completion of this session, participants should be able to: Describe the pathophysiology, initial evaluation and management of patients with allergies to aeroallergens and/or venoms; Identify recent advances in the field of immunotherapy, including mechanisms of immunomodulation; Discuss current and emerging treatment modalities and adjuncts in the management of aeroallergen and venom allergic patients.



Allied Health Course   

1101 Advanced Practice Course

8:00 am to 12:30 pm
Marriott North Tower, Lobby Level, Marriott Hall Salons 1 & 2
 Pre-registration and ticket required. No fee.
 Credit: 4.50 CME / 5.40 CE
Moderators: Nina A. Zimmermann, MSN RN ANP-BC AE-C
Debra A. Sedlak, MSN CPNP

- 8:00 Introduction**
Debra A. Sedlak, MSN CPNP
- 8:15 Patients' Attitudes and Beliefs About Complementary and Alternative Medicine Use for Asthma Self-Management**
Maureen George, PhD RN AE-C FAAN
- 9:00 Bronchial Thermoplasty for the Treatment of Severe Asthma**
Mario Castro, MD MPH
- 9:45 Question & Answer**
- 10:00 Vitamin D: Sunlight at the End of the Tunnel**
Nicolette De Jong, PhD
- 10:45 Food Allergy: New Therapies on the Horizon**
Beth D. Strong, RN CCRC
- 11:30 Managing Atopic Dermatitis: Itching the Night Away!**
Karol G. Timmons, RN MS CPNP
- 12:15 Question & Answer**

Upon completion of this session, participants should be able to: Evaluate how patients' health beliefs impact asthma self-management; Identify asthma patients who may benefit from alternative treatments such as bronchial thermoplasty and Vitamin D therapy; Define new and appropriate treatment strategies for common food allergies and atopic dermatitis.

Allied Health Advanced Practice Course Breakout Sessions   

12:30 to 2:00 pm
Separate pre-registration, ticket and fee from the 1101 Advanced Practice Course. Pre-registration and ticket required. Fee: \$20.
 Box lunch included. Sessions and meals are limited to registered attendees.
 Credit: 1.50 CME / 1.80 CE

1101A Cough/Chronic Cough

Marriott North Tower, Lobby Level, Marriott Hall Salon 5
Nina A. Zimmermann, MSN RN ANP-BC AE-C
Jeanette L. Arnold, MSN RN C-FNP

Upon completion of this session, participants should be able to discuss the diagnostic evaluation and therapeutic options to treat chronic cough.

1101B Is This Anaphylaxis?

Marriott North Tower, Lobby Level, Marriott Hall Salon 6
Gabriel Ortiz, MPAS PA-C DFAAPA
Vivian P. Hernandez-Trujillo, MD FAAAAI

Upon completion of this session, participants should be able to describe anaphylaxis and the initiation of appropriate treatment.

1101C Opening Pandora's Box: Asking the Right Questions

Marriott North Tower, Lobby Level, Torrey Pines 1 & 2
David Wayne Unkle, MSN APN FCCM
Anthony J. Ricketti, MD FACAI FCCP

Upon completion of this session, participants should be able to discuss strategies for interpreting information given by our patients.

1101D Differentiating Asthma From COPD: Why is This So Hard?

Marriott North Tower, Lobby Level, Atlanta & Chicago
Edward O. Corazalla, MS RPFT
Karen L. Gregory, DNP APRN-BC RRT AE-C

Upon completion of this session, participants should be able to identify differences and similarities in patients with asthma vs. COPD.

Clinical Research Workshop 

1102 The Anatomy of the Clinical Trial Agreement

8:00 to 9:15 am
Marriott North Tower, Lobby Level, Torrey Pines 1 & 2
 Credit: 1.25 CME / 1.50 CE
Moderator: Christopher Chang, MD PhD FAAAAI

The Anatomy of the Clinical Trial Agreement and Negotiating a Profitable Budget
Cheryl Koff Bernstein, RN BSN CCRC

Upon completion of this session, participants should be able to: Identify and discuss the language used in reciprocal or crossed indemnification and offer alternative indemnification language during contract negotiations; Identify and discuss important sections of the contract such as liability insurance, language used to describe adherence to the protocol, payment, study termination and offer alternative language; Discuss successful methods and techniques used during contract and budget negotiations with the sponsor.

Chrysalis Project 

1111 2014 Chrysalis Project Program

7:30 am to 2:00 pm
Marriott North Tower, Lobby Level, Rancho Santa Fe 1-3
 Pre-registration and ticket required. No fee. Continental breakfast and box lunch included.
 Credit: No CME / No CE

- 7:30 Breakfast**
- 8:00 Welcome**
Thomas A. Fleisher, MD FAAAAI
Kimberly A. Risma, MD PhD FAAAAI
- 8:05 Welcome from the AAAAI President**
Linda Cox, MD FAAAAI
- 8:15 Food Allergy**
A. Wesley Burks, MD FAAAAI
- 8:45 Eosinophilic Disorders**
Paneez Khoury, MD
- 9:15 Immunodeficiency**
Kathleen E. Sullivan, MD PhD FAAAAI
- 9:45 Break**
- 10:00 Asthma**
Rohit Katial, MD FAAAAI
- 10:30 Atopic Dermatitis**
Donald Y.M. Leung, MD PhD FAAAAI
- 11:00 Academic Career Paths**
Kimberly A. Risma, MD PhD FAAAAI
- 11:20 Industry Career Paths**
Daniel C. Adelman, MD FAAAAI
- 11:40 Private Practice Career Paths**
Adina Kay Knight, MD FAAAAI
- 12:00 Chrysalis Project Program Luncheon with FIT Mentors**



Program Directors Course 

1112 How to Develop and Maintain Excellence in Allergy/Immunology Fellowships: Boot Camp for Program Directors and Clinical Faculty

8:15 am to 12:00 pm

Marriott North Tower, Lobby Level, San Diego Ballroom Salon A
Pre-registration and ticket required. No fee. Continental breakfast included.

Credit: No CME / No CE

Moderator: Asriani M. Chiu, MD FAAAAI

8:15 Continental Breakfast

8:45 The ABC's of Post-Graduate Medical Education (AAAAI, ABAI, ACGME) and Beyond

Mary Beth Fasano, MD FAAAAI

9:15 The Nuts and Bolts of Building an A/I Fellowship Program: Program Requirements in the Era of the Next Accreditation System

Jeffrey R. Stokes, MD FAAAAI

9:45 Communications and Reference Tools: iPads, iPhones and PubMed

Thanai Pongdee, MD FAAAAI

10:15 Break

10:30 How to Use the Milestones for Effective Learner Assessment

Michael R. Nelson, MD PhD FAAAAI

11:00 Curriculum Design: Tips for Teaching Generation Y

Fanny Silviu-Dan, MD FAAAAI

11:30 Directing an A/I Fellowship Program: Ask the Expert Panel Discussion

Mariana C. Castells, MD PhD FAAAAI

Lawrence B. Schwartz, MD PhD FAAAAI

Elizabeth A. Secord, MD FAAAAI

Upon completion of this session, participants should be able to: Enhance the teaching skills of upcoming, new and current allergy/immunology fellowship program directors and associate program directors, core A/I fellowship faculty and community volunteer clinical faculty; Provide practical tips for developing and enhancing an A/I fellowship program in the context of the next accreditation system; Support the development of allergy/immunology program directors, fellowship core faculty and community volunteer clinical faculty; Improve the quality of allergy/immunology fellowship training.

Course  

1201 Advanced Course in Pollen Identification

9:00 am to 12:00 pm

Marriott North Tower, Lobby Level, Marriott Hall Salon 3

Pre-registration and ticket required. Fee: \$125.

Credit: 3.00 CME / 3.60 CE

Moderator: Estelle Levetin, PhD FAAAAI

9:00 Asteraceae Pollen

Peter Van De Water, PhD

9:30 Hands-On Instruction; Question & Answer

10:00 Betulaceae Pollen

Richard W. Weber, MD FAAAAI

10:30 Hands-On Instruction; Question & Answer

11:00 Other Triporate and Tricolporate Pollen

Estelle Levetin, PhD FAAAAI

11:30 Hands-On Instruction; Question & Answer

Upon completion of this session, participants should be able to: Differentiate pollen in the birch family and related tri-porate pollen types; Recognize difficult tricolporate pollen types; Differentiate asteraceae pollen other than ragweed.

Course 

1202 NIAID: Epigenetics in Asthma and Allergy: Basic Concepts and Recent Advances

9:00 am to 12:00 pm

Convention Center, Upper Level, Room 11AB

Credit: 2.75 CME / 3.30 CE

Moderator: Alkis Togias, MD FAAAAI

9:00 Epigenetics: Basic Concepts

Bing Ren, PhD

9:25 Asthma and Allergy Epigenetics: What Have We Learned So Far?

David A. Schwartz, MD

9:50 Environmental Influences on the Epigenome

Rachel L. Miller, MD FAAAAI

10:15 Break

10:30 Epigenetic Regulation of the Immune System in Relation to Allergy and Asthma

Kari C. Nadeau, MD PhD FAAAAI

10:55 The Epithelial Cell Epigenome and its Relation to Asthma

Carole Ober, PhD

11:20 Epigenetic Regulation of Arachidonic Acid Metabolism and its Clinical Implications

Benjamin A. Raby, MD MPH

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe the importance of epigenetic changes and their potential impact on our understanding and treatment of allergic diseases and asthma; Identify specific cells and pathways relevant to allergy and asthma where epigenetic changes may influence disease.

Course 

1203 Technology in the Clinical Practice Made Ridiculously Simple

9:00 am to 12:00 pm

Convention Center, Mezzanine Level, Room 14AB

Credit: 3.00 CME / 3.40 CE

Moderator: Tao T. Le, MD MHS FAAAAI

9:00 What Can Technology Do for Your Practice

Tao T. Le, MD MHS FAAAAI

9:20 EHRs and the Meaningful Use of Life

A. Sean McKnight, MD FAAAAI

9:50 Practice Management Systems and Other Office Automation Tools

Linda D. Green, MD FAAAAI

10:20 Break

10:30 iPhones, iPads, Androids, Oh My!

Melinda M. Rathkopf, MD FAAAAI

11:00 Social Media Tools for Marketing and Communications

Ves Dimov, MD

11:30 Making the Technology Work and Pay Off

David J. Shulan, MD FAAAAI

11:50 Question & Answer

Upon completion of this session, participants should be able to: Describe EHRs, practice management systems and office automation technologies appropriate for the clinical practice; Explain the role of mobile technologies in the practice; List web and social media tools for practice marketing and communications.



Course 

1204 Endoscopic Evaluation and Management of Chronic Rhinosinusitis (Pre- and Post-Surgery) Including Cultures

9:00 am to 12:00 pm
Convention Center, Upper Level, Room 3
 Pre-registration and ticket required. No fee.
 Credit: 3.00 CME / 3.40 CE
 Moderator: Anju T. Peters, MD FAAAAI

9:00 Anatomy of the Sinuses
 Todd T. Kingdom, MD

9:20 Radiology of the Sinuses
 S. James Zinreich, MD

10:00 Endoscopic Evaluation of the Sinuses Including Cultures: Video and Lecture
 Wellington S. Tichenor, MD FAAAAI

10:20 Break

10:30 Surgical Evaluation
 Robert C. Kern, MD

10:50 Endoscopic Evaluation of the Sinuses: Post-Surgical
 Wellington S. Tichenor, MD FAAAAI

11:10 Case Management Studies: Question & Answer
 Daniel L. Hamilos, MD

Upon completion of this session, participants should be able to: Describe the anatomy of the paranasal sinuses and identify pathology on CT scan; Recall indications for surgery and complications of surgery; Perform endoscopy in patients with CRS as well as cultures of the middle meatus and/or sinuses and review management of complicated sinusitis.

Course  

1205 Difficult Cases (Part 1)

9:00 am to 12:00 pm
Convention Center, Mezzanine Level, Room 15AB
 Pre-registration and ticket required. No fee.
 Credit: 2.75 CME / 3.20 CE
 Moderators: David W. Hauswirth, MD FAAAAI
 Joyce E. Yu, MD

9:00 Hypereosinophilic Disorders (Not EoE)
 Amy D. Klion, MD
 Princess U. Ogbogu, MD FAAAAI

9:35 Itching Without Rash
 Cem Akin, MD PhD FAAAAI
 Gerald B. Lee, MD

10:10 Break

10:30 Peri-Operative Anaphylaxis
 Phillip L. Lieberman, MD FAAAAI
 Joel M. Hartman, MD

11:05 What the Allergist/Immunologist Sees That is Not Allergy
 Dennis K. Ledford, MD FAAAAI
 Eugene M. Choo, MD FAAAAI

11:40 Question & Answer

Upon completion of this session, participants should be able to discuss diagnostic and clinical management challenges encountered in allergy, asthma and immunology practice.

Course 

1206 Primary Immunodeficiency Diseases: What Do I Do with My Patient? From Start to Finish

9:00 am to 12:00 pm
Convention Center, Upper Level, Ballroom 6CF
 Credit: 2.75 CME / 3.30 CE
 Moderator: Lisa J. Kobrynski, MD MPH FAAAAI

9:00 Who Needs Evaluation for Immunodeficiency?
 M. Teresa De La Morena, MD

9:25 Assessing Innate and Adaptive Humoral Immunity
 Francisco A. Bonilla, MD PhD FAAAAI

9:50 Assessing Innate and Adaptive Cellular Immunity
 I. Celine Hanson, MD FAAAAI

10:15 Question & Answer

10:35 Break

10:50 Therapies for Innate and Adaptive Humoral Immunodeficiency
 Vincent R. Bonagura, MD FAAAAI

11:15 Therapies for Innate and Adaptive Cellular Immunodeficiency
 Mark Ballou, MD FAAAAI

11:40 Question & Answer

Upon completion of this session, participants should be able to: Describe a general approach to a patient with recurrent infections or other presentation consistent with PID; Discuss the stepwise approach to the diagnosis of PID and how to apply advanced and specialized tests, possibly in conjunction with guidance from a tertiary provider; List the different modalities available for therapy, general principles of their application and resources for guidance in unusual or complex situations.

Course 

1207 Drug Hypersensitivity

9:00 am to 12:00 pm
Convention Center, Upper Level, Ballroom 6DE
 Credit: 2.75 CME / 3.30 CE
 Moderator: Rebecca S. Gruchalla, MD PhD FAAAAI

9:00 Symptoms and Skin Testing for Type I Chemotherapy Drug Hypersensitivity
 David E. Sloane, MD

9:50 Break

10:05 Patch Testing in Drug Allergy
 Antonino G. Romano, MD

10:55 Antibiotic Skin Testing
 Anahita F. Dioun, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: List the symptoms of Type I drug hypersensitivity reactions; Identify symptoms of Type IV drug hypersensitivity reactions; Describe diagnostic tools for Type I and Type IV drug hypersensitivity reactions.



Course  

1208 Dermatology for the Allergist: Diagnosis and Therapeutics Boot Camp

9:00 am to 12:00 pm

Convention Center, Mezzanine Level, Room 16AB

Pre-registration and ticket required. No fee.

Credit: 3.00 CME / 3.40 CE

Moderator: Lynda C. Schneider, MD FAAAAI

9:00 Common Dermatologic Diseases with Mimics and Crossovers in Allergy: Overview from a Dermatology Perspective

Peter A. Lio, MD

9:30 Therapies for Dermatitis

Lawrence F. Eichenfield, MD

10:00 Question & Answer

10:10 Break

10:20 Video Demonstration: Biopsies, Scrapings and Patent Testing

Lawrence F. Eichenfield, MD

11:00 Hands-On Learning

Lawrence F. Eichenfield, MD

Luz S. Fonacier, MD FAAAAI

Peter A. Lio, MD

Upon completion of this session, participants should be able to: Discuss common diagnostic tests applicable to eczemas; Outline basic skin care for allergic skin diseases and avoidance of pitfalls.

Course 

1209 Allergen Immunotherapy: The Nuts and the Bolts (Part 1)

9:00 to 10:00 am

Convention Center, Upper Level, Room 30CDE

Pre-registration and ticket required. No fee.

Credit: 1.00 CME / 1.20 CE

Moderator: Matthew A. Rank, MD FAAAAI

9:00 Advances in Allergy Diagnostic Testing: Component Resolved Diagnosis to Identify Specific Allergens

Joerg R. Kleine-Tebbe, MD FAAAAI

9:30 Food Immunotherapy: Baked, Shaken or Stirred: Is it Ready to be Served?

Robert A. Wood, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss how diagnosis might improve with *in vitro* techniques to come; Discuss clinical readiness of food immunotherapy.

Course Breakout Sessions   

Attendees will rotate between the following two workshops.

Pre-registration and ticket required. Fee: \$25. Sessions are limited to registered attendees.

10:00 am to 12:00 pm

1209A/D Hands-On Workshop: Allergy Skin Testing

Convention Center, Upper Level, Room 32AB

Credit: 1.00 CME / 1.20 CE

Peter S. Creticos, MD FAAAAI

Jay A. Lieberman, MD

John Oppenheimer, MD FAAAAI

Anita Trikha, MD

Upon completion of this session, participants should be able to: Compare the different devices and other equipment and their characteristics; Explain the importance of standardized allergen extracts for the test result; Demonstrate the importance of standardized testing technique and its control by proficiency testing.

1209B/C Coding and Regulatory Issues Related to Allergy Diagnosis and Treatment

Convention Center, Upper Level, Room 33AB

Credit: 1.00 CME / 1.20 CE

Donald W. Aaronson, MD FAAAAI

David A. Brown, MD

Gary N. Gross, MD FAAAAI

Upon completion of this session, participants should be able to apply adequately the coding, documentation and regulatory guidelines for immunotherapy.

Course 

1210 Principles of Healthy Homes: What to Look for and How to Help Your Patients or Evaluation and Mitigation

9:00 am to 12:00 pm

Convention Center, Upper Level, Room 33C

Pre-registration and ticket required. No fee.

Credit: 2.75 CME / 3.30 CE

Moderator: Jay M. Portnoy, MD FAAAAI

9:00 The Indoor Biome and Healthy Housing

Christina E. Ciaccio, MD FAAAAI

9:30 How to Evaluate a Problem Home: Tools You Can Use

Kevin Kennedy, MPH CIEC

10:00 Break

10:15 Working With Patients: Taking an Environmental Healthy History

James L. Sublett, MD FAAAAI

10:45 Remediating and Maintaining a Healthy Home

Paul J. Dowling, MD FAAAAI

11:15 What Works, What Doesn't and What Needs to be Done

Wanda Phipatanakul, MD MS FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Identify the principles of healthy homes and the relative importance of each; Identify the basic steps in taking an environmental history about a patient's home environment; Describe the essential steps to assess home environmental hazards and conditions and mitigation.



Allied Health Workshop 

1301 Psychosocial Well-Being: Living with Food Allergies

9:30 to 10:45 am
Marriott North Tower, Lobby Level, Marriott Hall Salon 5
 Credit: 1.25 CME / 1.50 CE
Panelists:
Jennifer M. Darr, MSW LCSW
Melissa T. Korenblat-Hanin, ACSW LCSW

Upon completion of this session, participants should be able to: Describe the psychosocial dynamics of living with food allergies: challenges, emotions and accomplishments; Discuss approaches that build and enhance stability, security and sensibility using challenging case scenarios; Identify successful resources for assisting the food allergic patient and family.

Allied Health Workshop 

1302 The Asthma Action Plan: Use of Simulation to Teach and Reinforce

9:30 to 10:45 am
Marriott North Tower, Lobby Level, Atlanta & Chicago
 Credit: 1.25 CME / 1.50 CE
Moderator: Maureen George, PhD RN AE-C FAAN
Using Simulation to Improve Patient Education About the Asthma Action Plan
Anne E. Borgmeyer, MSN RN CPNP AE-C

Upon completion of this session, participants should be able to: Describe principles of patient and family-focused education; Review the use of simulation to teach patient communication strategies to providers; List the key principles of the Asthma Action Plan to improve self-management and asthma control.

Allied Health Workshop 

1401 Developing and Maintaining a Successful Research Center: Secrets of a Trade

11:00 am to 12:15 pm
Marriott North Tower, Lobby Level, Torrey Pines 1 & 2
 Credit: 1.25 CME / 1.50 CE
Moderator: Craig F. LaForce, MD FAAAAI
Cheryl Koff Bernstein, RN BSN CCRC
David I. Bernstein, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss the infrastructure necessary to establish a successful and productive research center; Discuss the challenges of maintaining a successful research center while competing in global clinical trials; Identify strategies for promoting your research center and enhancing your chances for clinical trial selection.

Allied Health Workshop  

1402 The Food Allergy Spectrum: Not Just Peanuts, Eggs and Milk

11:00 am to 12:15 pm
Marriott North Tower, Lobby Level, Torrey Pines 3
 Credit: 1.25 CME / 1.50 CE
Panelists:
Pinkus Goldberg, MD FAAAAI
Karen S. Rance, DNP RN CPNP AE-C

Upon completion of this session, participants should be able to: Identify an evidence-based approach to managing food allergy patients with less common allergens; Discuss how to screen for possible sensitivity to food additives and preservatives; Describe a management approach for patients with multiple food allergies.

Allied Health Workshop   

1501 Ask the Expert: Roundtable Discussion

12:30 to 1:30 pm
Marriott North Tower, Lobby Level, Presidio Rooms 1 & 2
 Pre-registration and ticket required. Fee: \$40. Box lunch included.
 Credit: 1.00 CME / 1.20 CE
Moderator: John D. Milewski, Med. Admin.
Joan E. Hawkins
Teresa Thompson, CPC CMSCS CCC

11:30 Question & Answer

Upon completion of this session, participants should be able to: Identify coding and ICD10 challenges in 2014; Discuss best practices for motivating employees; Identify how to assess your clinical practices.

Program Directors' Business Meeting

2:00 to 4:00 pm
Marriott North Tower, Lobby Level, San Diego Ballroom Salon A
 All Program Directors and Co-Directors are invited to attend this business meeting.

Course  

1601 Advanced Course in Fungal Spore Identification

2:00 to 5:00 pm
Marriott North Tower, Lobby Level, Marriott Hall Salon 3
 Pre-registration and ticket required. Fee: \$125.
 Credit: 3.00 CME / 3.60 CE
Moderator: Estelle Levetin, PhD FAAAAI

2:00 Basidiospore Identification
Estelle Levetin, PhD FAAAAI

2:30 Hands-On Instruction; Question & Answer

3:00 Ascospore Identification
W. Elliott Horner, PhD LEED AP FAAAAI

3:30 Hands-On Instruction; Question & Answer

4:00 Challenging Spore Types
James Scott, PhD

4:30 Hands-On Instruction; Question & Answer

Upon completion of this session, participants should be able to: Interpret common basidiospores; Interpret common ascospores; Describe Fusarium, Penicillium/Aspergillus and other difficult spore types.



Course ▼

1602 NIAID: Recent Advances in Biomarkers of Allergy and Asthma

2:00 to 5:00 pm
Convention Center, Upper Level, Room 11AB
Credit: 2.75 CME / 3.30 CE
Moderator: Marshall Plaut, MD FAAAAI

- 2:00 **Allergen Challenge as a Biomarker of Disease Severity and of the Effects of Treatment**
Stephen R. Durham, MA MD FRCP
- 2:25 **Transcriptomic Changes After Allergen Exposure**
Sunil K. Ahuja, MD
- 2:50 **Basophil Activation as a Predictor of Food Allergen Severity**
Alexandra F. Santos, MD MSc
- 3:15 **Break**
- 3:30 **Basophil Activation as a Biomarker of Food Allergy and Asthma**
Wayne G. Shreffler, MD PhD FAAAAI
- 3:55 **T Regulatory Cells as Markers of Allergen Immunotherapy**
Andrew D. Luster, MD PhD
- 4:20 **CD27 Effector Cell Depletion During Allergen Immunotherapy**
Erik R. Wambre, PhD
- 4:45 **Question & Answer**

Upon completion of this session, participants should be able to: Explain how mediators produced following allergen challenge predict the status of allergic diseases; Describe the relationship of successful allergen immunotherapy to effects on circulating T cell subsets and antibody responses; Appreciate the value of measuring peripheral blood basophil activation in allergic diseases and asthma.

Course

1603 Finding a Job and Getting Started in Practice

2:00 to 5:00 pm
Convention Center, Upper Level, Room 2
Credit: 3.00 CME / 3.40 CE
Moderator: Tao T. Le, MD MHS FAAAAI

- 2:00 **Overview and Introductions**
Tao T. Le, MD MHS FAAAAI
- 2:05 **Finding a Job and Negotiating the Agreement**
Tao T. Le, MD MHS FAAAAI
- 2:40 **Getting Licensed and Transitioning into Practice**
Brian A. Smart, MD FAAAAI
- 2:55 **Break**
- 3:05 **Secrets of an Efficient Allergy Practice**
David L. Patterson, MD MS MBA FAAAAI
- 3:40 **Practice Finances 101**
Marshall P. Grodofsky, MD FAAAAI
- 4:15 **Marketing Your Practice and Referral Development**
Stanley M. Fineman, MD MBA FAAAAI
- 4:50 **Question & Answer**

Upon completion of this session, participants should be able to: Outline how to identify and join the right practice opportunity; Discuss the fundamentals of office management; Identify strategies for marketing a practice and building a patient base.

Course  ▼

1604 Difficult Cases (Part 2)

2:00 to 5:00 pm
Convention Center, Mezzanine Level, Room 15AB
Pre-registration and ticket required. No fee.
Credit: 2.75 CME / 3.20 CE
Moderators: Jason W. Caldwell, DO FAAAAI
Michael H. Land, MD FAAAAI

- 2:00 **COPD vs. Asthma**
William W. Busse, MD FAAAAI
Matthew C. Bell, MD
- 2:35 **Implant Allergy**
Luz S. Fonacier, MD FAAAAI
Haejin Kim, MD
- 3:10 **Break**
- 3:30 **New Immune Deficiencies**
Gulbu Uzel, MD
Monica G. Lawrence, MD
- 4:05 **Mystery Rashes**
Lisa A. Beck, MD FAAAAI
Anne Marie Singh, MD
- 4:40 **Question & Answer**

Upon completion of this session, participants should be able to discuss diagnostic and clinical management challenges encountered in allergy, asthma and immunology practice.

Course ▼

1605 Mast Cell Activation Syndromes: From Anaphylaxis to Mastocytosis

2:00 to 5:00 pm
Convention Center, Upper Level, Room 6A
Credit: 2.75 CME / 3.30 CE
Moderator: Luis Escribano, MD PhD FAAAAI

- 2:00 **Anaphylaxis to Hymenoptera Venom**
Patrizia Bonadonna, MD PhD
- 2:30 **Mastocytosis: Role of Tryptase and C-Kit Mutations**
Cem Akin, MD PhD FAAAAI
- 3:00 **Break**
- 3:15 **Non-Clonal Mast Cell Activation Syndrome**
Mariana C. Castells, MD PhD FAAAAI
- 3:45 **When and How to Perform a Bone Marrow Study in MCAS: Practical Recommendations**
Luis Escribano, MD PhD FAAAAI
- 4:15 **Idiopathic Anaphylaxis**
Paul A. Greenberger, MD FAAAAI
- 4:45 **Question & Answer**

Upon completion of this session, participants should be able to: Discuss the symptoms and presentation of mast cell activation syndromes (MCAS); Outline the role of tryptase and c-kit mutations in MCAS; Describe management options for MCAS.



Course

1606 Review of Systemic Autoimmune Disease and Treatment

2:00 to 5:00 pm
Convention Center, Upper Level, Ballroom 6B
Credit: 3.00 CME / 3.60 CE
Moderator: Arnold I. Levinson, MD FAAAAI

2:00 Update on Laboratory Diagnosis of Systemic Autoimmune Disease

David P. Huston, MD FAAAAI

2:30 ACR Updated Recommendations for Disease-Modifying Antirheumatic Drugs and Biologic Agents in the Treatment of RA

Arthur Kavanaugh, MD FAAAAI

3:00 Question & Answer

3:15 The Spectrum of Vasculitis: New Insights into Pathogenesis and Treatment

Richard Keating, MD

3:45 New Treatment Modalities for Lupus

Mary Anne Dooley, MD

4:15 Susceptibility to Infections in Autoimmune Disease: Is it the Disease or the Treatment?

John J. Cush, MD

4:45 Question & Answer

Upon completion of this session, participants should be able to: Interpret screening and follow-up reflex testing in the diagnosis of autoimmune disease; Review the latest treatment guidelines for rheumatoid arthritis; Describe the organ systems lupus can affect and the downstream sequelae of complement activation.

Course

1607 Primary Immune Deficiency: A Global Perspective

2:00 to 5:00 pm
Convention Center, Upper Level, Ballroom 6CF
Credit: 3.00 CME / 3.40 CE
Moderator: Motohiro Ebisawa, MD PhD FAAAAI

2:00 An Overview of Primary Immunodeficiency Diseases Around the World

Fred Modell

2:25 Vaccine-Associated Paralytic Polio and Other Live Attenuated Vaccine-Associated Disease in Immunodeficient Infants

Antonio Condino-Neto, MD PhD

2:50 Clinical Cases: Diagnosis and Management of Primary Immunodeficiency Around the World

Elham M. Hossny, MD PhD FAAAAI

3:15 Question & Answer

3:25 Break

Moderators: Elham M. Hossny, MD PhD FAAAAI
Mona I. Kidon, MD FAAAAI

3:35 Defects of Human Immunity and Mycobacterium Diseases Around the World

Stephanie Boisson-Dupuis, MD

4:00 Molecular Mechanisms of Hyper IgE Syndromes

Speaker to be announced.

4:25 Malnutrition, Vitamin Deficiencies, the Immune System and Infections: Time to Revisit Our Knowledge

Raz Somech, MD PhD

4:50 Question & Answer

Upon completion of this session, participants should be able to: Discuss ethnic and geographical differences in PID prevalence and clinical presentation around the world; Discuss international vaccine programs and challenges posed for the PID community; Review clinical scenarios of PID management in different settings around the world.

Course

1608 NIEHS: Exposure to Indoor Allergens and Endotoxin in Relation to Allergic Disease: Results from NHANES 2005-2006

2:00 to 5:00 pm
Convention Center, Upper Level, Ballroom 6DE
Credit: 2.75 CME / 3.20 CE
Moderators: Paivi M. Salo, PhD
Darryl C. Zeldin, MD

2:00 Overview of the NHANES 2005-2006 Allergy Component

Darryl C. Zeldin, MD

2:20 Multiplexed Allergen Measurements: New Standards and Performance Parameters

Eva-Maria King, PhD

2:40 NHANES 2005-2006: Getting to Grips with the Big Data

Agustin Calatroni, MA MS

3:00 Break

3:20 IgE Sensitization and Current Allergen Exposure: Implications for Environmental Intervention

Herman Mitchell, PhD

3:40 Environmental Exposures and Allergy Symptoms

Paivi M. Salo, PhD

4:00 Which Combinations of IgE Clusters and Exposures Have the Greatest Impact on Asthma?

Peter J. Gergen, MD MPH

4:20 Endotoxin Exposure Assessment and Respiratory Disease

Peter S. Thorne, PhD

4:40 Question & Answer

Upon completion of this session, participants should be able to: Interpret the role that allergen/endotoxin exposures and allergic sensitization play in allergic diseases; Apply new, standardized methods in indoor allergen assessment; Review strategic objectives of NHANES and the allergy component.

Course

1609 Allergen Immunotherapy: The Nuts and the Bolts (Part 2)

2:00 to 3:00 pm
Convention Center, Upper Level, Room 30CDE
Pre-registration and ticket required. No fee.
Credit: 1.00 CME / 1.20 CE
Moderator: Michael R. Nelson, MD PhD FAAAAI

2:00 SCIT and SLIT: Optimal Dosing, Regimen and Duration

Harold S. Nelson, MD FAAAAI

2:30 Allergen Immunotherapy: Practical Considerations, Cost-Effectiveness, Adherence and Quality of Life

Cheryl S. Hankin, PhD

Upon completion of this session, participants should be able to: Describe how immunotherapy can easily be dosed and the knowledge gaps we still have in this field; Discuss when doses might need to be adjusted for SCIT and for SLIT.



Course Breakout Sessions  

Attendees may attend one of the following sessions.
Pre-registration and ticket required. Fee: \$25. Sessions are limited to registered attendees.
3:00 to 5:00 pm

1609A/D Hands-On Workshop: Media Fill Test and Extract Preparation Management

Convention Center, Upper Level, Room 32AB

Credit: 1.00 CME / 1.20 CE

Donald W. Aaronson, MD FAAAAI

Michael S. Blaiss, MD FAAAAI

Susan E. Kosisky, BS MHA

Cecilia Mikita, MD MPH FAAAAI

Michael R. Nelson, MD PhD FAAAAI

Upon completion of this session, participants should be able to demonstrate the ability to make a sterile immunotherapy vial.

1609B/C Allergen Immunotherapy Prescription Writing: Cross-Reactivity, Proteolytic Enzymes, Diluents and Other Factors

Convention Center, Upper Level, Room 33AB

Credit: 1.00 CME / 1.20 CE

Rohit Katial, MD FAAAAI

Bryan L. Martin, DO FAAAAI

Michael S. Tankersley, MD FAAAAI

Upon completion of this session, participants should be able to demonstrate the proper method for writing immunotherapy prescriptions for optimal efficacy and safety.

Course

1610 Personalized Medicine Approaches in Asthma and Allergy

2:00 to 5:00 pm

Convention Center, Upper Level, Room 8

Credit: 2.75 CME / 3.20 CE

Moderator: Antonella Cianferoni, MD PhD

2:00 CyTOF Flow: The New Frontier

Jonathan M. Irish, PhD

2:30 Lessons Learned from Genetic Diseases of Allergy

Joshua D. Milner, MD

3:10 Break

3:30 Using Biomarkers and Genomics to Personalize Therapeutics for Allergy and Asthma

Stanley J. Szefler, MD FAAAAI

4:05 Establishing a Personalized Medicine Program: The Harvard Experience

Scott T. Weiss, MD MS

4:40 Question & Answer

Upon completion of this session, participants should be able to: Discuss the availability for genetic variation in disease risk, progression and therapy; Describe readily available predictive tests (genetic and non-genetic); Describe the use and cost effectiveness of a personalized medicine approach in clinical practice.

Course

1611 Career Building for the Junior Investigator

2:00 to 5:00 pm

Convention Center, Upper Level, Room 1AB

Credit: 2.75 CME / 3.20 CE

Moderator: Laura B. Fanning, MD

2:00 Panel Discussion: Career Advice from Established Investigators: Strategies to Establish Scientific/Clinical Expertise

Effective Time Management

Effective Lab Management

Andrea J. Apter, MD MA MSc FAAAAI

Kathleen C. Barnes, PhD FAAAAI

Joshua A. Boyce, MD FAAAAI

James E. Gern, MD FAAAAI

Mitchell H. Grayson, MD FAAAAI

3:05 Question & Answer

3:20 Break

3:40 Panel Discussion: Career Advice from Junior Investigators:

Time Management Strategies

Strategies for Work and Family Life Balance

Data Management

Grant Writing

Nora A. Barrett, MD FAAAAI

Patrick J. Brennan, MD PhD

Taylor A. Doherty, MD FAAAAI

Tanya M. Laidlaw, MD FAAAAI

Brian P. Vickery, MD FAAAAI

4:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss how to develop a specific clinical and scientific expertise; Discuss how to manage their time effectively and how to choose roles and projects wisely; Describe benchmarks of success.

Course  

1612 Hands-On Rhinologyngoscopy

2:00 to 5:00 pm

Convention Center, Upper Level, Room 30AB

Pre-registration and ticket required. Fee: \$50.

Credit: 2.75 CME / 3.30 CE

Moderator: Jerald W. Koepke, MD FAAAAI

2:00 Intro to Rhinologyngoscopy

Jerald W. Koepke, MD FAAAAI

3:15 Break

3:30 Hands-On Instruction

Allen D. Adinoff, MD FAAAAI

Kevin R. Murphy, MD

Grant C. Olson, MD

Donald W. Pulver, MD FAAAAI

C. Ross Westley, MD FAAAAI

Upon completion of this session, participants should be able to: Describe the surgical anatomy of the upper airway, including the nasal cavity, pharynx and larynx; Identify examples of normal and abnormal anatomy, as well as disease presentations and post-operative changes found with endoscopic examination of the upper airway; Identify indications for and the use of the fiberoptic rhinoscope in the allergist's office.



Course 

1613 Interpretation of Pulmonary Function Tests (PFTs)

2:00 to 5:00 pm
Convention Center, Upper Level, Room 33C
Pre-registration and ticket required. No fee.
Credit: 3.00 CME / 3.50 CE
Moderator: Mark F. Sands, MD FAAAAI

2:00 Introductory Remarks

2:05 Pathophysiology and the PFT
Mark F. Sands, MD FAAAAI

2:30 Performing PFT: Video Demonstration
John M. Weiler, MD FAAAAI

2:40 Interpretation of the PFT: Putting it All Together
Donald P. Tashkin, MD

3:10 Question & Answer

3:25 Break

3:30 Hands-On Workshop
Donald W. Cockcroft, MD FAAAAI
Meredith C. McCormack, MD
Riccardo Polosa, MD PhD FAAAAI
Mark F. Sands, MD FAAAAI
Donald P. Tashkin, MD
John M. Weiler, MD FAAAAI

Upon completion of this session, participants should be able to: Describe the components of pulmonary function testing; Recognize simple and complex obstructive and restrictive pulmonary abnormalities; Interpret PFTs from asthma and COPD to fixed and variable obstructive abnormalities, as well as interstitial and other restrictive diseases.

Clinical Research Symposium 

1621 Tools of the Trade

2:00 to 3:15 pm
Marriott North Tower, Lobby Level, Torrey Pines 3
Credit: 1.25 CME / 1.50 CE
Moderator: Jaime E. Ross, RN

2:00 What You Need to Know to Prepare for an FDA Audit
Kim E. Mudd, RN MSN CCRP

2:30 Developing Your Monitoring Plan: Improving the Quality of the Research
Janet S. Kamilaris, RN

3:00 Question & Answer

Upon completion of this session, participants should be able to: Describe the components of a monitoring plan; List the methods to keep a clinical trial site ready for an audit; Identify the proper use of a note to file and describe its limitations.

Allied Health Plenary  

1701 Cybersecurity: Technology in Practice

4:00 to 5:15 pm
Marriott North Tower, Lobby Level, Marriott Hall Salon 5
Credit: 1.25 CME / 1.50 CE
Moderator: Sally A. Noone, RN MSN CCRP
Larry Thompson

Upon completion of this session, participants should be able to: Identify actions to protect hardware and software; Describe how to implement security measures to protect a practice; Identify how to set up emergency plans in case of a breach.

Problem-Based Learning Workshop  

1801 Diagnosis of Patients with Defects in Innate Immunity Including TLR Pathway Defects

5:00 to 6:15 pm
Convention Center, Upper Level, Room 3
Pre-registration and ticket required. Fee: \$50.
Credit: 1.25 CME / 1.50 CE
PBL Facilitator: Richard L. Wasserman, MD PhD FAAAAI
Content Lecturer: Dinakantha Kumararatne, MD PhD

Upon completion of this session, participants should be able to: Describe the currently known causes of defective innate immunity; Describe the clinical presentation of defects in innate immunity; Discuss the selection and interpretation of laboratory tests to diagnose defects in innate immunity.

Q & A Workshop 

1802 Difficult to Manage Asthma: The Very Young, the Very Old and the Obese

5:00 to 6:15 pm
Convention Center, Mezzanine Level, Room 14AB
Credit: 1.25 CME / 1.50 CE
Moderator: Timothy J. Craig, DO FAAAAI

5:00 What to Do When Your Patient Can't Tell You What's Wrong: Challenges in the Diagnosis and Management of Asthma in Children Under Age Five
Joseph D. Spahn, MD

5:15 Pitfalls in the Diagnosis and Management of Asthma in Older Adults: An Evidence-Based Update
Tolly Epstein, MD MS

5:30 New Insights into the Obese Asthma Phenotype: Diagnostic and Therapeutic Challenges in Obese Asthmatics
Juan C. Celedon, MD DrPH FAAAAI

5:45 Question & Answer

Upon completion of this session, participants should be able to: Identify emerging diagnostic modalities for asthma that may be useful in children under age 5 years; Develop strategies to distinguish asthma from other potential comorbid conditions in elderly asthmatics and implement age-appropriate management strategies in older asthmatics; Summarize recent data regarding the obese asthmatic phenotype and critically assess current management strategies in this subgroup of asthmatics.

Q & A Workshop

1803 What are Damp Buildings and How Do They Cause Problems?

5:00 to 6:15 pm
Convention Center, Upper Level, Room 5AB
Credit: 1.25 CME / 1.50 CE
Moderator: Jay M. Portnoy, MD FAAAAI

5:00 Innate Immunity Factors from Fungi
Anthony A. Horner, MD FAAAAI

5:15 Damp Buildings, Respiratory Disease and Asthma
Kari E. Rejula, MD PhD FAAAAI

5:30 Allergens from Damp Housing
Eva-Maria King, PhD

5:45 Question & Answer

Upon completion of this session, participants should be able to: Review the multiple expert panels/reports and Position Statements concluding that there is adequate evidence for respiratory health impacts, including new onset asthma, due to damp buildings; Describe the challenges of quantifying dampness and establishing acceptable moisture levels; Recognize the several plausible mechanisms that underlie the adverse respiratory impacts of the damp building effect.



Q & A Workshop

1804 The Science Behind Complementary and Alternative Medicine

5:00 to 6:15 pm
Convention Center, Upper Level, Room 7AB
Credit: 1.25 CME / 1.50 CE

Moderator: William S. Silvers, MD FAAAAI

5:00 Role of Vitamin D in Allergic Inflammation

Katrina Jane Allen, MD PhD FAAAAI

5:15 Immunomodulation by Chinese Herbal Medicine in Food Allergy

Julie Wang, MD FAAAAI

5:30 Probiotics, Prebiotics and Synbiotics For Prevention and Treatment of Allergic Disease

Mimi L.K. Tang, MD PhD FAAAAI

5:45 Question & Answer

Upon completion of this session, participants should be able to: Explain the role of vitamin D in allergic inflammation; Discuss the immunomodulatory effects of Chinese herbal medicine for food allergy; Describe the role of prebiotics and probiotics in the prevention and treatment of allergy.

Q & A Workshop

1805 Difficult Situations in Practice Management

5:00 to 6:15 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderator: Tao T. Le, MD MHS FAAAAI

5:00 Employment Agreements and Partnerships

Adhuna C. Mathuria, MD
Robert J. Holzhauer, MD MBA FAAAAI

5:15 Hiring and Firing

Vinay Mehta, MD FAAAAI
Weily Soong, MD FAAAAI

5:30 Marketing and Referral Development

Sakina S. Bajowala, MD FAAAAI
Stanley M. Fineman, MD MBA FAAAAI

5:45 Question & Answer

Upon completion of this session, participants should be able to: Identify and address difficult situations regarding employment and partnership contracts; Evaluate difficult situations in hiring and firing; Investigate difficult situations in marketing.

International Reception

5:00 to 6:00 pm
Convention Center, Upper Level, Ballroom 6CF
All international members and delegates are invited to attend this reception.

Allied Health Wine and Cheese Reception

5:15 to 6:15 pm
Marriott South Tower, Level 4, La Costa
All allied health members and their guests are invited to attend this reception for an evening of networking with other allied health professionals.

Seminars

5:15 to 6:15 pm
Pre-registration and ticket required. Fee: \$40. Refreshments included. Sessions and refreshments are limited to 30 people.
Credit: 1.00 CME / 1.20 CE

1901 Allergen Immunotherapy or Omalizumab in Asthma: When to Use Which?

Thomas B. Casale, MD FAAAAI
Jonathan Corren, MD

Marriott South Tower, Level 3, Balboa

Upon completion of this session, participants should be able to: Review efficacy of AIT in asthma and safety of AIT in moderate to severe asthma; Review studies of omalizumab alone and in combination with AIT in asthma; Make recommendations on individual use of these drugs and in combination for asthma.

1902 When is an Elevated IgE Level a Sign of Immunodeficiency?

Alexandra F. Freeman, MD
Hans D. Ochs, MD

Marriott South Tower, Level 3, Mission Hills

Upon completion of this session, participants should be able to: Review the differential diagnosis of an elevated IgE level; Discuss the work up necessary in patients with elevated IgE levels; Review the Hyper IgE syndromes.

1903 How to Assess and Manage a Child with Multiple Positive Environmental and Food Allergy Tests

Sami L. Bahna, MD DrPH FAAAAI
Anna H. Nowak-Wegrzyn, MD FAAAAI

Marriott South Tower, Level 3, Cardiff

Upon completion of this session, participants should be able to: Explain the prevalence and difference between classic food allergies and pollen-food allergy syndrome; Describe the utility of skin prick, fresh food skin prick, serum specific IgE testing, component resolved diagnostics and oral food challenge in assessment of complex patients with multiple food and environmental sensitizations; Discuss the management of complex patients with multiple food and environmental sensitivities and/or allergies.

1904 So the Patient Has Eosinophilia: What Next?

Amy D. Klion, MD
Catherine R. Weiler, MD PhD FAAAAI

Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to: Review diagnosis of various hypereosinophilic syndromes; Describe identification of secondary eosinophilia; Discuss therapeutic approaches to hypereosinophilic syndrome.

1905 Mechanisms and Biomarkers Related to Sublingual and Subcutaneous Immunotherapy

Giovanni Passalacqua, MD
Mohamed H. Shamji, BSc MSc PhD

Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to: Discuss humoral mechanisms of SCIT and SLIT; Discuss cellular mechanisms of SCIT and SLIT; Discuss novel biomarkers of successful SCIT and SLIT.

Annual Meeting Seminars and Workshops

Programmed by the AAAAI. Annual Meeting Seminars and Workshops funded through an educational grant from Merck.



2014 Federation of RSLAAIS Assembly Forum, Business Meeting and Reception

4:45 to 6:30 pm

San Diego Convention Center, Upper Level, Room 31AB

4:45 Wine and Cheese Welcome Reception

5:10 RSLAAIS Assembly Business Meeting

Moderator: Sharon B. Markovics, MD FAAAAI, RSLAAIS Chair

5:20 ACOs: Will they really be “accountable?”

Co-Moderators: Marshall P. Grodofsky, MD FAAAAI, RSL Governor

Jody T. Inglefield, MD FAAAAI, RSL Governor

Speakers:

Jonathan L. Bayuk, DO FAAAAI

Hampden County Physician Associates

Springfield, MA

Warner W. Carr, MD FAAAAI

Allergy and Asthma Associates of Southern California

6:10 Joint Council of Allergy, Asthma and Immunology (JCAAI) Update

Richard W. Honsinger, MD MACP FAAAAI

President, JCAAI

6:15 American Board of Allergy and Immunology (ABAI) Update

Stephen I. Wasserman, MD FAAAAI

President, ABAI

6:20 What's Next With RSLs

6:30 Adjourn

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~~CONS~~

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Seminars

7:00 to 8:00 am

Pre-registration and ticket required. Fee: \$40. Continental breakfast included. Sessions and meals are limited to 30 people.
Credit: 1.00 CME / 1.20 CE

2001 Microbiota and Asthma

Yvonne Huang, MD

Marriott South Tower, Level 3, Marina Ballroom Salon D

Upon completion of this session, participants should be able to: Review the importance of the microbiota in asthma and allergic disorders; Discuss the dangers of inappropriate antibiotic use on the microbiota; Describe fostering a healthy microbiota.

2002 Provocative Testing for Exercise-Induced Asthma: Methacholine vs. Mannitol vs. Exercise

Donald W. Cockcroft, MD FAAAAI

John M. Weiler, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon E

Upon completion of this session, participants should be able to: Discuss indications/contraindications for bronchoprovocation challenges in patients with EIB; Describe the strengths and weaknesses of each in the evaluation of hyper-reactivity; Identify methacholine and mannitol challenge as potential tests for monitoring asthma treatment.

2003 Monitoring and Managing Non-Infectious Complications of Common Variable Immune Deficiency

Charlotte Cunningham-Rundles, MD PhD FAAAAI

Rima A. Rachid, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon F

Upon completion of this session, participants should be able to: Review the non-infectious complications of CVID; Discuss how to monitor and treat these complications.

2004 There's an App for That: Using Smart Phones, Tablets and Web Tools for Clinical Practice

Tao T. Le, MD MHS FAAAAI

Melinda M. Rathkopf, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon G

Upon completion of this session, participants should be able to: Describe the various device options and platforms available to the clinician; Discuss the various apps available for the various devices and how to maximize their use; Identify web tools useful in the allergy practice.

2005 Immunizing the Immunodeficient Patient

Francisco A. Bonilla, MD PhD FAAAAI

M. Louise Markert, MD PhD FAAAAI

Marriott South Tower, Level 3, Balboa

Upon completion of this session, participants should be able to: Identify laboratory findings that may predict when live viral vaccinations may be administered to patients with cellular immunodeficiency; Describe factors involved in timing of live viral vaccinations after immunosuppressive medications; Discuss vaccinations and timing for patients with asplenia

or scheduled splenectomy.

2006 An Update on the Diagnosis and Treatment of Chronic Granulomatous Disease (CGD)

Alexandra F. Freeman, MD

Peter J. Mustillo, MD FAAAAI

Marriott South Tower, Level 3, Mission Hills

Upon completion of this session, participants should be able to: Describe current diagnostic tests for CGD; Review treatment options for patients with CGD including consideration for bone marrow transplant.

2007 How to Be a Mold Sleuth

Anupma B. Dixit, PhD

H. James Wedner, MD FAAAAI

Marriott South Tower, Level 3, Cardiff

Upon completion of this session, participants should be able to: Discern the quality of building inspection reports regarding water damage and mold colonization in housing; Describe mold sampling data to assess the significance of occupant exposure to molds indoors.

2008 Pathogenic Bacteria and Viral Illness: Are They Associated? What the Microbiome Tells Us

James E. Gern, MD FAAAAI

Kirsten Kloepper, MD

Marriott South Tower, Level 3, Del Mar

Upon completion of this session, participants should be able to: Describe the association between pathogenic bacteria and asthma exacerbations; Discuss potential mechanisms for viral infections to promote infections with pathogenic airway bacteria; Discuss potential treatment implications related to bacterial infections, wheezing illnesses and exacerbations of asthma.

2009 Aspirin and Antibiotic Desensitization

Anahita F. Dioun, MD FAAAAI

Catherine R. Weiler, MD PhD FAAAAI

Marriott South Tower, Level 3, Miramar

Upon completion of this session, participants should be able to: Describe what is needed to perform a desensitization in the office; Discuss the desensitization of aspirin allergic patients; Describe the desensitization of antibiotic allergic patients.

2010 Fifty Shades of Eosinophilic Esophagitis: Identifying the Phenotypes

Juan Pablo Abonia, MD

Mirna Chehade, MD MPH

Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to: Demonstrate the ability to identify EoE co-morbidities; Recognize when to suspect EoE given the medical history, whenever esophageal eosinophilia is found; Discuss how to investigate for other potentially associated diseases with EoE that require medical attention.

2011 Getting Ready for ICD-10: Cracking the Code

Priya J. Bansal, MD FAAAAI

Marshall P. Grodofsky, MD FAAAAI

Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to: Describe the differences between ICD-10 and ICD-9-CM; Discuss the impact of ICD-10 on billing and coding; Identify strategies for implementing ICD-10 in clinical practice.

2012 Component-Resolved Diagnosis for Inhalant Allergies

Reto Cramer, PhD

Peter Schmid-Grendelmeier, MD PhD

Marriott South Tower, Level 1, Santa Rosa

Upon completion of this session, participants should be able to: Describe cross-reactivity between various inhalant allergens and food allergens; Define predictive value of CRD for disease outcome; Identify better selection criteria for allergen-specific immunotherapy.

Annual Meeting Seminars
Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.



2013 **Cockroach Immunotherapy**

Luisa Karla P. Arruda, MD PhD FAAAAI
William W. Busse, MD FAAAAI

Marriott South Tower, Level 4, La Costa

Upon completion of this session, participants should be able to: Discuss epidemiologic studies on cockroach allergy, including outcomes of abatement procedures; Describe characteristics of cockroach allergens and composition of cockroach extracts currently available; Discuss ongoing and published studies on cockroach immunotherapy and new perspectives for treatment of cockroach allergy.

2014 **Alternative Pathways of Antigen-Mediated Anaphylaxis**

Mary Beth Hogan, MD FAAAAI
Wei Zhao, MD PhD FAAAAI

Marriott South Tower, Level 4, Catalina

Upon completion of this session, participants should be able to: Review the traditional pathway of anaphylaxis; Discuss the role of basophils and neutrophils in the pathogenesis of anaphylaxis; Distinguish IgE (mast cell) mediated anaphylaxis from IgG/Platelet Activating Factor as an alternative mechanism of anaphylaxis.

2015 **Interpreting Anti-IL5 Trial Data: Implications for Asthma, EoE and HES Pathophysiology**

Steven J. Ackerman, PhD
Sameer K. Mathur, MD PhD FAAAAI

Marriott South Tower, Level 4, Coronado

Upon completion of this session, participants should be able to: Discuss the different types of anti-IL-5 therapy in use in clinical trials; Review the outcomes of anti-IL-5 therapy for asthma, eosinophilic esophagitis and hypereosinophilic syndrome.

Allied Health Workshop

2021 **The Ins and Outs of Management of Chronic Eosinophilic Esophagitis**

6:45 to 8:00 am
Marriott North Tower, Lobby Level, Marriott Hall Salon 1
Credit: 1.25 CME / 1.50 CE
Moderator: Debra A. Sedlak, MSN CPNP

6:45 **Are You Missing the EoE Patient? It Starts with the History**
Katie J. Atkinson, RN CFNP

7:00 **Diagnosis and Treatment Options: Diet or Steroids?**
Seema Sharma Aceves, MD PhD FAAAAI

7:15 **Meeting the Patient's Needs: Nutrition and Quality of Life**
Marion E. Groetch, MS RD

7:30 **Question & Answer**

Upon completion of this session, participants should be able to: List the common symptoms of eosinophilic esophagitis (EoE) and the history that may trigger suspicion of EoE; Identify appropriate treatment options; Define how to guide patients on elimination diets to meet nutritional needs and maintain quality of life.

Allied Health Workshop

2022 **What Allied Health Professionals Need to Know About Drug Sensitivity**

6:45 to 8:00 am
Marriott North Tower, Lobby Level, Marriott Hall Salon 2
Credit: 1.25 CME / 1.50 CE
Moderator: Kim E. Mudd, RN MSN CCRP
Miguel A. Park, MD

Upon completion of this session, participants should be able to: Define the key components of the drug allergy history; Discuss diagnostic tests and work-up for drug allergies; Review the treatment options for drug allergies.

Allied Health Workshop

2023 **Management of Atopic Dermatitis**

6:45 to 8:00 am
Marriott North Tower, Lobby Level, Torrey Pines 1 & 2
Pre-registration and ticket required. No fee.
Credit: 1.25 CME / 1.50 CE
Moderator: William R. Blouin, ARNP
Instructors:
Carla M. Duff, CPNP MSN
Sally A. Noone, RN MSN CCRP
Karol G. Timmons, RN MS CPNP

Upon completion of this session, participants should be able to: Identify and differentiate atopic dermatitis from other skin conditions; Demonstrate appropriate skin care including wet to dry dressings; Discuss how to teach patients and families about proper skin care.

Allied Health Workshop

2024 **Bring Your Own Pediatric Food Challenge Experience**

6:45 to 8:00 am
Marriott North Tower, Lobby Level, Torrey Pines 3
Credit: 1.25 CME / 1.50 CE
Moderator: Suzanne K. Carlisle, RN BSN CCRP
Elisabeth S. Stieb, RN BSN AE-C
Anne M. Hiegel, RN CRC

Upon completion of this session, participants should be able to: Discuss solutions to common problems encountered when conducting oral food challenges; Develop access to a network of health care providers conducting food challenges and interact with them as needed throughout the year.

Allied Health Workshop

2025 **Exploring the Spectrum of Gluten-Related Disorders**

6:45 to 8:00 am
Marriott North Tower, Lobby Level, Atlanta
Credit: 1.25 CME / 1.50 CE
Isabel J. Skypala, PhD
Berber Vlieg-Boerstra, PhD RD

Upon completion of this session, participants should be able to: Discuss the various gluten-related disorders; Discuss strategies based on the individual patient's gluten-related disorder.

Allied Health Workshop

2026 **Pharmacology of Tobacco Cessation Medications**

6:45 to 8:00 am
Marriott North Tower, Lobby Level, Chicago
Credit: 1.25 CME / 1.50 CE
Beth A. Allison, NP

Upon completion of this session, participants should be able to: Describe nicotine dependence and nicotine withdrawal; Discuss evidence-based use of smoking cessation medications.



Plenary ▼

2101 Immunotherapy: Mechanism, Outcomes and Markers

8:15 to 9:45 am

Convention Center, Ground Level, Exhibit Hall A

Credit: 1.50 CME / 1.80 CE

Moderator: Linda Cox, MD FAAAAI



8:15 Tolerance to Allergens: How it Develops and How it Can be Induced

Cezmi A. Akdis, MD FAAAAI

8:45 Biomarker Predictors of Effective Immunotherapy

Stephen R. Durham, MA MD FRCP

9:15 SIT Outcomes: Examining the Data for Efficacy, Safety, Adherence and Costs

Linda Cox, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss the benefits of specific immunotherapy; Describe factors affecting safety of specific allergy immunotherapy; Discuss the use of biomarkers to predict the response to immunotherapy to pollens.

Posters

7:00 am to 6:00 pm

Convention Center, Ground Level, Exhibit Hall B

Posters on display from 7:00 am to 6:00 pm. Authors present from 9:45 to 10:45 am.

Credit: No CME / No CE

Refer to pages 83 – 158 for abstracts and authors.

2201 Asthma Therapeutics: Advances in Biologics and Drugs

2202 Asthma Epidemiology

2203 Primary Antibody Deficiencies

2204 Asthma Epidemiology, Risk Factors, and Public Health I

2205 Aerobiology I

2206 Insect Hypersensitivity/Anaphylaxis

2207 HAE and Angioedema

2208 Population Health in Asthma

2209 Healthcare Delivery in Primary Immunodeficiency

2210 Diagnostics

2211 Oral Immunotherapy

2212 Mechanisms of Cytokines and Chemokines

2213 Role of Granulocytes and Mast Cells in Mechanisms of Allergic Disease

2214 Allied Health Poster Session

Hands-On Workshop 

2251 Adolescent Allergy/Asthma Simulation

10:00 am to 2:15 pm

Convention Center, Ground Level, Exhibit Hall B

Pre-registration and ticket required. No fee.

Credit: 0.50 CME / 0.60 CE

Participate in a live simulation of treating an adolescent patient experiencing allergies and asthma, working with faculty and standardized patients from the University of San Diego.

Upon completion of this session, participants should be able to demonstrate appropriate clinical skills to be used when treating an adolescent patient at risk of, or experiencing, allergies or asthma.

Hands-On Workshop 

2252 Adult Anaphylaxis Simulation

10:00 am to 2:15 pm

Convention Center, Ground Level, Exhibit Hall B

Pre-registration and ticket required. No fee.

Credit: 0.50 CME / 0.60 CE

Participate in a live simulation of treating an adolescent patient experiencing allergies and asthma, working with faculty and standardized patients from the University of San Diego.

Upon completion of this session, participants should be able to demonstrate appropriate clinical skills to be used when treating an adult patient at risk of, or experiencing anaphylaxis.

Symposium ▼

2301 Oral Immunotherapy (OIT)

10:45 am to 12:00 pm

Convention Center, Ground Level, Exhibit Hall A

Credit: 1.25 CME / 1.50 CE

Moderator: J. Andrew Bird, MD FAAAAI

10:45 Current Protocols for Oral Immunotherapy

Kari C. Nadeau, MD PhD FAAAAI

11:05 Oral Immunotherapy: Native or Modified Allergen?

Hugh A. Sampson, MD FAAAAI

11:25 When Should We Stop Oral Immunotherapy? When Should it be Restarted?

Giovanni B. Pajno, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Identify patients with IgE-mediated food allergy who represent a target for OIT; Examine different protocols for different foods; Outline the risk-benefit ratio of OIT.



Symposium ▼

2302 World Allergy Forum: Anaphylaxis: From Mechanisms to Novel Therapeutics



10:45 am to 12:00 pm

Convention Center, Upper Level, Ballroom 6B

Credit: 1.25 CME / 1.50 CE

Moderators: Linda Cox, MD FAAAAI
Lanny J. Rosenwasser, MD FAAAAI

10:45 Diagnosis and Prevention of IgE and Non-IgE-Mediated Anaphylaxis

Fred D. Finkelman, MD

11:05 Causes of Anaphylaxis

Motohiro Ebisawa, MD PhD FAAAAI

11:25 Treatment of Anaphylaxis: Recent Advances

F. Estelle R. Simons, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: List the etiology and mechanisms of anaphylaxis; Recognize the most common triggers in anaphylaxis; Discuss the management of anaphylaxis including an action plan for prevention.

Symposium ▼

2303 The Expanding Universe of Primary Immunodeficiency

10:45 am to 12:00 pm

Convention Center, Upper Level, Ballroom 6CF

Credit: 1.25 CME / 1.50 CE

Moderator: M. Teresa De La Morena, MD

10:45 The Ever-Expanding Spectrum of PID

Troy R. Torgerson, MD PhD

11:05 Diagnosing PID in 2014

Kathleen E. Sullivan, MD PhD FAAAAI

11:25 Supporting and Reconstituting Immune Function

M. Louise Markert, MD PhD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe how discovery of new immunodeficiencies leads to new insights into immune system biology; Develop a stepwise approach to diagnosing the broad range of immunodeficiencies; Discuss the latest developments in the therapy of immunodeficiency.

Symposium ▼

2304 NHLBI's Clinical Asthma Research Network's (AsthmaNet) Approach to Key Asthma Questions

10:45 am to 12:00 pm

Convention Center, Upper Level, Ballroom 6A

Credit: 1.25 CME / 1.50 CE

Moderators: William W. Busse, MD FAAAAI
James P. Kiley, PhD

10:45 What Roles Do Novel and Not-So Novel Medications Have in Treating Preschool Wheezers?

Leonard B. Bacharier, MD FAAAAI

11:05 Is LABA or Increased Dose of ICS the Best Step-Up Therapy for African Americans: Do Children Respond Differently Than Adults?

Michael E. Wechsler, MD

11:25 Does Vitamin D Have a Role in Clinical Asthma?

Mario Castro, MD MPH

11:45 Question & Answer

Upon completion of this session, participants should be able to: Outline therapeutic options to optimize asthma treatment early in life; Describe the unique therapeutic approaches that produce improved outcomes in African-American patients; Discuss the use of Vitamin D as a therapeutic agent for treating asthma.

Symposium ▼

2305 The Indoor Air Exposome in Work, School and Home: Taking in the Whole Picture

10:45 am to 12:00 pm

Convention Center, Mezzanine Level, Room 14AB

Credit: 1.25 CME / 1.50 CE

Moderator: Jill A. Poole, MD FAAAAI

10:45 Exposure Assessments and Risk of Disease in Multiple Settings

Wanda Phipatanakul, MD MS FAAAAI

11:05 Pesticides, Chemicals and Other Exposures Matter in Allergic Disorders

Rachel L. Miller, MD FAAAAI

11:25 Evaluation and Management of Patients Presenting with Suspected Building-Related Illness

Karin A. Pacheco, MD MSPH FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe the most common indoor air quality issues that cause negative health effects; Identify the emerging role of pesticides, chemicals and other exposures in modulating allergic sensitization, epigenetic markers and health outcomes; Outline best practices for clinical assessment of susceptible workers exposed to poor office indoor air quality and remediation strategies to create a healthy office indoor air quality environment.



Symposium ▼

2306 Mechanisms of Virus-Induced Asthma

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Mitchell H. Grayson, MD FAAAAI

10:45 Local Interactions Between Dendritic Cells and T Cells in the Antiviral Immune Response

Kevin Legge, PhD

11:05 The Neutrophilic Antiviral Response: Is There More Than Meets the Eye?

Dorothy S. Cheung, MD FAAAAI

11:25 The Chronic NKT-Macrophage Axis in Asthma

Michael J. Holtzman, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss how innate lymphoid cells contribute to airway inflammation in response to viral infections; Discuss new understanding of the neutrophilic response during viral infections; Describe how NKT cells and macrophages drive a chronic post-viral asthma phenotype.

Symposium ▼

2307 Innovative Methods for Reducing Asthma Disparities

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderator: Mary E. Bollinger, DO

10:45 Reaching Kids Where They Are: School-Based Asthma Interventions

Minal R. Patel, PhD MPH

11:05 Telemedicine: How Can it be Utilized to Decrease Barriers to Asthma Healthcare?

Tamara T. Perry, MD

11:25 Can Web-Based and Mobile Applications Improve Asthma Outcomes?

Giselle Mosnaim, MD MS FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe the impact of web and mobile-based interventions for asthma healthcare delivery; Discuss the impact and cost-effectiveness of school-based asthma interventions on health outcomes; Discuss the impact of asthma subspecialty care via telemedicine on health outcomes.

Symposium ▼

2308 The Relevance of Microbes and Their Diversity in Chronic Rhinosinusitis and Asthma

10:45 am to 12:00 pm
Convention Center, Upper Level, Room 30ABCDE
Credit: 1.25 CME / 1.50 CE
Moderator: Martin Wagenmann, MD FAAAAI

10:45 Asthma and the Relevance of the Microbiome

Trevor ThomasHansel, MD PhD

11:05 Biofilms in Chronic Rhinosinusitis

James Palmer, MD

11:25 Don't Underestimate Viruses as Relevant Factors in the Development of Chronic Airway Disease

Daniel J. Jackson, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss the relevance of microbial diversity in the development of asthma; Define alterations in resident microbiota relevant for chronic rhinosinusitis presentation and treatment; Recognize the importance of viral infections in the development of chronic lower airway disease.

Allied Health Workshop 

2311 Anaphylaxis Recognition and Management: What People Need to Know

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Marriott Hall Salon 1
Credit: 1.25 CME / 1.50 CE
Moderator: Debra A. Sedlak, MSN CPNP

Panelists

William R. Blouin, ARNP
Vivian P. Hernandez-Trujillo, MD FAAAAI
Gabriel Ortiz, MPAS PA-C

Upon completion of this session, participants should be able to: Discuss how patients, teachers and members of the lay community can recognize the signs and symptoms of anaphylaxis; Discuss how to plan and use appropriate treatment.

Allied Health Workshop 

2312 Atopic Dermatitis: Advancing Proficiency in Management

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Marriott Hall Salon 2
Pre-registration and ticket required. No fee.
Credit: 1.25 CME / 1.50 CE
Moderator: Pooja Varshney, MD

10:45 Atopic Dermatitis: Immune Dysregulation

Gregory M. Metz, MD

11:00 Atopic Dermatitis: Management Strategies

Karen L. Gregory, DNP APRN-BC RRT AE-C

11:15 Hands-On Instruction

Upon completion of this session, participants should be able to: Discuss the complex immune dysregulation that occurs in atopic dermatitis; Describe the general concepts of managing atopic dermatitis; Identify signs and symptoms that warrant further investigation (food allergy, immune deficiency, secondary infections).



Allied Health Workshop  

2313 Immune Replacement Therapy: The Route to Travel

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Torrey Pines 1 & 2
 Pre-registration and ticket required. No fee.
 Credit: 1.25 CME / 1.50 CE
 Moderator: Ginger S. LaBelle, CPNP

10:45 SCIG
 Kristin Epland, NP

11:00 IVIG
 M. Elizabeth M. Younger, CRNP PhD

11:15 Hands-On Instruction
 Upon completion of this session, participants should be able to: Describe the pros and cons of both IV and SC therapy; Identify the supplies and devices used for SC infusions.

Allied Health Symposium 

2314 The Contribution of Aerobiology Towards Asthma Morbidity

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Torrey Pines 3
 Credit: 1.25 CME / 1.50 CE
 Moderator: David L. Rosenstreich, MD FAAAAI

10:45 Association Between Tree Pollen Counts and Asthma ER Visits in a High-Density Urban Center
 Sunit Jariwala, MD

11:05 The Impact of Mouse Allergen on Asthma
 Susan L. Balcer-Whaley, MPH

11:25 Neighborhood Differences in Asthma Prevalence and Persistence
 Matthew S. Perzanowski, PhD

11:45 Question & Answer
 Upon completion of this session, participants should be able to: Describe the relationship between outdoor air quality components and asthma-related morbidities; Identify the effect mouse allergen contributes to asthma in an urban environment.

Allied Health Workshop 

2315 Revenue Management with Correct Coding

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Chicago
 Credit: 1.25 CME / 1.50 CE
 Moderator: Joan E. Hawkins
 Teresa Thompson, CPC CMSCS CCC

11:30 Question & Answer
 Upon completion of this session, participants should be able to: List the current CPT guidelines; Describe the current information to code correctly to third party payer guidelines; Discuss the current information regarding reviews from CMS, OIG, RAC and third party payers.

Allied Health Workshop  

2316 Using Technology to Improve Patient Adherence

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Atlanta
 Credit: 1.25 CME / 1.50 CE
 Moderator: John D. Milewski, Med. Admin.
 David R. Stukus, MD FAAAAI

11:30 Question & Answer
 Upon completion of this session, participants should be able to: Discuss the recognition of health literacy in patients and its impact on adherence to treatment plans; Review tools available for use in clinical practice; Discuss ways to utilize both social media and mobile devices to improve office and provider efficiency, patient engagement and overall care in the clinical setting.

Allied Health Professional Assembly Forum 

12:30 to 1:30 pm
Marriott North Tower, Lobby Level, Marriott Hall Salon 6
 All allied health professionals are invited to attend this forum. Box lunches included.

Seminars  

12:30 to 1:30 pm
 Pre-registration and ticket required. Fee: \$40. Box lunch included.
 Sessions and meals are limited to 30 people.
 Credit: 1.00 CME / 1.20 CE

2501 The Evolution of Childhood Wheezing to Asthma

Leonard B. Bacharier, MD FAAAAI
 Bradley E. Chipps, MD FAAAAI
Marriott South Tower, Level 3, Marina Ballroom Salon D

Upon completion of this session, participants should be able to: Determine the diagnostic criteria for varied phenotypic expression of childhood asthma; Examine the progression of immunopathologic events in the development of childhood asthma; Examine the implication for treatment given the varied immunopathologic and phenotypic expressions.

2502 Performing and Interpreting Spirometry: Understanding and Implementing the ATS/ERS Guidelines

James M. Quinn, MD FAAAAI
 Kevin M. White, MD
Marriott South Tower, Level 3, Marina Ballroom Salon E

Upon completion of this session, participants should be able to: Identify the source and relevance of the ATS/ERS guidelines for lung function testing; Discuss the ATS/ERS recommendations for correct performance of spirometry; Identify ATS/ERS guidelines to interpret spirometry and classify the severity of identified abnormalities.

2503 Hereditary Angioedema: Diagnosis and Management

Mark S. Dykewicz, MD FAAAAI
 Andrew J. MacGinnitie, MD PhD
Marriott South Tower, Level 3, Marina Ballroom Salon F

Upon completion of this session, participants should be able to: Review the mechanism of HAE; Discuss how and when to use the new therapies for HAE; Describe how to improve outcomes of your patients with HAE.

Annual Meeting Seminars
 Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.



2504 Making the Most of Your EMR: Meeting Meaningful Use

Priya J. Bansal, MD FAAAAI
A. Sean McKnight, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon G

Upon completion of this session, participants should be able to: Discuss tips for optimizing your current EMR; Discuss current state of Meaningful Use government incentive payments; Discuss clinical quality measures and PQRI reporting with your EMR.

2505 When Should Bone Marrow Transplantation be Considered in Primary Immunodeficiency?

Rebecca A. Marsh, MD
Elena E. Perez, MD PhD FAAAAI

Marriott South Tower, Level 3, Balboa

Upon completion of this session, participants should be able to: Review the primary immunodeficiency diseases for which BMT can be a curative treatment; Discuss how soon after diagnosis a patient with certain immunodeficiency disorders should be referred to a BMT center; Describe any therapies to be avoided prior to a patient going to transplant.

2506 Viral Infections in the Allergic Host: What Factors May Be Synergistic?

Josh L. Kennedy, MD
Eva Kathryn Miller, MD

Marriott South Tower, Level 3, Mission Hills

Upon completion of this session, participants should be able to: Evaluate the innate immune response to viral infection in the exacerbating asthmatic, particularly the evidence of a deficient or overactive response; Discuss the role of the epithelium in asthmatic responses to viral infection; Evaluate the role of allergy by examining the evidence that IgE responses are important predictors of asthma exacerbations.

2507 Biomass Smoke: Alternative Energy or Pollutant Source?

Patricia Mason Fritz
Alisa M. Smith, PhD FAAAAI

Marriott South Tower, Level 3, Cardiff

Upon completion of this session, participants should be able to: Recognize the emergence of a potentially significant source of community (neighborhood) air pollution; Discuss the continuum and coherence of health effects from exposure to combustion emissions; Analyze the role of ambient air pollution on the health of non-urban populations.

2508 The Intricacy of Penicillin Allergy Evaluation

Eric M. Macy, MD FAAAAI
Miguel A. Park, MD

Marriott South Tower, Level 3, Del Mar

Upon completion of this session, participants should be able to: Discuss the different components of the penicillin skin test; Discuss how the different components of the penicillin skin test affect the negative predictive value; Discuss the role of oral challenges to penicillin and/or amoxicillin in the evaluation of penicillin allergy.

2509 Performance of Oral Food Challenges in the Office Setting

S. Allan Bock, MD FAAAAI
Justin M. Skripak, MD

Marriott South Tower, Level 3, Miramar

Upon completion of this session, participants should be able to: Describe and perform food challenges in their own practices; Review the practical aspects of how to carry out a typical food challenge in the office; Discuss how to select patients for extensively heated milk and egg challenges and how to perform those challenges.

2510 Quality Improvement and Patient Safety in Allergy Practice

Brad J. McClimon, MD
Matthew A. Rank, MD FAAAAI

Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to: Discuss the need for allergists to consider, plan and perform quality projects; Discuss fundamental principles guiding quality improvement of allergic/immunologic diseases in the United States; Discuss potential quality improvement opportunities that could positively influence the outcomes of allergy, asthma and immunology education, research and patient care at the local and national level.

2511 Biologics Targeting the Immune Responses in Chronic Rhinosinusitis and Nasal Polyps

Claus Bachert, MD PhD
Daniel L. Hamilos, MD

Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to describe biologic treatments under consideration for treatment of chronic rhinosinusitis.

2512 Immunotherapy with Immunomodulator Therapy: Which Work and Which Do Not?

Peter S. Creticos, MD FAAAAI
Mohamed H. Shamji, BSc MSc PhD

Marriott South Tower, Level 1, Santa Rosa

Upon completion of this session, participants should be able to: Review new data on the combination of immunotherapy and certain immunomodulators; Discuss the the possible mechanisms that might account for these findings, analyzing the mechanisms of immunotherapy in a new light.

2513 Evaluating Experimental Models of Allergic Rhinitis

Anne K. Ellis, MD MSc FAAAAI
Martin Wagenmann, MD FAAAAI

Marriott South Tower, Level 4, La Costa

Upon completion of this session, participants should be able to: Describe the most commonly used methodologies for experimental nasal allergen challenge in the investigation of allergic rhinitis; Describe the commonly used methodologies utilized in environmental exposure unit-type studies of allergic rhinitis; Describe the advantages and disadvantages of both experimental models pertaining to the study of allergic rhinitis.

2514 Food Allergy and the Mucosal B Cell

Cathryn R. Nagler, PhD
Duane R. Wesemann, MD PhD

Marriott South Tower, Level 4, Catalina

Upon completion of this session, participants should be able to: Discuss how commensal organisms and dietary antigens may shape the pre-immune antibody repertoire; Review the known mechanisms underlying immune tolerance to gut luminal antigens; Describe the mechanisms regulating antibody affinity maturation and IgH class switch recombination to IgE.

2515 Prostaglandins: Regulatory Lipid Mediators

Darryl C. Zeldin, MD
Weisong Zhou, PhD

Marriott South Tower, Level 4, Coronado

Upon completion of this session, participants should be able to: Define the role of prostaglandins in vascular remodeling and allergic lung inflammation; Describe the role of prostaglandins in regulating T cell differentiation and function; Describe the role of prostaglandins on allergen-induced immune tolerance.

Annual Meeting Seminars

Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.



Pro/Con Debate ▼

2521 NHLBI Guideline Adherence Leads to Improvements in Asthma Outcomes in Medical Center Homes

Programmed by the AAAAI and JCAAI. Honored through an educational grant from Robert J. Becker, MD, Joint Council of Allergy, Asthma and Immunology Memorial Lectureship Fund.

12:30 to 1:30 pm

Convention Center, Mezzanine Level, Room 15AB

Credit: 1.00 CME / 1.20 CE

Moderator: Tao T. Le, MD MHS FAAAAI

Pro

Richard W. Honsinger, MD MACP FAAAAI

Con

Harvey L. Leo, MD FAAAAI

Upon completion of this session, participants should be able to: Describe the role of quality measures in the development of ACA parameters; Identify limitations in guideline developments for chronic diseases like asthma; Develop novel ideas to promote the expertise of allergy/immunology's role in active population based management of an important chronic disease.

Pro/Con Debate ▼

2522 Bronchial Thermoplasty Has a Role in Severe Asthma Management

12:30 to 1:30 pm

Convention Center, Upper Level, Ballroom 6A

Credit: 1.00 CME / 1.20 CE

Moderator: Mark F. Sands, MD FAAAAI

Pro

Mario Castro, MD MPH

Con

William J. Calhoun, MD FAAAAI

Upon completion of this session, participants should be able to: Recognize the risk and benefit of bronchial thermoplasty (BT) in asthma management; Describe the indications and contraindications for BT; Describe the outcomes of major clinical trials for BT.

Pro/Con Debate ▼

2523 Component Resolved Diagnosis Can Predict Anaphylactic Reactions to Peanut

12:30 to 1:30 pm

Convention Center, Upper Level, Ballroom 6B

Credit: 1.00 CME / 1.20 CE

Moderator: Stacie M. Jones, MD

Pro

Joerg R. Kleine-Tebbe, MD FAAAAI

Con

Anna H. Nowak-Wegrzyn, MD FAAAAI

Upon completion of this session, participants should be able to: Describe the significance of molecular testing as an indicator for food allergen challenge.

Pro/Con Debate ▼

2524 The Microbiome is Important in Asthma

12:30 to 1:30 pm

Convention Center, Upper Level, Ballroom 6CF

Credit: 1.00 CME / 1.20 CE

Moderator: R. Stokes Peebles, Jr., MD FAAAAI

Pro

Homer A. Boushey, MD FAAAAI

Con

Thomas A.E. Platts-Mills, MD PhD FAAAAI

Upon completion of this session, participants should be able to: Define the human microbiome; Discuss the relevance of the human microbiome to allergic disease, particularly as it relates to asthma; Discuss possible alterations to the microbiome that might be useful in asthma therapy.

Pro/Con Debate ▼

2525 Biopsy is Necessary for Follow-up of EoE

12:30 to 1:30 pm

Convention Center, Upper Level, Ballroom 6DE

Credit: 1.00 CME / 1.20 CE

Moderator: Katrina Jane Allen, MD PhD FAAAAI

Pro

Jonathan M. Spergel, MD PhD FAAAAI

Con

Mirna Chehade, MD MPH

Upon completion of this session, participants should be able to: List the arguments supporting the assertion that endoscopy is necessary for monitoring EoE; Discuss the arguments suggesting that you can follow EoE patients by symptoms; Discuss the relevance of endoscopies and symptom scores in evaluating and managing patients with esophageal eosinophilia.

Pro/Con Debate ▼

2526 Bone Marrow Biopsy is Indicated in Idiopathic Anaphylaxis

12:30 to 1:30 pm

Convention Center, Upper Level, Room 11AB

Credit: 1.00 CME / 1.20 CE

Moderator: Phillip L. Lieberman, MD FAAAAI

Pro

Mariana C. Castells, MD PhD FAAAAI

Con

Paul A. Greenberger, MD FAAAAI

Upon completion of this session, participants should be able to: Name the current information related to mast cell activation syndrome and idiopathic anaphylaxis; Discuss the primary and secondary triggers of mast cell activation syndrome and anaphylaxis; List the current treatment guidelines of mast cell activation syndrome and idiopathic anaphylaxis.



Pro/Con Debate ▼

2527 All Patients with Recurrent Sinus Infections Should be Screened for Immunodeficiencies

12:30 to 1:30 pm

Convention Center, Upper Level, Room 30ABCDE

Credit: 1.00 CME / 1.20 CE

Moderator: John M. Routes, MD FAAAAI

Pro

Vincent R. Bonagura, MD FAAAAI

Con

Todd T. Kingdom, MD

Upon completion of this session, participants should be able to: List the differential diagnosis of recurrent or chronic sinusitis in adults; Identify appropriate immunodeficiency screening measures in recurrent/chronic sinusitis and patients that would benefit from screening.

Oral Abstract

2601 Novel Genetic Factors in Asthma

2:00 to 3:15 pm

Convention Center, Upper Level, Ballroom 6A

Credit: 1.25 CME / 1.50 CE

Moderator: Paula L. Busse, MD FAAAAI

2:00 IL-33 and IL1RL1 Single Nucleotide Polymorphisms and Their Association With Asthma Among Puerto Ricans

Javier A. Mendez, MD

2:15 Genetic Effect Of Single-Nucleotide Polymorphisms In The PPARGC1B Gene On Airway Hyperreactivity In Asthmatic Patients

Jong-Sook Park, MD

2:30 Polymorphisms In IL10, TGFB, TLR4, TLR8 and ADBR2 Genes Resulted Associated To Asthma In Brazilian Family Trio Study

Isabel Ruguê Genov, MD

2:45 Genetic Variation Along The Histamine Pathway In Children With Allergic Vs. Non-Allergic Asthma

Sara Anvari, MD

3:00 Association Of Polymorphism At The CD14 Promoter (CD14-C159T) With Atopic and Non-Atopic Asthma In Adults From Crimea, Ukraine

Yuri Bisnyuk

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

2602 Mechanisms and Immunotherapy

2:00 to 3:15 pm

Convention Center, Upper Level, Ballroom 6CF

Credit: 1.25 CME / 1.50 CE

Moderator: Ricardo U. Sorensen, MD

2:00 The Utility Of Anti-Pneumococcal Antibody Measurement In Patients With Primary Immunodeficiency Receiving Immunoglobulin

Stephen Jolles

2:15 Diagnostic Immunization With Bacteriophage ΦX 174 In Patients With Common Variable Immunodeficiency/ Hypogammaglobulinemia

Lauren Smith, MD

2:30 ImmunoChip Study Reveals Regions On Chromosomes 2 and 6 May Contribute To The Spectrum Of CVID

Tracy Hwangpo, MD PhD

2:45 Rule Of Different Memory Cells In Common Variable Immunodeficiency and Specific Antibody Deficiency

Amer M. Khojah, MD

3:00 Evaluation of a Novel Missense Activation-Induced Deaminase AID Mutation in a Child with Hyper IgM Syndrome: Is it a Pathogenic Mutation?

Ottavia M. Delmonte, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

2603 Asthma Environmental Risk Factors and Infections

2:00 to 3:15 pm

Convention Center, Mezzanine Level, Room 14AB

Credit: 1.25 CME / 1.50 CE

Moderator: Daniel Elkayam, MD

2:00 Surfactant Protein A (SP-A) Reduces Human Rhinovirus 16 (RV16)-Induced Inflammatory Responses In Bronchial Epithelial Cells and Inhibits Viral Replication In H1-HeLa Cells

Sasipa Tanyaratsrisakul, PhD

2:15 The Home Microbiome and Childhood Asthma

Christina E. Ciaccio, MD FAAAAI

2:30 Effect Of Prenatal Antioxidant Intake On Infants' Respiratory Infection

Eun Lee

2:45 Epidermal Growth Factor Receptor (EGFR) Mediates Cell Fusion and Infectivity Of Respiratory Syncytial Virus (RSV)

Sujin Lee

3:00 Cluster Analysis Of An Inner-City Cohort Of Infant Wheezers

Monica B. Reddy, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Oral Abstract

- 2604 Atopic Dermatitis**
2:00 to 3:15 pm
Convention Center, Upper Level, Ballroom 6B
Credit: 1.25 CME / 1.50 CE
Moderators: Lisa A. Beck, MD FAAAAI
Peck G. Ong, MD FAAAAI
- 2:00 A Randomized, Multi-Center, NIH/NIAID Funded Study To Assess The Immunogenicity Of Fluzone® Intradermal and Intramuscular Vaccines In Atopic Dermatitis**
Donald Y.M. Leung, MD PhD FAAAAI
- 2:15 Which Infants With Eczema Are At Risk Of Food Allergy? Results From A Population Based Study**
Jana K. Eckert, PhD
- 2:30 Exome Chip Genotyping Reveals Association With PDE4C and Atopic Dermatitis In Populations Of European and African Descent**
Nicholas M. Rafaels
- 2:45 Exploring a Role for Laminin Proteins in the Pathogenesis of Atopic Dermatitis**
Erin J. Klaffky, MD PhD
- 3:00 Thymic Stromal Lymphopoietin and Interleukin-33 Promote Skin Inflammation and Containment Of Vaccinia Virus In A Mouse Model Of Atopic Dermatitis**
Michiko K. Oyoshi, PhD MSc

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

- 2605 Health Disparities**
2:00 to 3:15 pm
Convention Center, Upper Level, Room 1AB
Credit: 1.25 CME / 1.50 CE
Moderators: Melody C. Carter, MD
Princess U. Ogbogu, MD FAAAAI
- 2:00 What Really Happens In The Home: The Medication Environment Of Urban, Minority Youth**
Molly Martin, MD MAPP
- 2:15 Young, African American Adults With Asthma: What Matters To Them?**
Aimee L. Speck, MD
- 2:30 Language Disparities Among Minority Patients with Poor Asthma Control**
Jose R. Zaragoza-Buxo, MD
- 2:45 Race/Ethnicity and SES Are Predictors Of Allergic Sensitization To Environmental and Food Allergens**
Amina Abdeldaim, MD
- 3:00 Unrecognized Allergic Rhinoconjunctivitis and Allergic Sensitization Among Latino Youth (GALA II Study)**
Ulysses Burley, MPH

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

- 2606 Local Allergic Rhinitis and Non-Allergic Rhinitis**
2:00 to 3:15 pm
Convention Center, Upper Level, Ballroom 6DE
Credit: 1.25 CME / 1.50 CE
Moderator: Joaquim Mullol, MD PhD FAAAAI
- 2:00 The Nasal NO Response To External Acoustic Energy: A Pilot Study**
Dennis Shusterman, MD MPH
- 2:15 Flagellin/Toll-Like Receptor 5 Induces Interleukin-17C In Human Nasal Epithelia**
Hyun Jin Min
- 2:30 Phenotyping Non-Allergic and Local Allergic Rhinitis**
Carmen Rondon, MD PhD
- 2:45 Role Of Basophil Activation Test For Identifying Subjects With Local Allergic Rhinitis**
Paloma Campo, MD PhD
- 3:00 Does Serum Leptin Differ Between Patients With Rhinitis Of Allergic Vs Nonallergic Aetiology?**
Ayse Fusun Kalpaklioglu, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

- 2607 Mechanisms of Steroid and Arachidonic Acid Pathways in Allergic Disease**
2:00 to 3:15 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderators: Larry Borish, MD FAAAAI
Dawn C. Newcomb Baker, PhD
- 2:00 LTC4, But Not LTD4 Or LTE4, Activates Platelets Through a CysLT2R and P2Y12 Receptor-Dependent Pathway**
Joshua A. Boyce, MD FAAAAI
- 2:15 Predictors Of Response To Glucocorticoids In Hypereosinophilic Syndromes**
Paneez Khoury, MD
- 2:30 Differential Proteomic Analysis Of Eosinophils From Patients With Glucocorticoid Responsive Or Resistant Hypereosinophilic Syndrome**
Konrad Pazdrak, MD PhD
- 2:45 Glucocorticoid Receptor-α Up-Regulation In C57BL/6 Diet-Induced Obese Mice With House Dust Mite-Mediated Asthma**
Jennifer Diaz, MD
- 3:00 Reduced EP2 Receptor Expression Accounts For Prostaglandin E2 Resistance In Nasal Polyp Fibroblasts From Patients With Aspirin Exacerbated Respiratory Disease; Possible Role For Histone Acetylation In Control Of EP2 Receptor Expression**
Katherine N. Cahill, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Symposium

2611 SLIT: Implementation in Your Practice

2:00 to 3:15 pm

Convention Center, Ground Level, Exhibit Hall A

Credit: 1.25 CME / 1.50 CE

A recording of this session will be available online free of charge to registered attendees following the Annual Meeting.

*Moderators: Désirée E.S. Larenas Linnemann, MD FAAAAI
Michael S. Tankersley, MD FAAAAI*

2:00 Therapeutic Mechanisms of SLIT

Stephen R. Durham, MA MD FRCP

2:20 SLIT Approval Trials in the U.S.

Thomas B. Casale, MD FAAAAI

2:40 SLIT in Practice: The Nuts and the Bolts of Using it

Linda Cox, MD FAAAAI

3:00 Question & Answer

Upon completion of this session, participants should be able to: Review how SLIT works; Discuss the results of pivotal SLIT clinical trials; Describe how to use SLIT in practice.

Allied Health Workshop 

2621 Patient Safety in Allergy Practices: Is it an Issue?

2:00 to 3:15 pm

Marriott North Tower, Lobby Level, Marriott Hall Salon 1

Credit: 1.25 CME / 1.50 CE

Moderator: John D. Milewski, Med. Admin.

2:00 Malpractice: Risk Assessment

Donald W. Aaronson, MD FAAAAI

2:30 Question & Answer

Upon completion of this session, participants should be able to: Identify potential causes of patient injury due to allergy care; List actions that can prevent patient injury in an allergy practice; Discuss the risks of allergy immunotherapy and how to design practices that will reduce medical errors related to allergen immunotherapy that result in patient injury.

Allied Health Symposium 

2622 Taking a Food Allergy History for the Advanced Practice Provider: The Key to Diagnosis

2:00 to 3:15 pm

Marriott North Tower, Lobby Level, Marriott Hall Salon 2

Credit: 1.25 CME / 1.50 CE

Moderator: Pamela H. Steele, MSN CPNP AE-C

2:00 Obtaining a Complete and Concise Food Allergy History from Your Patients

Maria G. Crain, CPNP AE-C

2:30 Interpreting the History to Guide Your Use of Diagnostic Testing

Katie J. Atkinson, RN CFNP

3:00 Question & Answer

Upon completion of this session, participants should be able to: Describe a complete food allergy history; Discuss a concise diet history; Interpret patient information to guide testing.

Allied Health Workshop  

2623 ICD-10CM: Dispelling the Fear

2:00 to 3:15 pm

Marriott North Tower, Lobby Level, Torrey Pines 1 & 2

Credit: 1.25 CME / 1.50 CE

*Moderator: Joan E. Hawkins
Teresa Thompson, CPC CMSCS CCC*

2:45 Question & Answer

Upon completion of this session, participants should be able to: Identify the documentation requirements for the ICD-10CM system; Review the guidelines for choosing the correct diagnosis code for ICD-10; Discuss the timelines and the effects on the entire allergy practice.

Allied Health Symposium 

2624 Data Management: Taking Your Data from Collection to Analysis

2:00 to 3:15 pm

Marriott North Tower, Lobby Level, Torrey Pines 3

Credit: 1.25 CME / 1.50 CE

Moderator: Patrick J. Lenehan, MD

2:00 Data Collection: The First Part of a Long Process

Patrick J. Lenehan, MD

2:20 Data Cleaning: Reviewing and Reflecting on Study Variables

Charles Aloe, MPH

2:40 Data Analysis: Identifying the True Message

Jean Curtin-Brosnan, MA

3:00 Question & Answer

Upon completion of this session, participants should be able to: Discuss strategies for collecting and storing data completely and accurately; Describe the process of cleaning data and preparing it for analysis; Identify how changes in data can affect analytical results.



Allied Health Workshop 

2625 Allied Health Workshop: Travel Scholarship Award Recipients

2:00 to 3:15 pm

Marriott North Tower, Lobby Level, Atlanta

Credit: 1.25 CME / 1.50 CE

Moderator: Stephen J. McGeady, MD FAAAAI

2:00 Case Study of a Successful Asthma Network

Karen L. Meyerson, MSN FNP-C AE-C

2:05 AsthmaCare Partners Program

Julie A. Kuhn, MSW

2:10 Patient Satisfaction Surveys (Research)

Diane G. Ananos, RN

2:15 Five Years of FOIT (Food Oral Immunotherapy) in Private Practice

Angela Hague, PA-C

2:20 Developing Support Groups for Patients with EGID

Raquel Z. Durban, MS RD LDN

2:25 Bridging the Gap: Gaps in the World of Food Protein Enterocolitis

Fallon Schultz, MSW LCSW CAM

2:30 Understanding Barriers and Support in Asthma Management in School Age Children

Helena Azzi, DNP FNP-BC AE-C

2:35 Identifying Dietary Interventions in EoE

Anna C. Sprunger, PA-C

2:40 Strengthening Physicians' Ability to Convey Information to Patients

Edward M. Horowitz, BA

2:45 Effietive Program Planning Program Workshop for Asthma Educators

Margaret J. McCormick, MS RN

2:50 Surprising Benefits of Omalizumab in a Patient with Mixed Disease Asthma/COPD A Case Study in Knoxville, Tennessee

Laura E. Odom, MSN FNP

2:55 Question & Answer

Upon completion of this session, participants should be able to: Develop an appreciation for the activities of Allied Health members that contribute to the care of patients; Identify effective patient care strategies that can be implemented into the allergy/immunology practice; Develop professional networks within Allied Health.

Keynote 

2701 Genomic and Wireless Digital Innovation: Reshaping the Future of Medicine

3:30 to 4:30 pm

Convention Center, Ground Level, Exhibit Hall A

Credit: 1.00 CME / 1.20 CE

Moderator: Stuart L. Abramson, MD PhD FAAAAI

Eric J. Topol, MD

Cardiologist, Scripps La Jolla, California; Professor of Genomics at the Scripps Research Institute and Chief Academic Officer of Scripps Health; and Editor-in-Chief at Medscape



Upon completion of this session, participants should be able to describe how genomics and digital technologies can be utilized in the development and implementation of medical management plans.

Q & A Workshop

2801 The Influence of Bisphenol A and Phthalates (Xenoestrogens) on the Development of Asthma and Allergy in Children and Adults: What's Known and What's Real?

4:45 to 6:00 pm

Convention Center, Upper Level, Room 1AB

Credit: 1.25 CME / 1.50 CE

Moderator: Leslie C. Grammer, MD FAAAAI

4:45 How Are We Exposed to Bisphenol A and Phthalates in Our Immediate and Regional Environments?

Randall M. Goldblum, MD

5:00 What Can Basic Research Teach Us About the Effects of Xenoestrogens on Allergy and Asthma?

Terumi Midoro-Horiuti, MD PhD FAAAAI

5:15 What Have We Observed About the Effects of Xenoestrogens on the Development of Childhood and Adult Asthma and Allergy?

Rachel L. Miller, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Define the environmental sources of chemicals with estrogen properties such as bisphenol A and phthalates; Summarize the research demonstrating the effects of xenoestrogens on the allergic and asthmatic phenotype; Describe the epidemiology that associates xenoestrogen exposures and the development of asthma and allergy in children and adults.

Annual Meeting Workshops

Programmed by the AAAAI. Annual Meeting Workshops funded through an educational grant from Merck.



Hands-On Workshop  

2802 EMR Roundtable: What Are Allergists Using?

4:45 to 6:00 pm
Convention Center, Upper Level, Room 2
 Pre-registration and ticket required. Fee: \$50.
 Credit: 1.25 CME / 1.50 CE
 Moderator: *Tao T. Le, MD MHS FAAAAI*

Practice Fusion

Dana V. Wallace, MD FAAAAI

GE Centricity

A. Sean McKnight, MD FAAAAI

Allscripts

Melinda M. Rathkopf, MD FAAAAI

EPIC

Ves Dimov, MD

Meditab-IMS

Richard L. Wasserman, MD PhD FAAAAI

NextGen

Robert Anolik, MD FAAAAI

ModuleMD

Instructor to be announced.

eClinical Works

Hugh H. Windom, MD FAAAAI

Rosch

Nathaniel D. Hare, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss the challenges allergists face in EMR selection; Discuss tips on EMR selection and implementation specific to the practicing allergist; Review specific EMRs with allergists using them in practice.

Problem-Based Learning Workshop  

2803 A Child with Severe Atopic Dermatitis

4:45 to 6:00 pm
Convention Center, Upper Level, Room 3
 Pre-registration and ticket required. Fee: \$50.
 Credit: 1.25 CME / 1.50 CE
 PBL Facilitator: *Stanley M. Fineman, MD MBA FAAAAI*
 Content Lecturer: *Mark Boguniewicz, MD FAAAAI*

Upon completion of this session, participants should be able to: Discuss the differential diagnosis of severe atopic dermatitis; Assess food allergy as a co-morbid condition in this patient; Summarize cutting-edge literature on state of the art skin therapy in refractory atopic dermatitis.

Q & A Workshop 

2804 The Safety of Asthma Medications During Pregnancy: An Update

4:45 to 6:00 pm
Convention Center, Upper Level, Room 11AB
 Credit: 1.25 CME / 1.50 CE
 Moderator: *Michael Schatz, MD MS FAAAAI*

4:45 The Safety of Asthma Medications During Pregnancy: VAMPSS Prospective Cohort Data

Christina Chambers, PhD MPH

5:00 The Safety of Asthma Medications During Pregnancy: VAMPSS Case-Control Data

Allen A. Mitchell, MD

5:15 A Synthesis of Data on the Safety of Asthma Medications During Pregnancy

Jennifer A. Namazy, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Evaluate the recent VAMPSS prospective cohort data on the safety of asthma medications in pregnancy; Review the recent VAMPSS case-control data on the safety of asthma medications in pregnancy; Discuss current information on the gestational safety of asthma medications to the clinical care of pregnant patients with asthma.

Reception immediately following the session with the VAMPSS Investigative Team.

Q & A Workshop 

2805 AAP: Hot Topics in Pediatric Allergy and Immunology

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6A
 Credit: 1.25 CME / 1.50 CE
 Moderator: *Todd A. Mahr, MD FAAAAI*

4:45 Allergic Respiratory Disease

Chitra Dinakar, MD FAAAAI

5:00 Food and Drug Allergies

Brian P. Vickery, MD FAAAAI

5:15 Immunologic Disorders

Thomas A. Fleisher, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Describe the latest developments in pediatric allergy and immunology; Discuss how these might impact the care of pediatric patients with respiratory allergic disease, food and drug allergy and immunologic disorders.

Annual Meeting Workshops

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Q & A Workshop

2806 Who's on First? Primary Immunodeficiency, Autoimmune Disease or Immune Modulation

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6B
Credit: 1.25 CME / 1.50 CE
Moderator: Ramsay L. Fuleihan, MD

4:45 Autoimmune Disease with Primary and Secondary Failure of Tolerance
Speaker to be announced.

5:00 Infectious Complications of Immune Modulation
Christina C. Price, MD

5:15 Monitoring and Supporting Immune Function After Immunomodulation
Vibeke Strand, MD

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss how autoimmunity arises in the setting of primary and secondary immunodeficiency; Review potential infectious sequelae arising from immunomodulation; Describe how to monitor and support immune function after immune compromise due to immunomodulator therapy.

Q & A Workshop

2807 Difficult Drug Allergy Cases: Case-Based Discussions

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6CF
Credit: 1.25 CME / 1.50 CE
Moderator: Rebecca S. Gruchalla, MD PhD FAAAAI

4:45 Management of Patients with Multiple Drug Allergies
Roland Solensky, MD FAAAAI

5:00 Perioperative Anaphylaxis and Advice for Patients Needing Further Surgery
Aleena Banerji, MD

5:15 Determine When Skin Testing, Test Doses and Desensitization are Appropriate
David A. Khan, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Explain management of patients with multiple drug allergies; Describe perioperative anaphylaxis: diagnosis, evaluation and management; Identify the role for skin testing, test dose and desensitization.

Panel Discussion Workshop

2808 Thriving and Surviving in the Evolving Healthcare System: 2014 JCAAI Update

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6DE
Credit: 1.25 CME / 1.50 CE
Moderator: J. Allen Meadows, MD FAAAAI

Panelists:

Donald W. Aaronson, MD FAAAAI
Gary N. Gross, MD FAAAAI
Richard W. Honsinger, MD MACP FAAAAI

Upon completion of this session, participants should be able to: List strategies for positioning their practices for success in the changing healthcare arena; Describe the changing allergy CPT codes, ICD-10 changes and other new coding developments; Discuss the requirements for compliance with federal regulations, including penalties for non-compliance.

Q & A Workshop

2809 Update in Occupational Allergy: A Focus on the Skin, Nose, and the Young Worker

4:45 to 6:00 pm
Convention Center, Upper Level, Room 7AB
Credit: 1.25 CME / 1.50 CE
Moderator: Susan M. Tarlo, MBBS FAAAAI

4:45 Skin Prick Testing in the Diagnosis of Occupational Type I Allergies
Joaquin Sastre, MD PhD FAAAAI

5:00 Occupational Rhinitis
Santiago Quirce, MD PhD

5:15 Prevention of Work-Related Respiratory Allergies in Young Workers
André Cartier, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Review the pros and cons of skin testing for occupational allergens and recent advances in occupational skin allergy; Identify the range of exposures causing occupational rhinitis and tools for investigation; Discuss how to approach adolescents and young adults at risk of work-related allergic responses.

Q & A Workshop

2810 Molecular Pathogenesis of Aspirin Intolerance

4:45 to 6:00 pm
Convention Center, Upper Level, Room 8
Credit: 1.25 CME / 1.50 CE
Moderator: Robert P. Schleimer, PhD FAAAAI

4:45 Prostaglandin E2 Resistance: An Explanation for Dysregulation of Leukotrienes in AERD
Tanya M. Laidlaw, MD FAAAAI

5:00 Chronic Rhinosinusitis and Disturbed Microbial Homeostasis
Susan V. Lynch, PhD

5:15 The Surprising Role of Interferon Gamma in AERD
Larry Borish, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Identify the molecular control mechanisms of the 5-lipoxygenase enzyme; Identify the potential contribution from the perturbed microbiome; Discuss the potential role of interferon gamma in AERD.

Panel Discussion Workshop

2811 Experimental Models of Allergic Rhinitis: Evaluation and Utilization

4:45 to 6:00 pm
Convention Center, Upper Level, Room 5AB
Credit: 1.25 CME / 1.50 CE
Moderator: Fuad M. Baroody, MD FAAAAI

Panelists:

Anne K. Ellis, MD MSc FAAAAI
Robert M. Naclerio, MD FAAAAI
Martin Wagenmann, MD FAAAAI

Upon completion of this session, participants should be able to: Describe the commonly used methodologies utilized in environmental exposure unit-type studies of allergic rhinitis; Describe the most commonly used methodologies for experimental nasal allergen challenge in the investigation of allergic rhinitis; List the advantages and disadvantages of both experimental models pertaining to the study of allergic rhinitis.



Q & A Workshop

2812 Safety Challenges with Allergen Immunotherapy

4:45 to 6:00 pm
Convention Center, Mezzanine Level, Room 14AB
Credit: 1.25 CME / 1.50 CE
Moderator: Matthew A. Rank, MD FAAAAI

4:45 Allergen Immunotherapy in Patients with Other Special Medical Conditions

Désirée E.S. Larenas Linnemann, MD FAAAAI

5:00 Immunotherapy and Medication: Lessons Learned from Experience on How to Approach these Patients

Christopher W. Calabria, MD

5:15 Which Factors Might Enhance Safety of Immunotherapy in Your Clinic?

David I. Bernstein, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss safety experience with allergen immunotherapy given to patients with a history of cancer, HIV positivity, hypertension and other underlying medical conditions; Describe problems that might arise theoretically and problems that have been reported with AIT in patients taking certain medications (beta-blockers, ACE inhibitors, immunosuppressive drugs, etc.); Recognize factors in an allergy clinic associated with a higher rate of adverse events with AIT and recommend actions in their clinics that might augment safety of AIT.

Q & A Workshop

2813 The Epithelium in Control

4:45 to 6:00 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Angela Haczku, MD PhD FAAAAI

4:45 TSLP, Here We Go Again!

Steven Ziegler, PhD

5:00 The Importance of IL-25

Hirohito Kita, MD

5:15 Epithelial and Dendritic Cell-Derived IL-33 in Control of Allergic Disease

Anne Sperling, PhD

5:30 Question & Answer

Upon completion of this session, participants should be able to: Describe novel mechanisms through which epithelial TSLP drives allergic disease; Discuss the mechanism through which epithelial derived IL-25 drives allergic disease; Discuss how the epithelium through IL-1a is able to drive allergic disease.

Annual Meeting Workshops

Programmed by the AAAAI. Annual Meeting Workshops funded through an educational grant from Merck.

Q & A Workshop

2814 ABAI: Help Me Help You Meet MOC Requirements

4:45 to 6:00 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderator: Stephen I. Wasserman, MD FAAAAI

4:45 What's New and What Do I Have to Do to Meet MOC Requirements?

Rayné Harrison

5:00 Roadblocks to Meeting MOC Requirements

Sarah Johnson

5:15 How I Survived Meeting MOC Requirements

James M. Tracy, DO FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Review the MOC requirements and how to successfully complete them; Demonstrate tips and tricks to completing MOC requirements; Reflect upon the personal experience of a peer who completed MOC requirements.

Q & A Workshop

2815 The Next Step After ICS/LABA

4:45 to 6:00 pm
Convention Center, Upper Level, Room 30ABCDE
Credit: 1.25 CME / 1.50 CE
Moderator: Harold S. Nelson, MD FAAAAI

4:45 The Case for Anti-Cholinergics

Brian J. Lipworth, MD

5:00 The Case for Fine Particle ICS

Richard J. Martin, MD

5:15 The Case for Omalizumab

Thomas B. Casale, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: List the evidence supporting the use of anticholinergic therapy in refractory asthma; Review the evidence supporting the use of a small particle ICS over conventional ICS molecules; Discuss recent evidence supporting the use of omalizumab treatment in difficult asthma.

Problem-Based Learning Workshop



2816 Controversies in a Patient with Insect Sting Anaphylaxis

4:45 to 6:00 pm
Convention Center, Upper Level, Room 31C
Pre-registration and ticket required. Fee: \$50.
Credit: 1.25 CME / 1.50 CE
PBL Facilitator: Ray S. Davis, MD FAAAAI
Content Lecturer: David B.K. Golden, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss a case vignette of a patient with stinging insect anaphylaxis; Apply the latest Practice Parameters in the management of a challenging patient with insect venom anaphylaxis; Determine criteria for when to discontinue venom immunotherapy.



Allied Health Workshop  

2821 Anaphylaxis: Advancing Proficiency in Recognition, Management and Risk Reduction

4:45 to 6:00 pm

Marriott North Tower, Lobby Level, Torrey Pines 1 & 2

Pre-registration and ticket required. No fee.

Credit: 1.25 CME / 1.50 CE

Moderator: Dee Mallam, RN AE-C

4:45 Anaphylaxis: Recognition and Treatment
Gregory M. Metz, MD

5:00 Anaphylaxis: Risk Reduction Strategies
Karen L. Gregory, DNP APRN-BC RRT AE-C

5:15 Hands-On Instruction

Upon completion of this session, participants should be able to: Discuss the criteria for anaphylaxis; Identify signs and symptoms of anaphylaxis and understand appropriate treatment; Describe risk factors for anaphylaxis and implement risk reduction strategies.

Allied Health Workshop 

2822 Paths to Empowerment: Motivation and Cost-Effective Incentives in an Economically Challenging Environment

4:45 to 6:00 pm

Marriott North Tower, Lobby Level, Marriott Hall Salon 2

Credit: 1.25 CME / 1.50 CE

Moderator: John D. Milewski, Med. Admin.

Jeanette Booker

5:30 Question & Answer

Upon completion of this session, participants should be able to: Identify how to assess level of motivation in current employees; Discuss how to improve motivation and increase productivity; Outline how to change the culture in their practices and look at alternative incentives that are cost effective and reap positive results.

Allied Health Workshop  

2823 Performing a Practice Assessment

4:45 to 6:00 pm

Marriott North Tower, Lobby Level, Marriott Hall Salon 1

Credit: 1.25 CME / 1.50 CE

Moderator: Joan E. Hawkins

Thomas J. Derrico

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss the importance of a periodic assessment of their practices operational and financial performance; Identify key areas for consideration in performing an assessment; Describe sources of data from within their practices and how to obtain the data.

Allied Health Workshop 

2824 Myth Busters: Using Evidence-Based Medicine to Dispel Your Patient's Allergy-Related Urban Myths

4:45 to 6:00 pm

Marriott North Tower, Lobby Level, Torrey Pines 3

Credit: 1.25 CME / 1.50 CE

Moderator: Jeanette L. Arnold, MSN RN C-FNP

David R. Stukus, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss commonly held misconceptions in the field of allergy/immunology; Analyze the evidence that refutes these commonly held misconceptions; Describe information that can be utilized in clinical practice to address frequently asked questions received from referring providers and patients.

Allied Health Workshop  

2825 Managing the Complexities of the Food Protein-Induced Enterocolitis Syndrome Diet

4:45 to 6:00 pm

Marriott North Tower, Lobby Level, Atlanta

Credit: 1.25 CME / 1.50 CE

Moderator: G. Lynn Christie, MS RD

Kathryn E. Grimshaw, PhD RD

Carina Venter, PhD RD

5:25 Question & Answer

Upon completion of this session, participants should be able to: Identify foods commonly associated with FPIES; Describe the typical feeding progression in infancy and how to provide appropriate foods to promote feeding skill development with a very limited diet; Discuss specific nutritional risks associated with a limited solid foods diet in infancy and how to prevent/correct deficiencies in these diets.

New Allergist/Immunologist Assembly Business Meeting and Reception

4:45 to 6:15 pm

Convention Center, Upper Level, Room 31AB

The AAAAI invites all new allergy/immunology specialists to attend this business meeting and reception.

Chrysalis Project Reception

6:00 to 7:00 pm

Marriott North Tower, Lobby Level, Rancho Santa Fe 1-3

Private reception open to Chrysalis project participants, mentors, faculty, and the Program Directors Assembly.

The Allergy, Asthma & Immunology Education and Research Organization (ARTrust™) "First Class Event"



7:00 to 10:00 pm

San Diego Air & Space Museum

All AAAAI members, delegates and guests are invited to attend this Saturday evening event. See page 13 for more information.

AAAAI American Academy of
Allergy Asthma & Immunology

Save the Date



2015 *AAAAI Annual Meeting*
February 20-24

Houston  **Texas**

American Academy of Allergy, Asthma & Immunology



Seminars



7:00 to 8:00 am

Pre-registration and ticket required. Fee: \$40. Continental breakfast included. Sessions and meals are limited to 30 people.

Credit: 1.00 CME / 1.20 CE

3001 Treating the Patient with Difficult to Treat Exercise-Induced Asthma: Novel Therapies for Exercise-Induced Bronchoconstriction

Matteo W. Bonini, MD

William W. Storms, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon D

Upon completion of this session, participants should be able to: Outline current therapies for exercise-induced bronchoconstriction and acknowledge that some patients do not respond to them; Describe novel therapies for exercise-induced bronchoconstriction; Explain why beta agonists do not work for all patients with exercise-induced bronchoconstriction.

3002 Use of Cytokine Inhibitors in Severe Asthma

Jonathan Corren, MD

Sally E. Wenzel, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon E

Upon completion of this session, participants should be able to: Review and understand the roles that specific cytokines play in asthma; Review trials of various agents (anti-TNF, anti-IL4, anti-IL13, anti-IL5, anti-IL17, anti-IL9) in asthma; Explore subtypes of asthma where these agents might best be used.

3003 How Many Eosinophils are Too Many?

Paneez Khoury, MD

Princess U. Ogbogu, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon F

Upon completion of this session, participants should be able to: Review the criteria for eosinophilia; Discuss the differential diagnosis of eosinophilia; Review the work-up for an increased eosinophil count.

3004 Social Media for Allergy/Immunology Practice: Let's Do It!

Sakina S. Bajowala, MD FAAAAI

Nathaniel D. Hare, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon G

Upon completion of this session, participants should be able to: Discuss how to set up a Twitter account and how to use it to connect with patients and colleagues; Discuss how to set up a Facebook professional page; Describe how to use YouTube to embed and record videos to maintain an interactive website for your practice.

3005 Update on Testing for Primary Immunodeficiency Diseases

John M. Routes, MD FAAAAI

Kathleen E. Sullivan, MD PhD FAAAAI

Marriott South Tower, Level 3, Balboa

Upon completion of this session, participants should be able to: Review novel testing for recurrent or unusual infections; Discuss genetic testing for primary immunodeficiency diseases; Discuss future testing for primary immunodeficiency.

3006 Let's Take the Myth-stery Out of Mold

James J. Anderson, MLT

Peter J. Pityn, PhD

Marriott South Tower, Level 3, Mission Hills

Upon completion of this session, participants should be able to: Provide evidence that the risk of mold is often overstated, misstated or misunderstood; Learn of the true risk presented by mold; Explore issues with mold assessments and everyday mold exposure.

3007 Environmental Microbiomes

Christina E. Ciaccio, MD FAAAAI

Brett J. Green, PhD

Marriott South Tower, Level 3, Cardiff

Upon completion of this session, participants should be able to: Explore the human microbiome and allergic disease; Discuss the normal indoor microbiome and factors that cause alterations in the typical structure.

3008 Medical Management of Eosinophilic Esophagitis in Adults

Mark Holbreich, MD FAAAAI

Javed Sheikh, MD FAAAAI

Marriott South Tower, Level 3, Del Mar

Upon completion of this session, participants should be able to: Show the appropriate use of diet in EoE management in adults; Demonstrate the different medications and become familiar with dose and delivery; Describe the pros and cons of esophageal dilation in EoE.

3009 Mastocytosis Mimics: Cutting Through the Clutter

Joseph H. Butterfield, MD FAAAAI

Melody C. Carter, MD

Marriott South Tower, Level 3, Miramar

Upon completion of this session, participants should be able to: List the criteria for diagnosing systemic mastocytosis; Recognize the variety of mast cell activation disorders and the criteria needed for a true diagnosis of mast cell activation syndrome; Describe the differential diagnostic possibilities when faced with a patient with symptoms suggestive of systemic mastocytosis or mast cell activation syndrome.

3010 Optimizing the Allergist's Expertise in Asthma Adherence

Bruce G. Bender, PhD FAAAAI

L. Keoki Williams, MD MPH FAAAAI

Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to: Discuss an appreciation for the prevalence and implications of suboptimal adherence in asthma; Develop clues which may suggest suboptimal adherence; Discuss strategies to facilitate optimal controller use in specific asthmatic patients.

3011 Is Immunotherapy Getting Safer? Updated Information on Various Forms of Immunotherapy and How to Improve

Tolly Epstein, MD MS

Michael S. Tankersley, MD FAAAAI

Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to: Summarize current evidence regarding the incidence of fatal reactions to SCIT; Critically assess new evidence characterizing risk factors associated with SCIT anaphylaxis that may be applied to optimize safety protocols; Discuss the necessity of the thirty minute waiting period after SCIT injections.

3012 Clinical Conundrums in Chronic Rhinosinusitis

Rakesh Chandra, MD

Raymond G. Slavin, MD MS FAAAAI

Marriott South Tower, Level 1, Santa Rosa

Upon completion of this session, participants should be able to: Utilize an evidence-based approach to the diagnosis and treatment of chronic rhinosinusitis.

3013 Understanding How Allergic Responses End: The Allergy Resolvome

Koichiro Asano, MD

Ariel Munitz, PhD

Marriott South Tower, Level 4, La Costa

Upon completion of this session, participants should be able to: Identify factors involved in resolution of inflammation; Review lipid mediators', IL-10 and endocannabinoids' mechanism of action in the resolution of inflammation.

Annual Meeting Seminars

Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.



3014 Inhibitory Receptors on Allergy Effector Cells: New Therapeutic Targets

Bruce S. Bochner, MD FAAAAI
Francesca Levi-Schaffer, PhD FAAAAI
Marriott South Tower, Level 4, Catalina

Upon completion of this session, participants should be able to: Discuss the mechanisms of three different inhibitory receptors pertinent for asthma; Describe efforts to therapeutically target these receptors.

3015 Parasites, Allergy and Asthma

Luisa Karla P. Arruda, MD PhD FAAAAI
Thomas A.E. Platts-Mills, MD PhD FAAAAI
Marriott South Tower, Level 4, Coronado

Upon completion of this session, participants should be able to: Review outcomes of clinical trials conducted with parasites to treat patients with asthma or rhinitis; Discuss epidemiologic studies on parasites, allergy and asthma carried out in different areas of the world and with different populations; Discuss mechanisms by which parasite infection may influence immune responses underlying allergy and asthma and the role of parasite infections in total and specific IgE.

Allied Health Seminars   

7:00 to 8:00 am
Pre-registration and ticket required. Fee: \$10. Sessions are limited to 30 people.
Credit: 1.00 CME / 1.20 CE

3041 PFT Interpretation: Beyond the FVC

Edward O. Corazalla, MS RPFT
Marriott North Tower, Lobby Level, Rancho Santa Fe 1 & 2

Upon completion of this session, participants should be able to: Review the effect clinical status has on PFT testing; Develop the ability to interpret difficult spirometry tracings; Interpret PFTs and develop options to modify the asthma care plan.

3042 Recurrent Infections: When is a "Little Cold" More Than a "Little Cold"

Joseph L. Roberts, MD PhD
Debra A. Sedlak, MSN CPNP
Marriott North Tower, Lobby Level, Torrey Pines 1 & 2

Upon completion of this session, participants should be able to: Develop an appreciation of the multiple presentations of the patient with recurrent infections; Discuss the selection of appropriate testing to determine if the patient has or is evolving to a primary immunodeficiency diagnosis; Review the appropriate screening test for non-PIDD diagnosis (autoimmune, endocrine).

3043 Complementary and Alternative Medicine (CAM): What's New and What We Need to Know: Taking a History and Providing Guidance on Patients' Use of CAM in Allergy and Asthma


Maureen George, PhD RN AE-C
William S. Silvers, MD FAAAAI
Marriott North Tower, Lobby Level, Atlanta & Chicago

Upon completion of this session, participants should be able to: Discuss commonly used CAM for seasonal allergies and asthma; Describe the evidence for saline nasal irrigation, acupuncture, butterbur, honey and other CAM in a clinical case; Investigate online resources for reference, e.g. NCCAM (NIH National Center for Complementary and Alternative Medicine), Natural Medicines Comprehensive Database, etc.

3044 Tips on Training School Personnel about Food Allergies and Anaphylaxis

Sonia C. Mancia, RN
Humaira Robinson, BSN RN
Marriott North Tower, Lobby Level, New York & Orlando

Upon completion of this session, participants should be able to: Discuss tips on how to train school personnel to recognize and treat anaphylaxis; Review evidence regarding the content to include training and the efficacy of such training.

Plenary 

3101 Integrated Airways

8:15 to 9:45 am
Convention Center, Ground Level, Exhibit Hall A
Credit: 1.50 CME / 1.80 CE
Moderator: Steve N. Georas, MD

8:15 Host Defense, Inflammation and Remodeling in the Upper Airway
Robert P. Schleimer, PhD FAAAAI

8:45 Barrier Dysfunction in the Lower Airway
Donna Davies, BSc PhD

9:15 Asthma Endotypes: The Next Step Towards Personalized Asthma Care
Sally E. Wenzel, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss the immunopathogenesis of barrier dysfunction in chronic rhinosinusitis; Describe the relationship between barrier dysfunction and the immunopathogenesis of asthma; Discuss how asthma endotypes are influencing the development of personalized asthma therapy.

Posters

7:00 am to 6:00 pm
Convention Center, Ground Level, Exhibit Hall B
Posters on display from 7:00 am to 6:00 pm. Authors present from 9:45 to 10:45 am.
Credit: No CME / No CE
Refer to pages 83 – 158 for abstracts and authors.

3201 Bronchoprovocation and Asthma Comorbidities

3202 Biomarkers and Asthma Control I

3203 Atopic Disease Basic Science

3204 T Cell Mediated Immunity

3205 Asthma Epidemiology, Risk Factors and Public Health II

3206 Aerobiology II

3207 Food Allergy I

3208 Urticaria

3209 Pediatric Population Health

3210 Health Information Technology

3211 Chronic Rhinosinusitis and Polyps

3212 Rhinitis

3213 Mechanisms of Lymphocyte Function

3214 Role of Structural Cells in Mechanisms in Health and Disease

Annual Meeting Seminars

Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.



Symposium ▼

3301 EAACI: Novel Developments in Asthma Exacerbations

10:45 am to 12:00 pm

Convention Center, Upper Level, Ballroom 6A

Credit: 1.25 CME / 1.50 CE

Moderators: Cezmi A. Akdis, MD FAAAAI

Nikolaos G. Papadopoulos, MD FAAAAI

10:45 Molecular Mechanisms of Asthma Exacerbations

Evangelos Andreakos, PhD

11:05 Immune Response to Rhinoviruses and Their Link to Asthma Exacerbations

Mubeccel Akdis, MD PhD

11:25 Eicosanoids and Asthma Exacerbations

Marek Sanak, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: List mechanisms underlying asthma exacerbations; Describe the interaction of respiratory viruses with epithelium, the immune system and how eicosanoids play a role in the pathogenesis of asthma exacerbations.



Symposium ▼

3302 Pathophysiology and Management of Urticaria and Angioedema

10:45 am to 12:00 pm

Convention Center, Upper Level, Ballroom 6B

Credit: 1.25 CME / 1.50 CE

Moderator: David R. Weldon, MD FAAAAI

10:45 Pathophysiology of Chronic Urticaria

Thomas B. Casale, MD FAAAAI

11:05 Diagnostic Evaluation of Patients with Chronic Urticaria/Angioedema: What Does the Evidence Tell Us?

David M. Lang, MD FAAAAI

11:25 Therapy Options for Patients with Anti-Histamine Resistant Chronic Urticaria

Javed Sheikh, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe updates of the pathophysiology of chronic urticaria; Describe cost-effective and evidence-based diagnostic evaluation of patients with chronic urticaria/angioedema; Relate evidence supporting use of therapeutic interventions for patients with antihistamine-resistant urticaria/angioedema.

Symposium ▼

3303 Update of the Allergic Contact Dermatitis Practice Parameter: What's New in 2014?

10:45 am to 12:00 pm

Convention Center, Upper Level, Ballroom 6CF

Credit: 1.25 CME / 1.50 CE

Moderator: H. Henry Li, MD PhD

10:45 Clinical Pearls and Clues in the Assessment of the Patient Referred for Evaluation of Contact Dermatitis and Patch Testing

David I. Bernstein, MD FAAAAI

11:05 What are the Most Common Chemical Sensitizers at Home and in the Workplace?

Luz S. Fonacier, MD FAAAAI

11:25 Metal Allergy and Implantable Devices

Karin A. Pacheco, MD MSPH FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Identify key factors in clinical history and patch testing in suspected allergic contact dermatitis; Identify the most frequent contact sensitizers encountered at home and in the workplace; Discuss the relationship between metal hypersensitivity and prosthetic joint failure.

Symposium ▼

3304 Wheezing Episodes in Preschool Children: The Role of Bacterial Pathogens, Treatment of Acute Exacerbations and Potential for Asthma Prevention

10:45 am to 12:00 pm

Convention Center, Upper Level, Ballroom 6DE

Credit: 1.25 CME / 1.50 CE

Moderator: Leonard B. Bacharier, MD FAAAAI

10:45 Wheezing Episodes in Preschool Children: Beyond Viral Infections

Daniel J. Jackson, MD

11:05 Oral Corticosteroids as a Treatment of Acute Wheezing Episodes in Preschool Children: What is the Evidence for the Efficacy of This Treatment?

Avraham Beigelman, MD MSCI

11:25 The Utility of Oral Bacterial Extracts as a Prevention Modality for Wheezing Episodes and Asthma

Fernando D. Martinez, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss the current evidence of the role of bacterial pathogens in the pathogenesis of wheezing episodes in preschool children; Evaluate whether the current evidence supports the utility of oral corticosteroids as a treatment for acute wheezing episodes in preschool children; Discuss emerging concepts on the utility of immunostimulants for the prevention of wheezing episodes and potentially asthma.



Symposium ▼

3305 Molecular Allergy: From Bench to Bedside

10:45 am to 12:00 pm
Convention Center, Upper Level, Room 11AB
Credit: 1.25 CME / 1.50 CE
Moderator: Robert G. Hamilton, PhD D.ABMLI FAAAAI

10:45 Improved Diagnostics for Food Allergy: Higher Analytical Sensitivity and Better Risk Assessment Using Single Molecules
Kirsten Beyer, MD

11:05 Improved Diagnostics for Inhalant Allergy: Addressing Plant Related Crossreactivity and Multisensitizations with Single Molecules
Joerg R. Kleine-Tebbe, MD FAAAAI

11:25 Allergenic Molecules in Anaphylactic Reactions: Improved Differentiation and Analytical Sensitivity
Markus W. Ollert, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss the diagnostic value of food components and how they can lead to improved diagnostic answers and advice to the patient; Describe the diagnostic value of inhalant allergen components and how they can lead to improved diagnostic answers and advice to the multi-sensitized patient; Identify recently identified components from bee and wasp venom, latex and other protein allergens that facilitate definitive answers in cases of presumed sensitizations and enhance analytical sensitivity.

Symposium ▼

3306 The Relationship Between Allergies and Infections

10:45 am to 12:00 pm
Convention Center, Room 14AB
Credit: 1.25 CME / 1.50 CE
Moderator: Dorothy S. Cheung, MD FAAAAI

10:45 Basophils: Initiators of the Immune Response
Caroline L. Sokol, MD PhD

11:05 Mast Cells in the Immune Response Against Bacteria
Soman N. Abraham, PhD

11:25 Role of IgE in the Anti-Viral Immune Response
Mitchell H. Grayson, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss the ability of basophils to present antigen and start an immune response; Describe the data suggesting that the production of IgE is part of the antiviral immune response; Discuss how mast cells play a role in the clearance of bacterial and viral infections.

Symposium ▼

3307 The Emergence of Innate Lymphocyte Populations Driving Allergic Disease

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Larry Borish, MD FAAAAI

10:45 Innate Properties of IL-5+ "Super-Effector" Th2 Cells
Calman Prussin, MD FAAAAI

11:05 Type 2 Innate Lymphoid Cell Activation by CysLTs
Taylor A. Doherty, MD FAAAAI

11:25 Innate Lymphoid Cells and Invariant Natural Killer T Cells in Asthma
Dale T. Umetsu, MD PhD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss the various innate cell populations and their contributions to allergic inflammation and pathogenesis; Identify the role of lipid mediators in regulation of adaptive Th2 immunity; Identify the potential roles of innate lymphocytes in allergic disease.

Symposium ▼

3308 Closing the Outcome Gap for Women with Asthma: A Tribute to Noreen M. Clark, PhD

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderator: Georgiana M. Sanders, MD MS FAAAAI

10:45 Clinical, Social, and Cultural Factors in Asthma Management by Women and Potential Outcomes from Gender Focused Interventions
Georgiana M. Sanders, MD MS FAAAAI

11:05 Asthma Management in Women with Multiple Morbidities
Mary Janevic, MPH PhD

11:25 Special Challenges in Treatment and Self Management for Older Women with Asthma
Alan P. Baptist, MD MPH FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe the range of treatment and management challenges and solutions particular to their female asthma patients; Recognize elements of education for female patients that are associated with reduced health care use and symptom burden.

Allied Health Symposium ◆

3311 Update on Experience Performing Baked Egg and Baked Milk Food Challenges

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Marriott Hall Salons 1 & 2
Credit: 1.25 CME / 1.50 CE
Moderator: Kim E. Mudd, RN MSN CCRP
Teri Holbrook, RN CRNP
Hemant P. Sharma, MD MHS FAAAAI
Elisabeth S. Stieb, RN BSN AE-C

11:45 Question & Answer

Upon completion of this session, participants should be able to: Identify which children can be considered for a food challenge to baked milk and baked egg; Describe the appropriate protocol to use in your practice to conduct a baked milk and baked egg food challenge; Discuss how children who pass a baked milk and baked egg food challenge can increase the foods in their diets.



Allied Health Workshop 

3312 Motivational Interviewing Strategies

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Rancho Santa Fe 1 & 2
Credit: 1.25 CME / 1.50 CE
Moderator: Michael S. Tankersley, MD FAAAAI
Beth A. Allison, NP

11:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss the role of ambivalence in behavior change; Describe strategies for dealing with patient resistance; Review brief motivational interviewing strategies to incorporate into practice.

Allied Health Workshop 

3313 Immunotherapy Guideline Update: Third Edition and USP 797 Compliance

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Torrey Pines 1 & 2
Credit: 1.25 CME / 1.50 CE
Panelists
Cheryl Koff Bernstein, RN BSN CCRC
Michael R. Nelson, MD PhD FAAAAI

Upon completion of this session, participants should be able to: Discuss the requirements and importance of becoming compliant with USP chapter 797; Describe the compliance requirements for allergen extract preparation according to the USP chapter 797 and immunotherapy Practice Parameters Guidelines Third Edition Update; Identify practical approaches for implementation of the guidelines.

Allied Health Workshop  

3314 Childhood Asthma and Obesity: What Do We Know? What Can We Do?

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, Atlanta & Chicago
Credit: 1.25 CME / 1.50 CE
Moderator: Stephen J. McGeedy, MD FAAAAI
Anne E. Borgmeyer, MSN RN CPNP AE-C
Carina Venter, PhD RD

11:25 Question & Answer

Upon completion of this session, participants should be able to: Outline the relationship between asthma and obesity; Review current guidelines for the management of childhood obesity and asthma; Discuss barriers to adherence for obese children with asthma and their families.

Allied Health Workshop  

3315 Team Approach to Providing Interdisciplinary Care of Atopic Dermatitis

10:45 am to 12:00 pm
Marriott North Tower, Lobby Level, New York & Orlando
Credit: 1.25 CME / 1.50 CE
Moderator: Jennifer S. LeBovidge, PhD
Karol G. Timmons, RN MS CPNP
Wendy Elverson, RD LDN

11:15 Question & Answer

Upon completion of this session, participants should be able to: Describe the formation of a multidisciplinary team to care for children with atopic dermatitis; Discuss the role of a psychologist/mental health professional in an interdisciplinary clinic for children with atopic dermatitis; Describe the role of a nutritionist in an interdisciplinary clinic to optimize nutritional care for patients with atopic dermatitis.

Allied Health Oral Abstract Session   

3520 Allied Health Oral Abstract Luncheon

12:15 to 1:30 pm
Marriott North Tower, Lobby Level, San Diego Ballroom Salon C
Pre-registration and ticket required. Fee: \$40. Box lunch included.
Credit: 1.25 CME / 1.50 CE
Moderator: Debra A. Sedlak, MSN CPNP

12:15 Clinical Efficacy Of Subcutaneous and Sublingual Immunotherapy In Asthma and Rhinitis Children Sensitized To House Dust Mite

Min-Ju Kim

12:30 A Patient-Reported Symptom-Based Predictor Of Objective Sinus Inflammation

Alcina K. Lidder, BA

12:45 Healthcare Providers' Perception vs. Reality In Patient Concerns About Starting Subcutaneous Immunoglobulin

Carla M. Duff, CPNP MSN

1:00 Anaphylaxis During Obstetric Surgery In Latex Allergic Patients

Nana Jinjolava, MD

1:15 The Impact Of Legislation On Illinois School Nurses

Christine Szychlinski, APN CPNP

Upon completion of this session, participants should be able to discuss the diversity in care provided to the allergy and immunology patient population.

Interest Section Forum  

3521 ADT: Hot Issues in Asthma

12:30 to 2:30 pm
Convention Center, Upper Level, Room 5AB
Pre-registration and ticket required. No fee. Box lunch included. Bring your mobile device to participate.
Credit: 1.25 CME / 1.50 CE
Moderator: Timothy J. Craig, DO FAAAAI

12:30 Lunch

12:35 Business Meeting
Timothy J. Craig, DO FAAAAI

1:05 Question & Answer

1:15 Why are Microbiomes Important in Asthma?

Homer A. Boushey, MD FAAAAI

1:45 Update on Newer Approved Therapies and New Uses of Old Drugs for Asthma

William W. Busse, MD FAAAAI

2:15 Question & Answer

Upon completion of this session, participants should be able to: Discuss the importance of microbiomes in asthma; Discuss the introduction of new therapies into the present care of asthma; Describe how biologicals can affect asthma care.



Interest Section Forum  

3522 BCI: Cutting-Edge Research from Members of the Basic and Clinical Immunology Interest Section

12:30 to 2:30 pm

Convention Center, Upper Level, Room 11AB

Pre-registration and ticket required. No fee. Box lunch included.

Credit: 1.25 CME / 1.50 CE

Moderator: Francisco A. Bonilla, MD PhD FAAAAI

12:30 Lunch

12:35 Business Meeting

Francisco A. Bonilla, MD PhD FAAAAI

1:05 Question & Answer

1:15 Nanotechnology Meets Allergy: The Yin and Yang of Nanoscale Toxicity and Therapy

James R. Baker, Jr., MD FAAAAI

1:45 Genome Safari: Navigating the Nucleotides to Find the Origins of Asthma

Kathleen C. Barnes, PhD FAAAAI

2:15 Question & Answer

Upon completion of this session, participants should be able to: Discuss nanotechnology applications in medicine generally; Identify nanotechnology applications specific to allergy and immunology; Describe the most recent advances in genomic approaches to understanding the origins of asthma and allergy.

Interest Section Forum  

3523 EORD: Metals, Cements and Glues: Assessing the Exposure: Diagnosing the Disease

12:30 to 2:30 pm

Convention Center, Mezzanine Level, Room 14AB

Pre-registration and ticket required. No fee. Box lunch included.

Credit: 1.25 CME / 1.50 CE

Moderator: Jeffrey G. Demain, MD FAAAAI

12:30 Lunch

12:35 Business Meeting

Karin A. Pacheco, MD MSPH FAAAAI

1:05 Question & Answer

1:15 Metals: Source Exposures, Disease Outcomes, and Making the Association Between the Two

James S. Taylor, MD

1:45 Cements and Glues: Common and Overlooked Causes of Allergic Disease

Karin A. Pacheco, MD MSPH FAAAAI

2:15 Question & Answer

Upon completion of this session, participants should be able to: Recognize common occupational and procedure-related exposures to metals, cements and glues; Identify which of these to suspect in adverse reactions in the workplace or the surgical suite; Describe how best to establish the diagnosis of sensitization to these agents.

Interest Section Forum  

3524 FADDA: Practice Parameter Updates on Allergic Skin Diseases

12:30 to 2:30 pm

Convention Center, Upper Level, Ballroom 6A

Pre-registration and ticket required. No fee. Box lunch included. Bring your mobile device to participate.

Credit: 1.25 CME / 1.50 CE

Moderator: David A. Khan, MD FAAAAI

12:30 Lunch

12:35 Business Meeting

David A. Khan, MD FAAAAI

1:05 Question & Answer

1:15 Atopic Dermatitis: Updates on Evaluation and Management from the Practice Parameter

Lynda C. Schneider, MD FAAAAI

1:45 Chronic Urticaria: Updates on Diagnostic Testing and Therapy from the Practice Parameter

Jonathan A. Bernstein, MD FAAAAI

2:15 Question & Answer

Upon completion of this session, participants should be able to: Describe recent updates to the practice parameter on atopic dermatitis focusing on evaluation and management of atopic dermatitis; Discuss recent updates to the practice parameter on urticaria focusing on evaluation and management of chronic urticaria.

Interest Section Forum  

3525 HEDQ: Bringing Added Value to Accountable Care Organizations (ACOs) Through Asthma Population Management

12:30 to 2:30 pm

Convention Center, Mezzanine Level, Room 15AB

Pre-registration and ticket required. No fee. Box lunch included. Bring your mobile device to participate.

Credit: 1.25 CME / 1.50 CE

Moderators: Bruce G. Bender, PhD FAAAAI

Giselle Mosnaim, MD MS FAAAAI

12:30 Lunch

12:35 Tribute to Dr. Noreen Clark

12:40 Business Meeting

Giselle Mosnaim, MD MS FAAAAI

1:05 Question & Answer

1:15 Asthma Population Management (Part 1): Identifying Persistent Asthma, Defining High Risk Asthma, and Measuring Quality of Asthma Care

Michael Schatz, MD MS FAAAAI

1:45 Asthma Population Management (Part 2): Strategies for Improving Clinical Outcomes and Improving Quality of Care

William W. Crawford, MD

Robert J. Becker, MD, Memorial Lectureship Recipient

2:15 Question & Answer

Upon completion of this session, participants should be able to: Define the administrative data elements necessary for effective management of large populations of asthma patients; Describe the barriers to reducing emergency room asthma visits at the level of a large population of asthma patients; Identify strategies for improving performance on publicly reported asthma quality of care measures.



Interest Section Forum



3526 IRSOC: Make Sublingual Immunotherapy One of Your Tools in Your Practice

12:30 to 2:30 pm
Convention Center, Upper Level, Ballroom 6B
Pre-registration and ticket required. No fee. Box lunch included.
Credit: 1.25 CME / 1.50 CE
Moderator: *Désirée E.S. Larenas Linnemann, MD FAAAAI*

12:30 Lunch

12:35 Business Meeting

Désirée E.S. Larenas Linnemann, MD FAAAAI

1:05 Question & Answer

1:15 How to Select and Administer Grass SLIT Among the Patients of Your Practice

Michael S. Blaiss, MD FAAAAI

1:45 How to Select and Administer House Dust Mite SLIT Among the Patients of Your Practice in the Future

Giovanni Passalacqua, MD

2:15 Question & Answer

Upon completion of this session, participants should be able to: Comment on which patients would make good and which would make bad candidates for SLIT; Discuss safety issues concerning SLIT with grass pollen extracts, especially focused on practical similarities and differences in Europe and U.S.; Give an overview of innovative formula of house dust mite SLIT, as are the tablets and use of adjuvants and argue how molecular diagnosis might have implications for immunotherapy.

Interest Section Forum



3527 MAAI: Novel Mechanisms in Turning Inflammation On and Off

12:30 to 2:30 pm
Convention Center, Mezzanine Level, Room 16AB
Pre-registration and ticket required. No fee. Box lunch included.
Credit: 1.25 CME / 1.50 CE
Moderator: *Mitchell H. Grayson, MD FAAAAI*

12:30 Lunch

12:35 Tribute to Dr. Redwan Moqbel

12:50 Business Meeting

Mitchell H. Grayson, MD FAAAAI

1:10 Question & Answer

1:15 Epithelial Cell Apoptosis Protects Against Inflammation

Larry Borish, MD FAAAAI

1:45 Eicosanoid Storm: The Role of the Inflammasome

Karsten Gronert, PhD

2:15 Question & Answer

Upon completion of this session, participants should be able to: Describe how epithelial cells control inflammation through ingestion of apoptotic cells; Describe how the inflammasome contributes to inflammation through the rapid release of eicosanoids.

Allied Health Course



3551 The International Network for Diet and Nutrition in Allergy (INDANA): Add Nutrition Management to Your Practice Toolkit

12:30 to 5:00 pm
Marriott North Tower, Lobby Level, Marriott Hall Salons 1 & 2
Pre-registration and ticket required. Fee: \$30.
Credit: 4.25 CME / 5.10 CE
Moderator: *Marion E. Groetch, MS RD*

12:30 Diet History: Making the Right Connections

Isabel J. Skypala, PhD

1:10 What's in a Label?

Berber Vlieg-Boerstra, PhD RD

1:45 Food Triggers: The Degree of Avoidance

Marion E. Groetch, MS RD

2:20 A Day in the Life

Jamie L. Kabourek, MS RD

2:55 Break

3:10 Oops...Frequently Made Mistakes in Nutrition and Allergy

G. Lynn Christie, MS RD

3:45 Prevention and Weaning

Carina Venter, PhD RD

4:20 What is a Healthy Diet Anyway?

Kathryn E. Grimshaw, PhD RD

Upon completion of this session, participants should be able to: Recognize how to take a dietary history and link symptoms to food ingredients; Identify the implications (social, emotional, financial and nutritional) of allergen elimination diets and how to minimize the impact on patients and families; Describe the nutritional implications of various avoidance diets and how to advise patients on substitutes to meet nutrient needs.

Oral Abstract

3601 Biomarkers

2:45 to 4:00 pm
Convention Center, Upper Level, Ballroom 6A
Credit: 1.25 CME / 1.50 CE
Moderators: *Faoud T. Ishmael, MD PhD FAAAAI*
Leonard B. Bacharier, MD FAAAAI

2:45 Socio-Demographic and Environmental Correlates Of Exhaled Nitric Oxide Levels

Lakiea S. Wright, MD MAT

3:00 Relationships Between The New Biomarkers Induced By Interleukin-13 and Bronchial Hyperresponsiveness In Asthmatic Children: Periostin and Squamous Cell Carcinoma-Related Antigens

Heysung Baek, MD PhD

3:15 Exhaled Nitric Oxide Performance Compared To Methacholine Challenge In Asthma

Andrew Nickels, MD

3:30 Serum Interleukin 13 (IL-13) and Surfactant Protein D (SP-D) Expression Is Differentially Associated With Disease Status In Pediatric Asthma Patients

Vasiliki Gemou-Engesaeth, MD PhD

3:45 Correlation Of Exhaled Breath Temperature With Age In Chronic Respiratory Diseases

Radoslaw Gawlik, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Oral Abstract

3602 Immune Mechanisms in Atopy

2:45 to 4:00 pm
Convention Center, Upper Level, Room 1AB
Credit: 1.25 CME / 1.50 CE
Moderators: Antonella Cianferoni, MD PhD
Hans C. Oettgen, MD PhD FAAAAI

- 2:45 **Peripherally Induced Foxp3+ Regulatory T Cells Mediates The Immunomodulatory Effect Of Intravenous Immunoglobulin In An Experimental Model Of Allergic Airway Disease**
Amir Hossein Massoud, PhD
- 3:00 **Differential DNA Methylation In Mothers Increases The Prevalence Of Atopic Dermatitis In Their Offspring**
Pia J. Hauk, MD
- 3:15 **Hypereosinophilia In Children and Adults: A Retrospective Comparison**
Kelli Williams, MD MPH
- 3:30 **Interleukin 35 Modulates TSLP, IL-25 and IL-33 Primed Dendritic Cells and Inhibits Naive T Cell Differentiation and Grass Pollen-Specific T Cell Proliferation**
Natalia C. Couto-Franisco
- 3:45 **Fc-Gamma-Receptor-Ib Is Required For The Immunomodulatory Actions Of Intravenous Immune Globulin In An Antigen-Driven Murine Model Of Allergic Airways Disease**
Gabriel N. Kaufman, MSC

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

3603 I. Leonard Bernstein Session on Occupational Allergic Diseases

2:45 to 4:00 pm
Convention Center, Upper Level, Room 11AB
Credit: 1.25 CME / 1.50 CE
Moderator: Jonathan A. Bernstein, MD FAAAAI

- 2:45 **Endotoxin In Size-Specific Airborne Particles Induces Differential Nitritive Stress In Human Bronchoepithelial Cells**
Umesh Singh
- 3:00 **High Rates Of Sensitization To Selected Metals and Bone Cement In Joint Replacement Failure Patients and Preoperative Evaluations**
Karin A. Pacheco, MD MSPH FAAAAI
- 3:15 **Component Resolved Diagnosis In Baker's Asthma**
Cristina Gómez-Casado
- 3:30 **Endotoxin Exposure May Protect Against The Development Of Rhinoconjunctivitis and Respiratory Symptoms In Non-Atopic Individuals With Occupational Exposure To Mice**
Sharon K. Ahluwalia, MD
- 3:45 **Sensitization To Occupational Allergens and Allergic Diseases In Workers Of 5 Havana Bakeries**
Mirta Alvarez, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

3604 Drug Allergy

2:45 to 4:00 pm
Convention Center, Upper Level, Ballroom 6CF
Credit: 1.25 CME / 1.50 CE
Moderators: Mariana C. Castells, MD PhD FAAAAI
Miguel A. Park, MD

- 2:45 **Safety Of Propofol Use In Patients With Food Allergies**
Harshna Mehta, MD
- 3:00 **Risk Stratification Protocol For Carboplatin and Oxaliplatin Hypersensitivity Reactions With Repeat Skin Testing Improves Care**
Alberta L. Wang, MD
- 3:15 **Added Value Of Skin Testing In Hypersensitivity Reactions To Taxanes**
Matthieu Picard, MD
- 3:30 **Risk Stratification For Paclitaxel-Induced Hypersensitivity Reactions Improves Quality Of Care**
Timothy P. Lax, MD
- 3:45 **Healthcare Utilization and Serious Infection Prevalence Associated With Penicillin "Allergy" In Hospitalized Patients: A Cohort Study**
Eric M. Macy, MD FAAAAI

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

3605 Oral Immunotherapy for Food Allergy

2:45 to 4:00 pm
Convention Center, Upper Level, Ballroom 6B
Credit: 1.25 CME / 1.50 CE
Moderators: J. Andrew Bird, MD FAAAAI
Amy M. Scurlock, MD

- 2:45 **Length Of Avoidance Period Following Peanut Oral Immunotherapy Influences Effector Cell Suppression and Clinical Outcomes**
Michael D. Kulis Jr., PhD
- 3:00 **Basophil Hyporesponsiveness To Peanut Following Immunotherapy May Be Transient and Correlates With Clinical Response**
Mark Gorelik, MD
- 3:15 **Safety Of Pediatric Peanut Oral Immunotherapy Is Complicated By High Adverse Event Rates**
Yamini Virkud, MD MA
- 3:30 **Course and Outcome Of Patients With Asthma During Oral Immunotherapy To Cow's Milk Protein**
Arnon Elizur, MD
- 3:45 **B-Fahf-2 Pretreatment Reduces OIT Adverse Reactions and Improves Outcomes In a Murine Model Of Multiple Nut Allergy**
Xiu-Min Li, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Oral Abstract

3606 Adherence

2:45 to 4:00 pm
Convention Center, Upper Level, Room 2
Credit: 1.25 CME / 1.50 CE
Moderators: Eugene M. Choo, MD FAAAAI
Sujani Kakumanu, MD

- 2:45 **Adherence Documentation During Asthma Encounters At a Pediatric Tertiary Care Referral Center**
Kara J. Wada, MD
- 3:00 **High-Risk Asthma Multidisciplinary Care Clinic Adherence Linked To Asthma Control Test (ACT) Score Improvement**
Bradley A. Locke, DO
- 3:15 **Understanding Asthma Medical Nonadherence In Adult and Pediatric Populations**
Joyce Xiang Wu Lee, MD
- 3:30 **Improved Education and Self-Management In Children and Adolescents With Asthma Using a Personalized Smartphone Application**
David R. Stukus, MD FAAAAI
- 3:45 **Misuse Of Medical Devices Among Patients In a Tertiary Care Allergy/Immunology Practice**
Rana S. Bonds, MD FAAAAI

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

3607 Mechanisms of Immunotherapy

2:45 to 4:00 pm
Convention Center, Upper Level, Ballroom 6DE
Credit: 1.25 CME / 1.50 CE
Moderator: Mark Larché, PhD

- 2:45 **B Cells and Plasma Cells Populations Suffer Changes Along The Time After Dermatophagoides Pteronyssinus Specific Immunotherapy**
Enrique Gómez, PhD
- 3:00 **A Subset Of Novel Timothy Grass Antigens Is Associated With Marked Th1/Th2 Shifts Following Specific Immunotherapy**
Veronique M. Schulten
- 3:15 **Interleukin IL-27+ Dendritic Cells Modulate Ex-Vivo Th2 Responses In a Pdl-1-Dependent Manner and Increase In-Vivo Following Grass Pollen Immunotherapy**
Tomokazu Matsuoka
- 3:30 **Local 'Protective' IgG4 Antibodies In Nasal Fluid Are Elevated Following Grass Pollen Immunotherapy**
Jinjin Zhang
- 3:45 **Grass Pollen Immunotherapy: Impaired Allergen-Induced Nasal and Cutaneous Responses Correlate With Overall Seasonal Symptom Scores and Are Associated With Suppressed Local Th2 Cytokines In Nasal Fluid**
Guy W. Scadding, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

3608 Mechanisms of Eosinophil-Driven Disease

2:45 to 4:00 pm
Convention Center, Upper Level, Room 7AB
Credit: 1.25 CME / 1.50 CE
Moderators: Paige Lacy, PhD FAAAAI
Hans-Uwe Simon, MD PhD FAAAAI

- 2:45 **IL-4 and IL-13 Differentially Regulate TLR-Induced Eosinophil-Basophil Differentiation Of Cord Blood CD34+ Progenitor Cells**
Pia Reece, PhD
- 3:00 **Basophils Act As a Cellular Switch to Drive Eosinophilic Inflammation after IgE Activation**
Laurence E. Cheng, MD PhD
- 3:15 **The SNARE VAMP-7 Contributes To Eosinophil Degranulation, *In Vivo***
Paige Lacy, PhD FAAAAI
- 3:30 **Microbiota Regulates Eosinophils In The Small Intestine**
Rodrigo Jimenez-Saiz, PhD
- 3:45 **The Airway Mucins Muc5b and Muc4 Are Endogenous Ligands For Siglec-F and Induce Mouse Eosinophil Death**
Takumi Kiwamoto, MD PhD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Featured Poster Session and Reception

4:00 to 6:00 pm
Convention Center, Upper Level, Ballroom 6 Lobby
All Annual Meeting delegates and their guests are invited to attend this event. No fee and no pre-registration required.
Credit: No CME / No CE
Featured Posters highlight the highest quality abstracts submitted for presentation at the Annual Meeting. During the Featured Poster Session and Reception on Sunday evening, authors will be present with their posters to discuss their research. Take this opportunity to talk with these authors and network with other meeting delegates.

- 3801 Best of ADT**
- 3802 Advances in Primary Immunodeficiencies**
- 3803 Best of EORD**
- 3804 Best of FADDA**
- 3805 Best of HEDQ**
- 3806 Chronic Rhinosinusitis and Polyps**
- 3807 The Redwan Moqbel Memorial MAAI Featured Poster Session**
- 3811 Allied Health Featured Poster**

Second Annual ARTrust™ 5K Run/Walk: Light Up the Night

5:30 pm
Embarcadero
This event is open to everyone: serious runners, casual runners, walkers, families and the general public. Registration required. See page 13 for more information.
Sponsored by Teva Respiratory.



Seminars

7:00 to 8:00 am

Pre-registration and ticket required. Fee: \$40. Continental breakfast included. Sessions and meals are limited to 30 people.
Credit: 1.00 CME / 1.20 CE

4001 Asthma and the Older Adult

Alan P. Baptist, MD MPH FAAAAI
Paula L. Busse, MD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon D

Upon completion of this session, participants should be able to: Compare how asthma symptoms and spirometry may differ in older adults compared to younger populations; Identify unique factors associated with poor asthma control and quality of life in older adults; Discuss the optimal pharmacologic and non-pharmacologic management strategies for older adults with asthma.

4002 Use of Biomarkers in Severe Asthma

Jonathan Corren, MD
Faoud T. Ishmael, MD PhD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon E

Upon completion of this session, participants should be able to: Review and understand specific markers (blood and sputum eosinophils, FeNO, periostin, urine leukotrienes, EBT); Describe the relationship of these markers to specific asthma phenotypes and endotypes; Describe the use of these markers as predictors of efficacies of specific therapies.

4003 Evaluation of Autoinflammatory Disorders in Children

Ronit Herzog, MD FAAAAI
Lu Yao, MD

Marriott South Tower, Level 3, Marina Ballroom Salon F

Upon completion of this session, participants should be able to: Discuss the clinical and laboratory presentation of children with auto-inflammatory disorder; Describe the pathophysiology of auto-inflammatory disorder in children; Discuss the workup and management of children with suspected auto-inflammatory disorder.

4004 Selection and Implementation of an Electronic Medical Record

David J. Shulan, MD FAAAAI
Richard L. Wasserman, MD PhD FAAAAI

Marriott South Tower, Level 3, Marina Ballroom Salon G

Upon completion of this session, participants should be able to: Discuss why one would choose an EHR; Describe how to pick an EHR; Identify the needed procedures in implementing an EHR.

4005 The Spectrum of Presentations in Patients with Auto-Immune Lymphoproliferative Syndrome (ALPS)

Jack J.H. Bleesing, MD PhD
V. Konetl U. Rao, MD

Marriott South Tower, Level 3, Balboa

Upon completion of this session, participants should be able to: Discuss common findings in patients with ALPS; Review current laboratory testing for the disease; Discuss treatment options for ALPS.

4006 How to Get Your K Award Applications by a Mock Study Section

Nora A. Barrett, MD FAAAAI
Lawrence J. Prograis, MD
Joshua A. Boyce, MD FAAAAI

Marriott South Tower, Level 3, Mission Hills

Upon completion of this session, participants should be able to: Describe the peer review process for K award applications; Describe common strengths and weaknesses in K award applications as identified by reviewers; Apply knowledge of common review concerns to the preparation of a competitive K award application.

4007 Occupational Disease: New Agents, New Diseases, Prevention and Epidemiology

Leslie C. Grammer, MD FAAAAI
Santiago Quirce, MD PhD

Marriott South Tower, Level 3, Cardiff

Upon completion of this session, participants should be able to: Discuss new and updated knowledge in the areas discussed; Describe updated strategies for diagnosis and treatment of occupational diseases.

4008 Diagnosing an Allergy to Galactose Alpha 1,3 Galactose

Scott P. Commins, MD PhD
Maya R. Jerath, MD PhD

Marriott South Tower, Level 3, Del Mar

Upon completion of this session, participants should be able to: Describe the clinical presentation of alpha gal food allergy; Discuss how to diagnose and manage alpha gal food allergy.

4009 Non-IgE-Mediated Food Allergies

Jean-Christoph Caubet, MD
Anna H. Nowak-Wegrzyn, MD FAAAAI

Marriott South Tower, Level 3, Miramar

Upon completion of this session, participants should be able to: Discuss a variety of patient cases posing diagnostic dilemmas in non-IgE food allergy; Describe the utility of feeding history, skin prick, serum specific IgE testing and oral food challenge in diagnosing complex patients with possible GI food allergies.

4010 Outcomes and Quality Measures in Allergy Practice and Research

Chitra Dinakar, MD FAAAAI
Kaiser G. Lim, MD FAAAAI

Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to: Describe the most appropriate outcomes measures for assessment of quality practice in asthma and other allergic diseases; Discuss how to design an outcomes study for asthma.

4011 Proactive Management of Food Allergies in Schools

Alton Lee Melton, MD
Michael C. Young, MD FAAAAI

Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to: Identify activities and situations in the school setting that place allergic students at risk for accidental food allergen exposures; Discuss recommendations for schools and parents regarding best practices for treating reactions that do occur and proactively reducing the risk for accidental food allergen exposures.

4012 New Aspects of the Involvement of B and T Cells in the Mechanisms of Immunotherapy

Mubeccel Akdis, MD PhD
Mark Larche, PhD

Marriott South Tower, Level 1, Santa Rosa

Upon completion of this session, participants should be able to: Review new data of regulatory T cell involvement in the immunologic reactions documented after immunotherapy; Review new data of regulatory B cell involvement in the immunologic reactions documented after immunotherapy; Discuss the interactions between both these systems.

Annual Meeting Seminars

Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.



4013 Chronic Rhinosinusitis Subtypes and Treatment Implications

Amber U. Luong, MD PhD
Rodney J. Schlosser, MD

Marriott South Tower, Level 4, La Costa

Upon completion of this session, participants should be able to: Describe the classification of sinusitis; Describe the clinical subtypes of chronic rhinosinusitis; Explain the different non-surgical treatment options for the different chronic rhinosinusitis subtypes.

4014 How Do Antigens Become Allergens?

Angela Haczku, MD PhD FAAAAI
Anne Sperling, PhD

Marriott South Tower, Level 4, Catalina

Upon completion of this session, participants should be able to: Describe how the immune system recognizes innocuous allergens; Discuss dendritic cells, important sentinel cells in allergy; Identify the development of therapeutic agents that could fine tune the dendritic cell response.

4015 Th17 Cells, Neutrophils and Severe Asthma

Dawn C. Newcomb Baker, PhD
R. Stokes Peebles, Jr., MD FAAAAI

Marriott South Tower, Level 4, Coronado

Upon completion of this session, participants should be able to: Describe the role of STAT signaling in Th17 cell development and cytokine expression; Define the role of gender in Th17 cell differentiation and cytokine expression in patients with severe asthma; Discuss the role of IL-17A on structural cells in the airway.

Allied Health Course   

4051 Primer on Primary Immune Deficiency (PID)

8:00 am to 2:15 pm

Marriott North Tower, Lobby Level, Marriott Hall Salon 1

Pre-registration and ticket required. Fee: \$85. Box lunch included.

Credit: 5.50 CME / 6.60 CE

Moderator: Debra A. Sedlak, MSN CPNP

8:00 Overview of PID: Disease Characteristics and Presentation

M. Elizabeth M. Younger, CRNP PhD

8:45 Basics of Diagnostic Testing

William R. Blouin, ARNP

9:30 Non-Immune Replacement Therapies

Kristin Epland, NP

10:15 Break

10:30 Immune Replacement: Is There a Right Way?

Debra A. Sedlak, MSN CPNP

11:15 Transplantation in PID

M. Louise Markert, MD PhD FAAAAI

12:00 Lunch Break

12:30 Panel Discussion

Moderator:

M. Elizabeth M. Younger, CRNP PhD

Panelists:

M. Elizabeth M. Younger, CRNP PhD

William R. Blouin, ARNP

Kristin Epland, NP

Debra A. Sedlak, MSN CPNP


M. Louise Markert, MD PhD FAAAAI

1:30 Hands-On Instruction: SCIG

Carla M. Duff, CPNP MSN

Kristin Epland, NP

Upon completion of this session, participants should be able to: Identify and develop understanding of the multiple presentations of PID; Describe the various laboratory tests and appropriate application of these tests in the evaluation for PID; Develop an understanding of the treatments utilized in the management and treatment of PID.

Plenary 

4101 Drug Allergy in the 21st Century

8:15 to 9:45 am

Convention Center, Ground Level, Exhibit Hall A

Credit: 1.50 CME / 1.80 CE

Moderator: David A. Khan, MD FAAAAI

8:15 HLA and Drug Hypersensitivity

David A. Ostrov, PhD

8:45 Exanthematous Drug Eruptions

Werner J. Pichler, MD

9:15 New Challenges and Outcomes for Drug Desensitization

Mariana C. Castells, MD PhD FAAAAI

Upon completion of this session, participants should be able to: Discuss the genetic basis for selected drug reactions; Recognize and interpret erythematous drug eruptions; Develop expertise in the management of hypersensitivity reactions to chemotherapy, monoclonals, new biologicals and antibiotics.

Posters

7:00 am to 6:00 pm

Convention Center, Ground Level, Exhibit Hall B

Posters on display from 7:00 am to 6:00 pm. Authors present from 9:45 to 10:45 am.

Credit: No CME / No CE

Refer to pages 83 – 158 for abstracts and authors.

4201 Epidemiology: Asthma Control

4202 Biomarkers and Asthma Control II

4203 IVIG and Other Therapeutics

4204 Autoinflammatory Disorders

4205 Airborne Allergen Exposures

4206 Infections, Asthma and Allergies

4207 Immune Mediated Skin Diseases

4208 Food Allergy II

4209 Health Care Delivery

4210 Allergen Extracts and Immunotherapy

4211 Outcome Measures and Challenge Testing with Immunotherapy

4212 Mechanistic Insight into Pollens and Other Antigens



Symposium ▼

4301 American Lung Association Clinical Trials Network: Recent Advances

10:45 am to 12:00 pm
Convention Center, Upper Level, Ballroom 6B
Credit: 1.25 CME / 1.50 CE
Moderator: Stephen P. Peters, MD PhD FAAAAI

10:45 Validation Studies of Asthma Outcomes for Clinical Research
Speaker to be announced.

11:05 Pharmacogenomic Studies of Asthma from the ALA ACRC Network
John Lima, MD

11:25 SOYA: Effect of Soy Isoflavones on Asthma
Lewis J. Smith, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: List newly defined asthma outcome measures; Describe the effect of new therapeutic options in asthma; Discuss new information on pharmacogenomics in asthma.

Symposium ▼

4302 Primary Immunodeficiency at the Molecular Level: The Wave of the Future

10:45 am to 12:00 pm
Convention Center, Upper Level, Ballroom 6CF
Credit: 1.25 CME / 1.50 CE
Moderator: Elena E. Perez, MD PhD FAAAAI

10:45 Update on Newborn Screening for PID
Jennifer M. Puck, MD

11:05 New Immunodeficiencies Defined by Genomic Methods
Janet S. Chou, MD

11:25 Gene Therapy for PID: Quo Vadis?
Fabio Candotti, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss what progress has been made in the diagnosis of immunodeficiency at birth via newborn screening; Describe how genomic analysis is leading to an explosion in the discovery of new forms of immunodeficiency; Identify what advances are being made in gene therapy for immunodeficiency.

Symposium ▼

4303 Treatment Alternatives for Refractory Severe Asthma

10:45 am to 12:00 pm
Convention Center, Upper Level, Ballroom 6DE
Credit: 1.25 CME / 1.50 CE
Moderator: Paula L. Busse, MD FAAAAI

10:45 The Role of Anti-Cholinergics, Vitamin D Replacement and Fine Particle ICS
Reynold A. Panettieri, MD

11:05 The Role of Bronchial Thermoplasty
Monica Kraft, MD

11:25 Novel Approaches to Steroid Resistance
Stanley J. Szefler, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe the risks and benefits of bronchial thermoplasty in severe asthma; Outline novel approaches to therapy of steroid resistant asthma; Discuss the evidence supporting the use of vitamin D replacement, anti-cholinergics and small particle inhaled corticosteroids.

Symposium ▼

4304 How Close are We to Preventing Asthma by Vaccination?

10:45 am to 12:00 pm
Convention Center, Upper Level, Room 11AB
Credit: 1.25 CME / 1.50 CE
Moderator: R. Stokes Peebles, Jr., MD FAAAAI

10:45 The Role of Rhinovirus and RSV in Asthma Inception
Tina V. Hartert, MD MPH

11:05 The Current State of Rhinovirus Vaccine Development
Sebastian L. Johnston, MD PhD

11:25 The Current State of RSV Vaccine Development
Barney S. Graham, MD PhD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Define the data that link severe lower respiratory tract infection with rhinovirus and respiratory syncytial virus in infancy and the subsequent development of childhood asthma; Describe the current state of vaccine development for respiratory syncytial virus; Describe the current state of vaccine development for rhinovirus.

Symposium ▼

4305 B Cell and Antibody Biology in Upper and Lower Airways

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 14AB
Credit: 1.25 CME / 1.50 CE
Moderator: Patricia A. Takach, MD FAAAAI

10:45 Epidemiology and Burden of Antibody Deficiency in Chronic Rhinosinusitis
Anju T. Peters, MD FAAAAI

11:05 B Cell Responses in Chronic Rhinosinusitis
Kathryn E. Hulse, PhD

11:25 Regulation of B Cell Activation and Antibody Production
Mubeccel Akdis, MD PhD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe the epidemiology of antibody deficiency in chronic rhinosinusitis; Discuss the role of B cells in chronic rhinosinusitis; Identify the role of IgA in mucosal immunity in allergic diseases.

Symposium ▼

4306 Immunosenescence: Implications of an Aging Immune System

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Sharmilee M. Nyenhuis, MD FAAAAI

10:45 Effects of Aging on Immune Function
Jorg Goronzy, MD PhD

11:05 Vaccine Responses in the Elderly
John M. Kelso, MD FAAAAI

11:25 Effect of Aging on Asthma and Allergic Diseases
Sameer K. Mathur, MD PhD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe changes in immune function with aging; Describe changes in vaccine response and current recommendations for vaccination in the elderly; Discuss the effect of aging on allergic diseases.



Symposium ▼

4307 Wanted: Eosinophils, Dead or Alive? Eosinophil Cell Death Subroutines and Implications for Eosinophil-Targeted Therapy

10:45 am to 12:00 pm

Convention Center, Mezzanine Level, Room 16AB

Credit: 1.25 CME / 1.50 CE

Moderator: Gerald J. Gleich, MD FAAAAI

10:45 Eosinophil Extracellular DNA Trap Cell Death (ETosis) Mediates Lytic Release of Free Secretion-Competent Eosinophil Granules
Lisa A. Spencer, PhD FAAAAI

11:05 Siglec-8 Engagement Induces Apoptotic or Lytic Eosinophil Cell Death, Depending on Cell Activation Status
Nives Zimmermann, MD FAAAAI

11:25 Targeting Eosinophils in Disease
Parameswaran K. Nair, MD PhD FRCP

11:45 Question & Answer

Upon completion of this session, participants should be able to: Identify cell death subroutines; Discuss consequences of eosinophils' dying by different subroutines; Discuss consequences of cell death subroutines on efficacy and safety of eosinophil-targeting agents.

AAAAI Business Meeting

12:30 to 1:30 pm

Convention Center, Upper Level, Ballroom 6A

All AAAAI Fellows and members should attend this annual business meeting. Box lunches included. No fee. No pre-registration required.

Oral Abstract

4601 Adherence

2:00 to 3:15 pm

Convention Center, Upper Level, Ballroom 6B

Credit: 1.25 CME / 1.50 CE

Moderator: Mark F. Sands, MD FAAAAI

2:00 Poor Asthma Control In Older Adults Is Associated With Reduced Adherence To Controller Therapies and Inability To Afford Medications

Jessica Tan, MD MPH

2:15 Texting Medication Reminders For Better Asthma Control In Children and Teens

Humaa M. Bhatta, DO

2:30 Adherence To Prescribed Controller Therapy and Effects On Asthma Control In The Hispanic Population Of a Pediatric Disease Management Program

Lyne G. Scott, MD

2:45 Correlation Between Emergency Department Visits For Asthma Exacerbation and No Show Visits To Primary Care Provider In a Pediatric Population

Margaret Redmond, MD

3:00 Choosing Wisely: Adherence By Allergists To Recommended Use Of Spirometry In The Diagnosis and Management Of Adult Asthma

Kristin C. Sokol, MD MPH

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

4602 Bone Marrow Transplantation in Primary Immunodeficiencies

2:00 to 3:15 pm

Convention Center, Upper Level, Room 11AB

Credit: 1.25 CME / 1.50 CE

Moderator to be announced.

2:00 G Protein-Coupled Receptor Kinase-3 (GRK-3) In Bone Marrow Niche Interactions and Transplantation

Jaime M. Brozowski

2:15 Allogeneic Hematopoietic Stem Cell Transplantation For Immune Dysregulation, Polyendocrinopathy, X-Linked (IPEX) Syndrome Resolves Enteropathy and Autoimmunity: A Single Institution Experience

Zeynep Yesim Yesim Kucuk, MD

2:30 Natural Killer Cell Immunoglobulin Like Receptor (KIR) Genetic Profile Is a Strong Predictor Of Allogeneic Hematopoietic Cell Transplant Outcomes

Rehan M. Faridi, PhD

2:45 Transient Lymphopenia Of Infancy: A Previously Unrecognized Entity

Robert Sporer, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

4603 Air Pollution/Allergens/Air Quality

2:00 to 3:15 pm

Convention Center, Upper Level, Room 5AB

Credit: 1.25 CME / 1.50 CE

Moderator: Neil Alexis, PhD

2:00 Associations Among Volatile Organic Compounds, Allergic Sensitization, and Respiratory Illness In Children With Asthma Enrolled In a Study Of Low-Income, Green Eco-Friendly Housing (The Green Housing Study)

Joy Hsu, MD MSCI

2:15 A Systematic Analysis Of Pollen Transcriptomes From Plant Allergens Reveals Conserved Targets Of Immune Responses

Bjoern Peters

2:30 Urinary Polycyclic Aromatic Hydrocarbon Metabolites and Th2 Immunity In Children

Kinjal M. Hew, PhD

2:45 Impact Of BMI On Ozone-Induced IL-1 In The Airways Of Human Volunteers

Michelle L. Hernandez, MD

3:00 Group-2 Innate Lymphoid Cells Promote Air-Pollutant Induced Airway Inflammation and Hyperresponsiveness (AHR)

Qi Yang, PhD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Oral Abstract

4604 Food Allergy

2:00 to 3:15 pm
Convention Center, Upper Level, Ballroom 6CF
Credit: 1.25 CME / 1.50 CE
Moderator: Rima A. Rachid, MD FAAAAI

2:00 Peanut T Cell Epitope Discovery: Ara h1 and Ara h3
Manish Ramesh, MD PhD

2:15 Microparticles Encapsulated With Antigen Protect Against Sensitization and Reduce Anaphylactic Reactivity In a Food Allergy Model
Karen B. Chien, PhD

2:30 Over-The-Counter Dietary Supplements Genistein and Ipriflavone Suppress Peanut Allergy Symptoms
Lisa Chang, BS

2:45 Analyzing Casein-Specific IL-4 and IL-13 Secreting T-Cells: A Reliable Tool For Diagnosis Of Cow's Milk Allergy
Benedicte Michaud, MD PhD

3:00 Growth Of Children Aged 2-17 With Cow's Milk, Peanut, and Egg Allergy In NHANES
Karin Robbins, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

4605 Epidemiology

2:00 to 3:15 pm
Convention Center, Upper Level, Room 7AB
Credit: 1.25 CME / 1.50 CE
Moderator: Chitra Dinakar, MD FAAAAI

2:00 Allergic Causes Of Death In The United States
Susan J. Kim, MD

2:15 Death From Anaphylaxis Is a Reassuringly Unusual Outcome
Larry Borish, MD FAAAAI

2:30 Allergic Rhinitis, Asthma and Cardiovascular Disease
Angela M. Crans Yoon, MD

2:45 Pre-Natal and Early Life Predictors Of Atopy In Canadian Children: Results Of The Family Study
Tahira Batool, MBBS

3:00 Association Between Antibiotic Treatment In The First Six Months Of Life and Clinical Allergic Outcomes At Ages 2 To 3 Years
Kyra Jones, MEd

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

4606 Chronic Rhinosinusitis

2:00 to 3:15 pm
Convention Center, Upper Level, Ballroom 6DE
Credit: 1.25 CME / 1.50 CE
Moderator: Anju T. Peters, MD FAAAAI

2:00 The Clinical Significance Of Specific Antibody Deficiency (SAD) Severity In Chronic Rhinosinusitis (CRS)
Anjeni Keswani, MD

2:15 Meta-Analysis Of Gene Expression Microarrays Reveals Novel Biomarkers Consistent With Altered Functionality Of Mucosal Barrier In Patients With Chronic Rhinosinusitis
Sergejs Berdnikovs, PhD

2:30 Evidence For Immunoglobulin D In Patients With Chronic Rhinosinusitis
Jin Young Min, MD PhD

2:45 Oncostatin M Is Elevated In Chronic Rhinosinusitis and Decreases Barrier Function In Human Airway Epithelium
Kathryn L. Pothoven

3:00 Immunologic Changes During Chronic Rhinosinusitis Exacerbations Compared To Controls
Shefali Samant, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

4607 Mechanisms of Asthma and Allergic Disease

2:00 to 3:15 pm
Convention Center, Upper Level, Room 1AB
Credit: 1.25 CME / 1.50 CE
Moderator: Nora A. Barrett, MD FAAAAI

2:00 Allergen Challenge Increases Peripheral Blood CD84+ ILC2 In Allergic Rhinitis
David R. Scott, MD

2:15 Asthma Susceptibility Due To Environmental Programming Of Innate Immunity In Utero
Sarah Manners, BS

2:30 Rhinovirus Challenge Augments Allergen Responsiveness In Basophils Of Atopic Asthmatics
Rachana Agrawal, PhD

2:45 Der p 3 Allergen Activated Ano-1 Channel On Afferent Airway Nerves Regulates Th2 Cell Responses
Mayur Patil, MS

3:00 Increased Serum Soluble ST2 In Asthmatic Children and Recurrent Early Wheezers
Hai Lee Chung, MD PhD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Late Breaking Oral Abstract Session

4611 Basic Translational Sciences

2:00 to 3:15 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderators: Francisco A. Bonilla, MD FAAAAI
Mitchell H. Grayson, MD FAAAAI

2:00 Human TNFR2 Exhibits Bi-Directional Control over Regulatory T Cells

Denise L. Faustman, MD

2:15 Contribution of Sequential and Conformational IgE-Binding Epitopes to the Allergenicity of Major Peanut Allergen Ara h 2

Stephane Hazebrouck, PhD

2:30 Immunocap Cellulose Displays Cross-Reactive Carbohydrate Epitopes and Can Cause False-Positive Test Results in Patients with Anti-CCD IgE Antibodies

Wolfgang Hemmer, PhD

2:45 The RNA-Binding Protein Hur Is Required to Control Cytokine Expression in CD4+ T Cells

Ulus Atasoy, MD FAAAAI

3:00 Whole-Exome Sequencing Reveals IKBKB As a Cause of Combined Immunodeficiency

Talal Mousallem, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Cutting-Edge Research Keynote

4701 Nanotechnology Applications in Immunology and Allergy

3:30 to 4:30 pm
Convention Center, Ground Level, Exhibit Hall A
Credit: 1.00 CME / 1.20 CE
Moderator: Paul V. Williams, MD FAAAAI
James R. Baker, Jr., MD FAAAAI
Ruth Dow Doan Professor, Director, Michigan Nanotechnology Institute for Medicine and Biological Sciences



Upon completion of this session, participants should be able to describe how nanotechnology can be utilized in drug delivery and disease management.

Panel Discussion Workshop

4801 Mast Cell Activation Disorders: A Plan of Attack

4:45 to 6:00 pm
Convention Center, Upper Level, Room 1AB
Credit: 1.25 CME / 1.50 CE
Moderator: Melody C. Carter, MD
Panelists:
Cem Akin, MD PhD FAAAAI
Lawrence B. Schwartz, MD PhD FAAAAI
Catherine R. Weiler, MD PhD FAAAAI

Upon completion of this session, participants should be able to: Differentiate between mast cell activation disorder, monoclonal mast cell activation syndrome and mastocytosis; Determine which objective data is useful in defining the diagnosis of each entity.

Q & A Workshop

4802 Social Media: The Future is Here

4:45 to 6:00 pm
Convention Center, Upper Level, Room 2
Credit: 1.25 CME / 1.50 CE
Moderator: Melinda M. Rathkopf, MD FAAAAI

4:45 Using Twitter
Nathaniel D. Hare, MD FAAAAI

5:00 Using Facebook
Gerald B. Lee, MD

5:15 Creating a Blog/Website
Ves Dimov, MD

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss how the utilization of social media in allergy and immunology practices can lead to improved patient education and satisfaction; Identify a step-wise plan for the implementation and maintenance of a social media strategy; Identify and implement processes designed to protect PHI and prevent HIPAA violations when using healthcare social media.

Problem-Based Learning Workshop

4803 Making the Practice Parameters Work for You: Using a Quality Improvement Approach

4:45 to 6:00 pm
Convention Center, Upper Level, Room 3
Pre-registration and ticket required. Fee: \$50.
Credit: 1.25 CME / 1.50 CE
PBL Facilitator: Jay M. Portney, MD FAAAAI
Content Lecturer: Marcus S. Shaker, MD MS FAAAAI

Upon completion of this session, participants should be able to: Describe how quality improvement initiatives can be used to implement practice parameters in the clinical setting; Define fundamentals of quality improvement; Define how quality improvement initiatives can be applied in maintenance of certification requirements.

Panel Discussion Workshop

4804 Use of Gamma Globulin in Clinical Practice: Indications, Challenges, Adverse Reactions and Monitoring

4:45 to 6:00 pm
Convention Center, Upper Level, Room 5AB
Credit: 1.25 CME / 1.50 CE
Moderator: Elena E. Perez, MD PhD FAAAAI
Panelists:
Mark Ballow, MD FAAAAI
Vivian P. Hernandez-Trujillo, MD FAAAAI
Rima A. Rachid, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss the relative virtues of intravenous and subcutaneous IgG therapy; Review common approaches to reducing the systemic side effects of IGIV and managing adverse reactions; Discuss how to optimize IgG replacement therapy in immunodeficiency patients to minimize infections and maintain appropriate levels of Ig with maximal benefit.

Annual Meeting Workshops

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Q & A Workshop ▼

4805 Influenza and Pneumococcal Vaccines in Asthmatic Patients

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6B
Credit: 1.25 CME / 1.50 CE
Moderator: Pedro C. Avila, MD FAAAAI

4:45 Burden of Influenza and Invasive Pneumococcal Disease in Asthmatic Patients

Tina V. Hartert, MD MPH

5:00 Influenza and Pneumococcal Vaccines in Asthmatic Patients: Benefits and Risks

John M. Kelso, MD FAAAAI

5:15 New Influenza Vaccines for the 21st Century

Speaker to be announced.

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss the burden of influenza and invasive pneumococcal disease in asthmatic patients; Describe the types, benefits and risks of influenza and pneumococcal vaccines for asthmatic patients.

Year-in-Review Workshop ▼

4806 Practical Aspects of SCID Newborn Screening

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6CF
Credit: 1.25 CME / 1.50 CE
Moderator: Kathleen E. Sullivan, MD PhD FAAAAI

4:45 Secondary Evaluation of SCID Screen-Positive Infants

Jolan E. Walter, MD PhD

5:00 PID Diagnosed Using TRECs for Newborn Screening

John M. Routes, MD FAAAAI

5:15 PID Cases Missed Using TRECs for Newborn Screening

Jennifer M. Puck, MD

5:30 Question & Answer

Upon completion of this session, participants should be able to: Review secondary evaluation of SCID screen positive infants; Identify the cases that are detected via TRECs screening; Identify PID that can be potentially missed via TRECs screening.

Q & A Workshop ▼

4807 Standardization of Oral Food Challenges: How Golden is the Gold Standard?

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6DE
Credit: 1.25 CME / 1.50 CE
Moderator: Scott H. Sicherer, MD FAAAAI

4:45 The Food Challenge PRACTALL Guidelines: What are They and When Should they be Used?

Hugh A. Sampson, MD FAAAAI

5:00 Why do We Need to Standardize OFC Stopping Criteria: What are the Controversies?

David Mark Fleischer, MD FAAAAI

5:15 What is the Role of OFC in Oral Immunotherapy Trials?

Kirsten Beyer, MD

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss the different methodologies for oral food challenges; Describe the controversies around objective stopping criteria and the evidence base for this; Describe how and when to use different types of challenge methodologies.

Q & A Workshop

4808 FDA: Update from the U.S. Food and Drug Administration

4:45 to 6:00 pm
Convention Center, Upper Level, Ballroom 6A
Credit: 1.25 CME / 1.50 CE
Moderator: F. Estelle R. Simons, MD FAAAAI

4:45 Year-in-Review: An Update from the U.S. Food and Drug Administration

Badrul A. Chowdhury, MD PhD FAAAAI

5:00 Over-the-Counter (OTC) Marketing of Allergy Drug Products

Sofia A. Chaudhry, MD

5:15 Eosinophilic Asthma: Considerations for Drug Product Development

Susan Lee Limb, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Review recent issues of scientific importance at FDA and their regulatory implications; Identify issues related to the over-the-counter (OTC) marketing of allergy drug products; Recognize issues in the clinical development of drug products for eosinophilic asthma.

Q & A Workshop

4809 Innate Immunity Modulators in the Lung

4:45 to 6:00 pm
Convention Center, Upper Level, Room 7AB
Credit: 1.25 CME / 1.50 CE
Moderator: Harald E. Renz, MD

4:45 Anionic Pulmonary Surfactant Phospholipids Act as a Regulator of Inflammation and Viral Infection in the Lung

Dennis R. Voelker, PhD

5:00 Surfactant Protein-A and D in Airway Inflammation

Angela Haczku, MD PhD FAAAAI

5:15 Antagonism of Toll-Like Receptor Activation in Lung Disease

Anthony A. Horner, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Recognize the capacity of surfactant phospholipids in suppression of lung inflammation due to aeroallergen, bacterial infection and viral infection; Describe how surfactant protein-A suppresses lung inflammation and damage due to bacterial infection; Discuss the specificity and mechanisms of immune regulation regulated by pulmonary surfactant phospholipids and Protein-A.

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Q & A Workshop ▼

4810 Allergic Inflammation: New Advances in Chemokines and Cell Signaling

4:45 to 6:00 pm
Convention Center, Upper Level, Room 11AB
Credit: 1.25 CME / 1.50 CE
Moderator: David H. Broide, MB ChB FAAAAI

4:45 The Role of CCL18 in Chronic Allergic Inflammation
Andrew D. Luster, MD PhD

5:00 Eosinophilic Esophagitis: The Role of Eotaxins and Other Chemokines

Amal H. Assa'ad, MD FAAAAI

5:15 Mast Cells in Chronic Allergic Inflammation
Stephen J. Galli, MD

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss how chemokines such as CCL18 are important in allergic inflammation, particularly in atopic dermatitis; Identify how cytokines such as eotaxins play an important role in eosinophilic esophagitis; Describe the role of mast cells in chronic allergic inflammation and how innate mediators and Th2 inflammation exacerbate allergic disease.

Panel Discussion Workshop

4811 Dilemmas in the Management of Allergic Bronchopulmonary Mycosis

4:45 to 6:00 pm
Convention Center, Upper Level, Room 8
Credit: 1.25 CME / 1.50 CE
Moderator: Andrew J. Wardlaw, MD PhD
Panelists:
Leslie C. Grammer, MD FAAAAI
Catherine A. Pashley, PhD
Raymond G. Slavin, MD MS FAAAAI

Upon completion of this session, participants should be able to: Describe which fungi can cause ABPM and how they might cause lung damage; Review the clinical spectrum of how ABPM presents; Discuss how to optimally manage ABPM.

Q & A Workshop

4812 Utility of FeNO in the Diagnosis and Management of Asthma: Comparison to Other Measures

4:45 to 6:00 pm
Convention Center, Mezzanine Level, Room 14AB
Credit: 1.25 CME / 1.50 CE
Moderator: Harold S. Nelson, MD FAAAAI

4:45 The Use of FeNO in Adult Asthma
Miguel J. Lanz, MD FAAAAI

5:00 The Use of FeNO in Pediatric Asthma
Stanley J. Szeffler, MD FAAAAI

5:15 Practical Implications of Implementing FeNO in Clinical Practice
Joseph D. Spahn, MD

5:30 Question & Answer

Upon completion of this session, participants should be able to: Describe the appropriate uses of FeNO in adults; Review the appropriate uses of FeNO in children; Discuss the practical implications of implementing FeNO in clinical practice.

Q & A Workshop ▼

4813 Stepping Down Asthma Medications: Benefits and Risks

4:45 to 6:00 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Chitra Dinakar, MD FAAAAI

4:45 Which Patients May Be Good Candidates for Stepping Down Asthma Medications?
Fernando D. Martinez, MD

5:00 Understanding the Risks and Benefits of Stepping Down Asthma Medication

John B. Hagan, MD FAAAAI

5:15 Comparing Asthma Step-Down Strategies: Is "Dynamic Dosing" Ready for Prime Time?

Paul M. O'Byrne, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Identify asthma patients who may be good candidates for stepping down their asthma medication; Describe the risks associated with stepping down asthma medication with the best currently available evidence; Compare and contrast different types of step down strategies.

Q & A Workshop ▼

4814 Chronic Rhinosinusitis in Children

4:45 to 6:00 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderator: Martin Wagenmann, MD FAAAAI

4:45 Pathophysiology of Chronic Rhinosinusitis in Children
Daniel L. Hamilos, MD

5:00 Medical Workup and Treatment of Chronic Rhinosinusitis in Children

David W. Hauswirth, MD FAAAAI

5:15 Surgical Treatment of Chronic Rhinosinusitis in Children
Fuad M. Baroody, MD FAAAAI

5:30 Question & Answer

Upon completion of this session, participants should be able to: Discuss the pathophysiology of CRS in children; List the workup and medical treatment of children with CRS; Review the surgical approach to CRS in children after failure of medical therapy.

Problem-Based Learning Workshop  

4815 Aspirin Desensitization for Aspirin-Exacerbated Respiratory Disease: Indications, Protocols and Pitfalls

4:45 to 6:00 pm
Convention Center, Upper Level, Room 31C
Pre-registration and ticket required. Fee: \$50.
Credit: 1.25 CME / 1.50 CE
PBL Facilitator: Richard W. Weber, MD FAAAAI
Content Lecturer: Donald D. Stevenson, MD FAAAAI

Upon completion of this session, participants should be able to: Describe indications for aspirin desensitization for aspirin exacerbated respiratory disease; Identify problems that can occur with aspirin desensitization and develop strategies for how to deal with these problems.



Seminars

4:45 to 5:45 pm

Pre-registration and ticket required. Fee: \$40. Refreshments included. Sessions and refreshments are limited to 30 people. Credit: 1.00 CME / 1.20 CE

4821 From Urticaria to Toxic Epidermal Necrolysis: Cutaneous Drug Eruptions for the Clinician

Jennifer S. Kim, MD FAAAAI
Peter A. Lio, MD

Marriott South Tower, Level 3, Marina Ballroom Salon G

Upon completion of this session, participants should be able to: Evaluate cutaneous drug eruptions and render a diagnosis with confidence; Analyze evidence-based medicine to current therapeutic options for these conditions.

4822 Smoking and Asthma: Not Just Blowing Smoke

Riccardo Polosa, MD PhD FAAAAI
Mark F. Sands, MD FAAAAI

Marriott South Tower, Level 3, Balboa

Upon completion of this session, participants should be able to: Describe the pathophysiologic consequences of tobacco smoking upon the asthmatic; Discuss the effect of tobacco smoke on the lung from fetus through adult life; Describe effective smoking cessation interventions.

4823 Gene Therapy for Primary Immunodeficiency Disorders: Where are We in 2014?

Fabio Candotti, MD
Matthew Porteus, MD PhD

Marriott South Tower, Level 3, Mission Hills

Upon completion of this session, participants should be able to: Review the primary immunodeficiency disorders for which gene therapy is a treatment option; Discuss the mechanism of gene therapy; Discuss limitations and risks associated with gene therapy.

4824 Occupational Respiratory Diseases

André Cartier, MD FAAAAI
Susan M. Tarlo, MBBS FAAAAI

Marriott South Tower, Level 3, Cardiff

Upon completion of this session, participants should be able to: Recognize the history clues pointing to potential work-related asthma; Develop familiarity with the approach needed to establish the diagnosis of occupational asthma; Compare the strengths and weaknesses of the tools available to establish work-relatedness.

4825 Asthma Management Among Minority Populations: Practical Insights for Clinicians, Researchers and Public Health Planners

Alan P. Baptist, MD MPH FAAAAI
Christine L.M. Joseph, PhD

Marriott South Tower, Level 3, Del Mar

Upon completion of this session, participants should be able to: Identify the healthcare disparities that exist in asthma care; Discuss reasons why these disparities exist; Discuss effective strategies to treat minority populations, thereby decreasing health disparities in asthma.

4826 Exercise-Induced Anaphylaxis and Food-Dependent Exercise-Induced Anaphylaxis

Anna M. Feldweg, MD
Kirsi M. Jarvinen-Seppo, MD PhD

Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to: Review the most common clinical presentations of EIAN and typical foods that can trigger FD-EIAN; Identify recent publications relevant to EIAN and FD-EIAN; Increase understanding of treatment options for EIAN and FD-EIAN.

4827 Physical Urticarias

Mario Geller, MD FAAAAI
Karen S. Hsu Blatman, MD

Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to: Identify physical urticarias; Evaluate and educate patients with physical urticarias; Manage and treat physical urticarias with the recent data.

4828 Advanced Coding for the Allergist

Noga Askenazi, MD FAAAAI
Gary N. Gross, MD FAAAAI

Marriott South Tower, Level 1, Santa Rosa

Upon completion of this session, participants should be able to: Discuss the use of codes pertinent to allergy/immunology practice; Describe details of coding for patients' allergy testing and immunotherapy.

4829 Immunodeficiencies Discovered in the Last Five Years

Francisco J. Espinosa-Rosales, MD
Gulbu Uzel, MD

Marriott South Tower, Level 4, La Costa

Upon completion of this session, participants should be able to: Discuss the new primary immunodeficiency diseases with a focus on those described during the past five years; Describe the newer technologies used for discovery of these and future disorders; Identify the expanding overlap between immunodeficiency and inflammatory disorders.

4830 Management of Children and Adult Patients with Atopic Dermatitis

Jon M. Hanifin, MD FAAAAI
Dagmar Simon, MD

Marriott South Tower, Level 4, Catalina

Upon completion of this session, participants should be able to: Describe the presentation, pathophysiology and complications of atopic dermatitis; Discuss the management of these patients, including their education; Discuss possible therapeutic consequences due to new insights into the pathogenesis of atopic dermatitis.

Annual Meeting Seminars
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Seminars



7:00 to 8:00 am

Pre-registration and ticket required. Fee: \$40. Continental breakfast included. Sessions and meals are limited to 30 people.
Credit: 1.00 CME / 1.20 CE

5001 Corticosteroid Resistance in Asthma

Elena Goleva, PhD
Faoud T. Ishmael, MD PhD FAAAAI
Marriott South Tower, Level 3, Balboa

Upon completion of this session, participants should be able to: Discuss current approaches for clinical evaluation of potential insensitivity to oral and inhaled CS; Describe glucocorticoid receptor function and current understanding of the molecular pathways that lead to CS insensitivity; Explain the interaction of the glucocorticoid receptor with other steroid receptor regulated pathways, i.e. vitamin D, sex hormones, etc.; Discuss management of patients with suspected CS insensitivity and alternative therapeutic strategies for these patients.

5002 Rethinking Allergen Avoidance

Elizabeth Matsui, MD
Euan R. Tovey, PhD
Marriott South Tower, Level 3, Mission Hills

Upon completion of this session, participants should be able to: Define current guidelines for allergen avoidance in asthma management; Describe methods of reducing allergen exposure and evidence based studies of their effectiveness; Discuss new strategies for allergen avoidance that take into account the complex interactions between allergens, the innate immune system and genetic markers.

5003 Role of Allergy in Atopic Dermatitis

Johannes Ring, MD PhD FAAAAI
Marriott South Tower, Level 3, Cardiff

Upon completion of this session, participants should be able to: Review practical relevance of aero-food and contact allergic reactions in triggering flairs of AD; List practical tips for management with regard to restoring disturbed barrier function in AD.

5004 Cases of Patients with Chronic Cough

Mandel R. Sher, MD FAAAAI
Gary J. Stadtmayer, MD FAAAAI
Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to describe various diagnostic and treatment techniques for patients with chronic cough.

5005 New Insights into IgE Biology

Hannah J. Gould, PhD
Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to: Identify the regulation of IgE production in B cells; Describe the acquisition of IgE by tissue mast cells; Identify the effects of IgE activation on tissue mast cells in inflammation.

5006 Exhaled NO: Time to Clear the Air!

Chitra Dinakar, MD FAAAAI
Stanley J. Szefler, MD FAAAAI
Marriott South Tower, Level 1, Santa Rosa

Upon completion of this session, participants should be able to: Discuss the application of eNO in the context of ATS guidelines and AAAAI/ACAAI position statements; Recognize the relationship between the levels of evidence and practice guidelines for clinical eNO use; Explain potential weaknesses/strengths of eNO for managing asthmatics.

5007 Perioperative Anaphylaxis: Which Tests and How to Interpret

Gerald W. Volcheck, MD FAAAAI
Marriott South Tower, Level 4, La Costa

Upon completion of this session, participants should be able to explain to patients the meaning of allergy tests performed for perioperative anaphylaxis.

5008 Challenges of Managing Multiple Food Allergies

Julie Wang, MD FAAAAI
Michael C. Young, MD FAAAAI
Marriott South Tower, Level 4, Catalina

Upon completion of this session, participants should be able to: Identify the diagnostic and management challenges of multiple food allergies; Recognize the nutritional, feeding and social risk factors; Develop and implement a feeding plan for adequate nutrition, feeding skill and social development of children with multiple food allergies.

5009 SLIT vs. SCIT in Children

Giovanni Passalacqua, MD
David P. Skoner, MD
Marriott South Tower, Level 4, Coronado

Upon completion of this session, participants should be able to: Summarize experience with SLIT and compare and contrast its safety/efficacy vs. SCIT; Appreciate recent data describing SLIT; Appreciate methodologic variation in SLIT.

Q & A Workshop

5051 Glycobiology and Glycoimmunology: From Concepts to Clinical Relevance

6:45 to 8:00 am
Convention Center, Upper Level, Room 2
Credit: 1.25 CME / 1.50 CE
Moderator: Nives Zimmermann, MD FAAAAI

6:45 Cell Surface Sialic Acids: The 'Dark Matter' of Immune Regulation
Ronald L. Schnaar, PhD

7:00 Induction of Tolerance by Targeting B Cell Siglecs
James C. Paulson, PhD

7:15 Sialic Acid Recognition is Key to Immune Regulation-Role of Siglecs
Bruce S. Bochner, MD FAAAAI

7:30 Question & Answer

Upon completion of this session, participants should be able to: Explain sialic acid biosynthesis and its role in human biology; Define the role that glycans play in immune recognition and regulation.

Problem-Based Learning Workshop

5052 An Allergists' Vision of Ocular Diseases: A Case-Based Approach

6:45 to 8:00 am
Convention Center, Upper Level, Room 3
Pre-registration and ticket required. Fee: \$50.
Credit: 1.25 CME / 1.50 CE
PBL Facilitator: Andrew M. Smith, MD FAAAAI
Content Lecturer: Neal P. Barney, MD

Upon completion of this session, participants should be able to: Describe the pathophysiology of ocular conditions commonly encountered in the allergy clinic; Facilitate interaction between allergists and ophthalmologists and explain how each plays a complementary role in the management of ocular allergy; Discuss allergic diseases which present in different age groups (children, young adults and elderly) and how their diagnoses and management are different.

Annual Meeting Workshops

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Q & A Workshop ▼

5053 Impact of Climate Change on Indoor and Outdoor Aeroallergens

6:45 to 8:00 am
Convention Center, Upper Level, Room 5AB
Credit: 1.25 CME / 1.50 CE
Moderator: Estelle Levetin, PhD FAAAAI

6:45 Overview of the Impact of Climate Change
Charles S. Barnes, PhD

7:00 Changing Patterns of Aeroallergens and Pollens Around the World
John R. Cohn, MD FAAAAI

7:15 Impacts On the Indoor Environment
Jonathan A. Bernstein, MD FAAAAI

7:30 Question & Answer

Upon completion of this session, participants should be able to: Identify two recent reports on the impact of climate change on environmental exposures; Describe changes documented to date on indoor and outdoor allergen exposures that have been related to climate change adaptation factors; Discuss future factors that might be directly or indirectly related to climate change and changes in environmental exposures; Discuss appropriate changes in allergy practice in response to changing environmental exposures.

Q & A Workshop

5054 Teaching Allergy and Immunology to Residents and Medical Students: An Achievable Goal for the Clinical Allergist

6:45 to 8:00 am
Convention Center, Upper Level, Room 8
Credit: 1.25 CME / 1.50 CE
Moderator: Mark H. Moss, MD

6:45 The Six Core Competencies
Asriani M. Chiu, MD FAAAAI

7:00 Designing a Clinical Rotation
Lily Pien, MD FAAAAI

7:15 Teaching from a Practitioner's Perspective: What Works
Stephen A. Tilles, MD FAAAAI

7:30 Question & Answer

Upon completion of this session, participants should be able to: Identify the six core competencies of postgraduate medical training; Describe resources to enhance teaching of trainees in the office setting; Discuss qualities of a clinical rotation that lend value to a medical training program.

Plenary ▼

5101 Bioaerosols: When Not to Take a Deep Breath at Work

8:15 to 9:45 am
Convention Center, Ground Level, Exhibit Hall A
Credit: 1.50 CME / 1.80 CE
Moderator: Leslie C. Grammer, MD FAAAAI

8:15 Office: Building-Related Illness
Jean M. Cox-Ganser, PhD

8:45 Agriculture: Respiratory Illness in Large Animal Farming Environments

Jill A. Poole, MD FAAAAI

9:15 Factory: Occupational Illness in the Textile Industry
David C. Christiani, MD

Upon completion of this session, participants should be able to: State the health effects of bioaerosol exposure on health in office building workers; Discuss the immunologic mechanisms of respiratory disease associated with working in large animal confinement feeding operations; Describe bioaerosol sampling methods and exposure risk for health effects in textile manufacturing workers.

Posters

7:00 am to 5:00 pm
Convention Center, Ground Level, Exhibit Hall B
Posters on display from 7:00 am to 5:00 pm. Authors present from 9:45 to 10:45 am.
Credit: No CME / No CE
Refer to pages 83 – 158 for abstracts and authors.

5201 The Impact of Environmental Factors on Asthma

5202 Diagnostic Modalities of Asthma

5203 Basic and Translational Immunology

5204 Innate Immunity and Primary Immunodeficiencies

5205 Epidemiology and Risk Factors of Asthma

5206 Eosinophilic Gastrointestinal Diseases

5207 Drug Allergy

5208 Ocular Allergy

5209 Allergen Immunotherapy

5211 Late Breaking Poster Session

Annual Meeting Workshops

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Symposium ▼

5301 The Road to Allergy: Soluble Instructions to Dendritic Cells

10:45 am to 12:00 pm

Convention Center, Upper Level, Room 5AB

Credit: 1.25 CME / 1.50 CE

Moderator: Dawn C. Newcomb Baker, PhD

10:45 Cysteinyl Leukotrienes are Endogenous Signaling Molecules

Nora A. Barrett, MD FAAAAI

11:05 Inhibition of Th2 Priming by the UDP Receptor P2Y6

Joshua A. Boyce, MD FAAAAI

11:25 Platelets Dictate Th2 Sensitization: The Role of Serotonin

Marco Idzko, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Recognize the role cysteinyl leukotrienes play as signaling molecules in dendritic cells; Identify the counterregulatory role of the purinergic 6 receptor; Identify the role of serotonin in Th2 priming.

Symposium ▼

5302 What to Do When Everything Fails: Treatment Options for Severe Chronic Rhinosinusitis

10:45 am to 12:00 pm

Convention Center, Upper Level, Room 7AB

Credit: 1.25 CME / 1.50 CE

Moderator: Anju T. Peters, MD FAAAAI

10:45 Is More and Longer Better? Long-Term and High-Dose Glucocorticosteroids

Joaquim Mullol, MD PhD FAAAAI

11:05 Treating With the Cause of Trouble: ASA-Desensitization

Katharine M. Woessner, MD FAAAAI

11:25 The Road to Future: Will Biologics Improve Treatment?

Claus Bachert, MD PhD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Contrast the limitations and possibilities of high-dose or long-lasting glucocorticosteroid treatment in recurrent chronic rhinosinusitis with nasal polyps; Identify suitable patient subgroups, success rates and limitations of aspirin desensitization; Outline the pathophysiological basis and current knowledge about anti-IgE and anti-IL-5 treatment in nasal polyposis.

Symposium ▼

5303 Atopic Dermatitis

10:45 am to 12:00 pm

Convention Center, Upper Level, Room 2

Credit: 1.25 CME / 1.50 CE

Moderator: Lynda C. Schneider, MD FAAAAI

10:45 Barrier Defects in Atopic Dermatitis

Anna De Benedetto, MD

11:05 Atopic Dermatitis as a Global Burden

Peter Schmid-Grendelmeier, MD PhD

11:25 New Treatment Modalities

Mark Boguniewicz, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss atopic dermatitis; Identify and use appropriate diagnostic tools; Demonstrate efficient, safe and state-of-the-art treatment.

Symposium ▼

5304 Angioedema with Negative Family History

10:45 am to 12:00 pm

Convention Center, Upper Level, Room 11AB

Credit: 1.25 CME / 1.50 CE

Moderator: Michael M. Frank, MD FAAAAI

10:45 New Developments in Angioedema Caused by Angiotensin-Converting Enzyme Inhibitors

Marco Cicardi, MD PhD

11:05 Diagnosis of Idiopathic Angioedema

Marc A. Riedl, MD MS

11:25 Management of Idiopathic Angioedema

Aleena Banerji, MD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Discuss mechanisms and clinical aspects of recurrent angioedema caused by angiotensin-converting enzyme inhibitors; Review the differential diagnosis and management issues of idiopathic angioedema; Describe the management of idiopathic angioedema.

Symposium ▼

5305 Innate Cytokines and the Regulation of Allergy

10:45 am to 12:00 pm

Convention Center, Mezzanine Level, Room 14AB

Credit: 1.25 CME / 1.50 CE

Moderator: Zoulfia Allakhverdi, PhD FAAAAI

10:45 Role of Epithelial-Derived Cytokines in the Initiation and Pathogenesis of Allergy

Clare M. Lloyd, PhD

11:05 Cross-Regulatory Mechanisms of Interferon and Allergic Stimulation

J. David Farrar, PhD

11:25 Modulation of Innate Cytokines by TLR Agonists to Achieve Tolerance

Speaker to be announced.

11:45 Question & Answer

Upon completion of this session, participants should be able to: Identify the key cytokines secreted by lung epithelial cells in response to infections and the role of these cytokines in priming of the allergic condition; Describe the role of type I and III interferons in the suppression of Th2 and Th17 responses and the inhibition of interferon secretion by allergic stimulation through the high affinity IgE Fc receptor; Discuss how TLR ligands, such as CpG oligonucleotides, are being used to mediate allergic suppression through the induction of cross-regulatory cytokines.



Symposium ▼

5306 B Cells and Mucosal Immune Responses in Health and Disease

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Atsushi Kato, PhD

10:45 Mucosal Immunity: Balancing Immune Responses at the Forefront of Microbial Exposure
Andrea Cerutti, MD

11:05 Immunity and B Cells in the Gut: From Immune Exclusion to Food Allergy
Cecilia Berin, PhD

11:25 B Cells and Respiratory Immunity
Kathryn E. Hulse, PhD

11:45 Question & Answer

Upon completion of this session, participants should be able to: Outline how the mucosal immune system balances responses to commensal and pathogenic microbes; Describe the unique role of B cells and their antibodies in maintaining tolerance and homeostasis at mucosal sites; Identify how mucosal B cell responses may be dysregulated in allergic disease as a strategy for the development of more targeted therapeutic interventions.

Symposium ▼

5307 Inflammasome Disorders: Here and Now

10:45 am to 12:00 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderator: John W. Steinke, PhD FAAAAI

10:45 Nuts and Bolts of Inflammasome Biology
Daniel L. Kastner, MD

11:05 Inflammasome Associated Diseases: The Old and New
Monica G. Lawrence, MD

11:25 Treatment Options for Inflammasome Disorders
Hal M. Hoffman, MD FAAAAI

11:45 Question & Answer

Upon completion of this session, participants should be able to: Describe the basics of how the inflammasome works; Outline the current state of inflammasome disorders and what is new in the field; Discuss novel therapeutic approaches to treating inflammasome disorders.

Course   

5311 Mechanisms of Allergic Inflammation

10:45 am to 1:45 pm
Convention Center, Upper Level, Room 4
Pre-registration and ticket required. Fee: \$40. Box lunch included.
Credit: 2.75 CME / 3.20 CE
Moderator: Mitchell H. Grayson, MD FAAAAI

10:45 Introduction: Control of Type 2 Immunity
Mitchell H. Grayson, MD FAAAAI

10:50 Transcriptional Cross-Regulation of Th1 and Th2 Cell Differentiation
Jinfang Zhu, PhD

11:15 Question & Answer

11:20 Location, Location, Location: Dendritic Cells, B Cells and Th2 Development
Frances E. Lund, PhD

11:45 Question & Answer

11:50 From Friend to Foe: T Regs Acting Th2
Prabir Ray, PhD

12:15 Question & Answer

12:20 Break

12:40 Introduction: Novel Concepts in Immunoglobulin E and its Receptors
Mitchell H. Grayson, MD FAAAAI

12:45 Breaking Up is Hard to Do: Disassembly of IgE and FcεRI
Theodore S. Jardetzky, PhD

1:10 Question & Answer

1:15 Exclusivity: IgE Binding to CD23 or FcεRI
Hannah J. Gould, PhD
Brian Sutton, MA DPhil

1:40 Question & Answer

Upon completion of this session, participants should be able to: Describe mechanisms through which t-bet is able to suppress Th2 responses and discuss how dendritic cells and B cells drive Th2 development outside of the T cell zone; Review how a viral respiratory infection can induce Th2 cytokine production from regulatory T cells; Discuss how macromolecules can disrupt IgE-FcεRI complexes and how IgE interacts with CD23 and how this prevents binding to FcεRI and vice versa.



Course   

5312 Developing Clinical Skills to Promote Adherence and Maximize Asthma Outcomes

10:45 am to 1:45 pm

Convention Center, Upper Level, Room 3

Pre-registration and ticket required. Fee: \$40. Box lunch included.

Credit: 2.75 CME / 3.30 CE

Moderator: Marcus S. Shaker, MD MS FAAAAI

11:15 Clinical Management Strategies to Promote Adherence of Pediatric Asthma Patients and Families

Cynthia S. Rand, PhD

11:45 Methods to Diagnose Adherence Status

Andrew G. Weinstein, MD FAAAAI

12:15 Break

12:30 Shared Decision Making: A Communication Practice Proven to Enhance Adult Asthma Patients' Adherence and Outcomes

Sandra R. Wilson, PhD

1:00 The Role of Motivational Interviewing to Help Guide Patients to Favorable Asthma Management Actions

Belinda Borrelli, PhD

1:30 Question & Answer

Upon completion of this session, participants should be able to: Identify the reasons why patients are non-adherent with health care providers' plans; Discuss objective means to diagnose adherence status; Demonstrate motivational interviewing and other patient-centered techniques to help patients and families follow asthma treatment plans.

Course   

5313 Mechanisms and Treatment of Exacerbations of Asthma

10:45 am to 1:45 pm

Convention Center, Upper Level, Room 1AB

Pre-registration and ticket required. Fee: \$40. Box lunch included.

Credit: 2.75 CME / 3.30 CE

Moderators: James E. Gern, MD FAAAAI

Daniel J. Jackson, MD

10:45 Role of Viruses

Eva Kathryn Miller, MD

11:10 Role of Bacteria

Hans Bisgaard, MD DMSci

11:35 How Does Allergic Inflammation Alter the Immune Response to Viruses?

Peter W. Heymann, MD

12:00 Break

12:15 Etiology of Exacerbations in Different Populations

Malcolm R. Sears, MD FAAAAI

12:40 Identifying the Exacerbation-Prone Patient

Ronina A. Covar, MD

1:05 Approaches to the Prevention and Treatment of Exacerbations

Daniel Jackson, MD

1:30 Question & Answer

Upon completion of this session, participants should be able to: List the most common viruses and bacteria associated with asthma exacerbations; Discuss mechanisms of virus-allergen interactions that promote exacerbations; List major risk factors for exacerbations of asthma.

Course   

5314 Owning the Bone: How to Minimize Glucocorticoid-Induced Osteoporosis Risk

10:45 am to 1:45 pm

Convention Center, Upper Level, Room 8

Pre-registration and ticket required. Fee: \$40. Box lunch included.

Credit: 2.75 CME / 3.30 CE

Moderator: Joshua A. Steinberg, MD

10:45 Cellular Mechanisms of Glucocorticoid Action in Bone

Ernesto Canalis, MD

11:15 Bone Biomechanics and Glucocorticoid Effects

Bjoern Buehring, MD

11:45 Break

12:00 Corticosteroids and Bone Accretion

Kelan Tantisira, MD MPH

12:30 Influence of Diet and Lifestyle on Glucocorticoid-Induced Osteoporosis

Mary C. Tobin, MD FAAAAI

1:00 Incorporating Best Bone Health Care into Allergy Practice

Andrea J. Apter, MD MA MSc FAAAAI

1:30 Question & Answer

Upon completion of this session, participants should be able to: Identify known bone health risks of acute and chronic exposure to inhaled and oral glucocorticoids; Recognize differences between GIOP and post-menopausal osteoporosis pathophysiology, risk factors and screening tools; Discuss present and emerging guidelines and pharmacotherapy in the prevention and management of GIOP.

Pro/Con Debate 

5502 Adaptive Immune Responses are Essential

12:30 to 1:30 pm

Convention Center, Upper Level, Room 5AB

Credit: 1.00 CME / 1.20 CE

Moderator: Larry Borish, MD FAAAAI

Pro

Erwin W. Gelfand, MD FAAAAI

Con

Hirohito Kita, MD

Upon completion of this session, participants should be able to discuss the increasingly important role of ILC2 lymphocytes in generating allergic airway inflammation.

Pro/Con Debate 

5503 Anti-Fungals are Effective in Treating Allergic Fungal Airway Disease

12:30 to 1:30 pm

Convention Center, Upper Level, Room 11AB

Credit: 1.00 CME / 1.20 CE

Moderator: Jeffrey G. Demain, MD FAAAAI

Pro

Daniel L. Hamilos, MD FAAAAI

Con

Andrew J. Wardlaw, MD PhD

Upon completion of this session, participants should be able to: Identify the clinical trials and case series that have described the use of anti-fungals in fungal associated asthma; List the pros and cons of using anti-fungal agents in ABPA and related conditions.



Pro/Con Debate ▼

5504 The Diagnosis of Asthma vs. COPD Does Not Affect Treatment

12:30 to 1:30 pm
Convention Center, Mezzanine Level, Room 14AB
Credit: 1.00 CME / 1.20 CE
Moderator: Michael E. Manning, MD FAAAAI

Pro
Stephen P. Peters, MD PhD FAAAAI
Con
Nicola A. Hanania, MD

Upon completion of this session, participants should be able to: Describe how COPD and asthma can be differentiated; Compare and contrast treatment options and treatment expectations in COPD vs. asthma.

Pro/Con Debate ▼

5505 Epinephrine Should be Prescribed to All Allergen Immunotherapy Patients (SLIT and SCIT)

12:30 to 1:30 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.00 CME / 1.20 CE
Moderator: Linda Cox, MD FAAAAI

Pro
Dana V. Wallace, MD FAAAAI
Con
John Oppenheimer, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss the safety of SCIT with emphasis on timing and severity of reactions; Discuss safety of SLIT in the reported studies and surveys.

Pro/Con Debate ▼

5506 Androgens are the Best Option for Prophylactic Treatment of Hereditary Angioedema

12:30 to 1:30 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.00 CME / 1.20 CE
Moderator: Bruce L. Zuraw, MD

Pro
Marco Cicardi, MD PhD
Con
Marc A. Riedl, MD MS

Upon completion of this session, participants should be able to: List the benefits and risks of androgens for prophylaxis in HAE; Discuss the risks and benefits of C1 inhibitor therapy for prophylaxis in HAE; Compare and contrast the use of androgens vs. C1 inhibitor therapy for prophylaxis in HAE.

Seminars  

12:30 to 1:30 pm
Pre-registration and ticket required. Fee: \$40. Box lunch included.
Sessions and meals are limited to 30 people.
Credit: 1.00 CME / 1.20 CE

5521 Approach to the Evaluation of Immunodeficiency in Adults

Adina Kay Knight, MD FAAAAI
Joyce E. Yu, MD
Marriott South Tower, Level 1, Point Loma

Upon completion of this session, participants should be able to: Discuss the workup and management of adults with suspected immunodeficiency; Compare and contrast the differential diagnosis for hypogammaglobulinemia in adult patients; List key differences between the immunodeficiency diagnostic spectrum in adults vs. adolescents and children.

5522 Office Evaluation of Patients with Multiple Antibiotic Allergies

Roland Solensky, MD FAAAAI
Marriott South Tower, Level 1, Solana

Upon completion of this session, participants should be able to describe how to approach patients with multiple antibiotic allergies with appropriate diagnostic testing and challenge procedures.

5523 Novel Therapies for Chronic Urticaria and Angioedema

David H. Dreyfus, MD PhD FAAAAI
Marriott South Tower, Level 1, Santa Rosa

Upon completion of this session, participants should be able to: Discuss novel therapy for chronic urticaria and angioedema; Describe novel diagnostic testing for chronic urticaria and angioedema; Review practical considerations for application of novel therapy and diagnosis.

5524 Tree Nut and Peanut: Complexity in Cross-Reactivity

Soheila J. Maleki, PhD
Suzanne S. Teuber, MD FAAAAI
Marriott South Tower, Level 4, La Costa

Upon completion of this session, participants should be able to: Distinguish between clinical cross-reactivity and *in vitro* cross-reactivity; List the main seed storage proteins involved in cross-reactivity; Review the closely related tree nuts that are often clinically cross-reactive.

5525 Chronic Rhinosinusitis Subtypes and Implications for Treatment

Joseph K. Han, MD
Amber U. Luong, MD PhD
Marriott South Tower, Level 4, Catalina

Upon completion of this session, participants should be able to: Describe the classification of sinusitis; Describe the clinical subtypes of chronic rhinosinusitis; Explain the different non-surgical treatment options for the different chronic rhinosinusitis subtypes.

Annual Meeting Seminars

Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.



Oral Abstract

5601 Asthma Epidemiology and Risk Factors

2:00 to 3:15 pm
Convention Center, Upper Level, Room 5AB
Credit: 1.25 CME / 1.50 CE
Moderators: Ronina A. Covar, MD
Timothy J. Craig, DO FAAAAI

- 2:00 **Exposures That Alter The Early Life Microbiome and The Risk Of Asthma**
Amy S. Feldman, MD
- 2:15 **Ethnic Differences Of Reported Asthma Symptoms In Urban School-Based Screening Surveys**
Margee Louisias, MD
- 2:30 **Year One Daycare Attendance Predicts Asthma At Age Seven: The Cincinnati Childhood Allergy and Air Pollution Study (CCAAPS)**
Gang Cheng, MD PhD
- 2:45 **Determining Risk Levels Of The Composite Asthma Severity Index (CASI)**
Rebecca A. Zabel
- 3:00 **BMI and Asthma Severity In An Elementary and Middle School Inner City Population**
Christina G. Kwong, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

5602 Basic and Translational Immunology

2:00 to 3:15 pm
Convention Center, Upper Level, Room 7AB
Credit: 1.25 CME / 1.50 CE
Moderator: TBA

- 2:00 **Novel NK Cytotoxicity Assay Enables Drug Discovery For Hemophagocytic Lymphohistiocytosis**
Jinzhu Li, MD PhD
- 2:15 **Exploitation Of The Host Ubiquitin System By Respiratory Syncytial Virus Nonstructural Protein 2**
Jillian N. Whelan
- 2:30 **Epigenetic Regulation Of Dendritic Cell Migration**
Timothy P. Moran, MD PhD
- 2:45 **LRBA Subcellular Localization: Evidence Of The LRBA's Role In Vesicle Trafficking From The Golgi To Cell Membrane and Endocytosis**
Michelle A. Reiser, MS
- 3:00 **Differential Role Of Dendritic Cell Subsets In Shaping T-Cell Responses To Respiratory Viruses**
Meera Rani Gupta, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

5603 Environmental Risk Factors and Disease Outcomes

2:00 to 3:15 pm
Convention Center, Upper Level, Room 1AB
Credit: 1.25 CME / 1.50 CE
Jonathan A. Bernstein, MD FAAAAI
Moderator: James. L. Sublett, MD FAAAAI

- 2:00 **Effect Of Prenatal Exposure To Indoor PM2.5 and Environmental Tobacco Smoke Affecting Lower Respiratory Tract Infection Was Modified By ROS Genes: Cocoa Study**
Song I. Yang, MD
- 2:15 **IgE Anti-Respiratory Syncytial Virus Antibodies In Older Asthmatic Children**
Mira Mandal
- 2:30 **Asthma Symptoms and Rhinovirus In A Longitudinal Children's Cohort**
Euan R. Tovey, PhD
- 2:45 **Maternal Transfer Of Der p 1 and Blo t 5 Allergens and Their Respective Specific Antibodies Trough Placenta and Colostrum**
Patricia Macchiaverni
- 3:00 **Rhinovirus Infection Is Associated With Changes In The Airway Microbiome**
Kirsten Kloepfer, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

5604 Eosinophilic Gastrointestinal Diseases

2:00 to 3:15 pm
Convention Center, Upper Level, Room 2
Credit: 1.25 CME / 1.50 CE
Moderator: Antonella Cianferoni, MD PhD

- 2:00 **Natural History Of Esophageal Remodeling In Pediatric Eosinophilic Esophagitis Treated For Four Years**
Jessica Rajan, MD
- 2:15 **Diagnostic Inaccuracy Of Biopsy Evaluations In Eosinophilic Esophagitis Underscores The Value Of a Secondary Review Process**
Emily Stucke, BA
- 2:30 **Development Of Eosinophilic Esophagitis To Food After Development Of IgE Tolerance To The Same Food**
Solrun Melkorka Maggadottir, MD
- 2:45 **Mast Cells, Eosinophils and Eosinophilic Esophagitis**
Jay Jin, MD PhD
- 3:00 **CD3 and CD8 Cells Produce IL-9 In Pediatric Eosinophilic Esophagitis**
Arjun Andrew Anilkumar, BS

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Oral Abstract

5605 Population Health and Food Allergy

2:00 to 3:15 pm
Convention Center, Upper Level, Room 11AB
Credit: 1.25 CME / 1.50 CE
Moderator: Marcus S. Shaker, MD MS FAAAAI

- 2:00 **Longitudinal Effect Of Food Allergy Education On Epinephrine Availability In Public Schools**
Dipika Patel, MD
- 2:15 **Population Response To Change In Infant Feeding Guidelines For Allergy Prevention**
Dean Tey, MD
- 2:30 **Teasing and Bullying Among Adolescents With Food Allergy**
Adora Lin, MD PhD
- 2:45 **Differences In Food Allergy Quality Of Life Between Caregivers In a Clinic-Based and a Caregiver-Reported Food Allergic Population**
Matthew J. Greenhawt, MD MBA MSc
- 3:00 **Food Allergy Management In An Urban Pediatric Population**
Jennifer M. Camacho, MD

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

5606 New Forms of Immunotherapy

2:00 to 3:15 pm
Convention Center, Mezzanine Level, Room 14AB
Credit: 1.25 CME / 1.50 CE
Moderator: Désirée E.S. Larenas Linnemann, MD FAAAAI

- 2:00 **Persistent Treatment Effect Achieved At One Year After Four Doses Of Der p Derived Synthetic Peptide Immuno-Regulatory Epitopes In An Exposure Chamber Model Of House Dust Mite Allergy**
Rod Hafner, PhD
- 2:15 **Treatment With Synthetic Peptide Immuno-Regulatory Epitopes Derived From Grass Allergens Leads To a Substantial Reduction In Grass Allergy Symptoms In The Environmental Exposure Unit**
Anne K. Ellis, MD MSc FAAAAI
- 2:30 **Epicutaneous Immunotherapy Induces Epigenetic Changes In Sensitized Mice**
Lucie Mondoulet, PhD
- 2:45 **Ultra-Fast Hypoallergenic Birch Pollen Allergy Vaccine Allert Is Efficient and Safe: Results Of a Phase IIb Study**
Francois Spertini, MD
- 3:00 **Stable Conjugates Between A Novel Toll-Like Receptor 7 Ligand and Protein Allergens As Modulators Of Th2 Responses *In Vitro* and *In Vivo***
Lucia Fili

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Oral Abstract

5607 Mechanisms of T Cell-Mediated Allergic Disease

2:00 to 3:15 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Taylor A. Doherty, MD FAAAAI

- 2:00 **TSLP Induces Corticosteroid Resistance In Natural Helper Cells Via STAT5 Pathway**
Hiroki Kabata
- 2:15 **Impairment Of IL-27's Differential Effect On CD4+ T Cells In Asthma**
Zhihong Chen
- 2:30 **Profile Of Food Allergen-Specific T Cells In Allergic and Clinically Tolerant Individuals**
David Chiang, MS
- 2:45 **Follicular Helper T Cells Mediate IgE Antibody Production and Allergic Immune Responses in Mice**
Takao Kobayashi, PhD
- 3:00 **Analysis Of Circulating Rhinovirus-Specific CD4+ T Cells Using Novel MHC Class II Tetramers Reveals Marked Expansion Of Effector Memory Cells In Infected Subjects**
Lyndsey Muehling

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.

Late Breaking Oral Abstract Session

5611 Clinical Sciences

2:00 to 3:15 pm
Convention Center, Upper Level, Room 8
Credit: 1.25 CME / 1.50 CE
Moderator: Jeffrey G. Demain, MD FAAAAI
Giselle Mosnaim, MD MS FAAAAI

- 2:00 **Efficacy and Safety of Lebrikizumab in Severe Uncontrolled Asthma: Results from the Lute and Verse Phase II Randomized, Double-Blind, Placebo-Controlled Trials**
Nicola A. Hanania, MD
- 2:15 **Dose-Finding Efficacy and Safety Trial of House Dust Mite Sublingual Immunotherapy Tablet, MK-8237, Using an Environmental Exposure Chamber**
Hendrik Nolte, MD, PhD
- 2:30 **Long-Lasting Egg Consumption in Egg Allergic Children Treated with Oral Immunotherapy (OIT): Follow-up from the Consortium of Food Allergy Research (CoFAR) Study**
Stacie M. Jones, MD
- 2:45 **A Randomized, Double-Blind, Placebo-Controlled Trial of Omalizumab Combined with Oral Immunotherapy (OIT) in the Treatment of Cow's Milk Allergy (CMA): Safety of Dosing**
Jennifer S. Kim, MD
- 3:00 **Dupilumab Monotherapy in Adults with Moderate-to-Severe Atopic Dermatitis: A 12-Week, Randomized, Double-Blind, Placebo-Controlled Study**
Thomas R.M. Bieber, MD PhD FAAAAI

Upon completion of this session, participants should be able to discuss recent research developments in the field of allergy/immunology.



Panel Discussion Workshop ▼

5801 Improving Inpatient Asthma Outcomes in Pediatrics

3:30 to 4:45 pm

Convention Center, Upper Level, Room 5AB

Credit: 1.25 CME / 1.50 CE

Moderator: Miles M. Weinberger, MD FAAAAI

Panelists:

Amal H. Assa'ad, MD FAAAAI

Karen M. McDowell, MD

Joseph D. Spahn, MD

Upon completion of this session, participants should be able to: Utilize questionnaires that identify need in inpatient asthma care; Identify opportunities to improve outcomes for children with recurrent asthma admissions.

Panel Discussion Workshop

5802 The Ins and Outs of Managing Dietary and Corticosteroid Therapy in Eosinophilic Esophagitis

3:30 to 4:45 pm

Convention Center, Upper Level, Room 2

Credit: 1.25 CME / 1.50 CE

Moderator: Dan Atkins, MD FAAAAI

Panelists:

Juan Pablo Abonia, MD

Seema Sharma Aceves, MD PhD FAAAAI

Katrinia Jane Allen, MD PhD FAAAAI

Upon completion of this session, participants should be able to: Identify and discuss issues in the dietary treatment and management of EoE, including the use of an elimination diet and how to reintroduce foods into the diet; Identify and discuss issues in the use of swallowed topical steroids in the treatment of EoE.

Problem-Based Learning Workshop 

5803 Evaluation and Management of Patients with Recurrent Infections

3:30 to 4:45 pm

Convention Center, Upper Level, Room 3

Pre-registration and ticket required. Fee: \$50.

Credit: 1.25 CME / 1.50 CE

PBL Facilitator: Vincent R. Bonagura, MD FAAAAI

Content Lecturer: Mark R. Stein, MD FAAAAI

Upon completion of this session, participants should be able to: List the susceptibility factors for recurrent infection (immunodeficiency, rhinitis, structural defects, CF); Discuss the role of the diagnostic modalities relevant to the evaluation of patients with recurrent infection; Outline IgG therapy for immunodeficiency patients.

Q & A Workshop

5804 Challenges and Interventions to Improve Adherence in Urban Minority Populations with Asthma

3:30 to 4:45 pm

Convention Center, Upper Level, Room 4

Credit: 1.25 CME / 1.50 CE

Moderator: Cynthia S. Rand, PhD

3:30 Brief-Interval Telephone Surveys of Medication Adherence and Asthma Symptoms in the Childhood Asthma Management Program Continuation Study

Bruce G. Bender, PhD FAAAAI

3:45 Problem Solving to Improve Adherence and Asthma Outcomes in Urban Adults with Asthma

Andrea J. Apter, MD MA MSc FAAAAI

4:00 Use of Mobile Technology to Improve Adherence in Low-Income Minority Adolescents with Asthma

Giselle Mosnaim, MD MS FAAAAI

4:15 Question & Answer

Upon completion of this session, participants should be able to: Discuss barriers to adherence in urban minority populations with asthma; Discuss the efficacy of a problem solving intervention to improve adherence in urban adults with asthma; Evaluate the efficacy of an MP3 player and peer support intervention to improve adherence in urban minority adolescents with asthma.

Q & A Workshop

5805 Allergic Inflammation: New Insights into Key Innate Mediators

3:30 to 4:45 pm

Convention Center, Upper Level, Room 1AB

Credit: 1.25 CME / 1.50 CE

Moderator: Steve N. Georas, MD

3:30 IL33 Dependent Allergic Inflammation via FcγRIII Signalling

Anne Sperling, PhD

3:45 Epithelial Cell-Derived Exosomes in Allergic Airway Inflammation

Nirav Bhakta, MD PhD

4:00 Innate Type 2 Cytokines and their Receptors in Human Asthma

Morris Ling, MD

4:15 Question & Answer

Upon completion of this session, participants should be able to: Explain the importance of type 2 innate lymphoid cells in mediating the initial steps of allergic inflammation; Review the importance of airway epithelial cells and the effect of stress on production of inflammatory exosomes in allergic airway inflammation; Recognize the importance of innate type 2 cytokines and their receptors in human asthma.

Annual Meeting Workshops

Programmed by the AAAAI. Annual Meeting Workshops funded through an educational grant from Merck.



Year-in-Review Workshop ▼

5806 Mechanistic Basis of Food Allergy: New Frontiers

3:30 to 4:45 pm
Convention Center, Upper Level, Room 11AB
Credit: 1.25 CME / 1.50 CE
Moderator: Kari C. Nadeau, MD PhD FAAAAI

3:30 Environmental Sanitizers as a Potential Cause of Epidemic Food Allergy

Jessica R. Savage, MD

3:45 Novel iNKT Ligands in Foods: Potential Role in the Development of Allergy

Patrick J. Brennan, MD PhD

4:00 Role of B Cells in Food Allergy Therapy

Duane R. Wesemann, MD PhD

4:15 Question & Answer

Upon completion of this session, participants should be able to: Identify the possible role of sanitizing agents in the pathogenesis of food allergy; Review the importance of innate iNKT cell ligands in food allergy; List the principle of B cell receptor editing in the periphery and its potential relevance to the control of IgE responses.

Panel Discussion Workshop

5807 Rapid Desensitizations: Protocols and Management of Reactions

3:30 to 4:45 pm
Convention Center, Mezzanine Level, Room 15AB
Credit: 1.25 CME / 1.50 CE
Moderator: Karen S. Hsu Blatman, MD
David E. Sloane, MD
Timothy J. Sullivan, MD
Katharine M. Woessner, MD FAAAAI

Upon completion of this session, participants should be able to: Identify the safety and efficacy of drug desensitization protocols; Discuss the build up and progression of the available protocols for desensitization; Describe management tools for reactions during drug desensitizations.

Q & A Workshop

5808 Follicular Helper T Cells in Health and Disease

3:30 to 4:45 pm
Convention Center, Mezzanine Level, Room 16AB
Credit: 1.25 CME / 1.50 CE
Moderator: John W. Steinke, PhD FAAAAI

3:30 Development of Follicular Helper T Cells

Shane Crotty, PhD

3:45 Vaccines and Follicular Helper T Cells

Michael G. McHeyzer-Williams, PhD

4:00 The Role of Follicular Helper T Cells in Autoimmunity

Eric Meffre, PhD

4:15 Question & Answer

Upon completion of this session, participants should be able to: Discuss how follicular helper T cells develop; Describe how vaccines can be used to modulate follicular helper T cell function; Describe the mechanisms through which follicular helper T cells participate in the development of autoimmunity.

Problem-Based Learning Workshop  

5809 A Case of Chronic Severe Urticaria

3:30 to 4:45 pm
Convention Center, Upper Level, Room 31C
Pre-registration and ticket required. Fee: \$50.
Credit: 1.25 CME / 1.50 CE
PBL Facilitator: Don A. Bukstein, MD
Content Lecturer: Allen P. Kaplan, MD FAAAAI

Upon completion of this session, participants should be able to: Discuss the differential diagnosis of a patient with chronic severe urticaria; Debate the evaluation of urticaria, including serological, prick skin testing and biopsy interpretation; Discuss novel medical and immunomodulatory therapy.

Annual Meeting Workshops

Programmed by the AAAAI. Annual Meeting Workshops funded through an educational grant from Merck.

Scientific Abstract Sessions

Asthma Therapeutics: Advances in Biologics and Drugs

2201

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 1 **A Rare Presentation Of Surfactant Deficiency In a Term Neonate**
Dr. Nisha N. Shah, MD, LSU Health Sciences Center New Orleans, New Orleans, LA, **Dr. Heena Shah, MD**, Louisiana State University, New Orleans, LA and **Dr. Kenneth Paris, MD, MPH**, LSU Health Sciences Center, New Orleans, New Orleans, LA
- 2 **Relapse Of Severe Asthma Exacerbations After Cessation Of Omalizumab Treatment – Real Life Data**
Dr. Izabela R. Kuprys-Lipinska, MD, PhD and **Prof. Piotr Kuna, MD, PhD**, Dept. of Internal Medicine, Asthma and Allergy, Medical University in Lodz, Poland
- 3 **Therapeutic Equivalence Of Budesonide/Formoterol (BUD/FM) Breath-Actuated Inhaler (BAI) Compared With Bud/FM Pressurized Metered-Dose Inhaler (pMDI) In Adults and Adolescents With Moderate To Severe Asthma**
Kevin R. Murphy, MD¹, **Rajiv Dhand, MD²**, **Frank Trudo, MD³**, **Tom Uryniak, MS³** and **Ajay Aggarwal, MD³**, ¹Boys Town National Research Hospital, Boys Town, NE, ²Department of Medicine, University of Tennessee Graduate School of Medicine, ³AstraZeneca LP
- 4 **Effects Of Budesonide/Formoterol (BUD/FM) Delivered By Pressurized Metered-Dose Inhaler (pMDI) on Symptoms In African Americans and Caucasians With Moderate and Severe Asthma With and Without Fixed Airway Obstruction (FAO)**
Donald P. Tashkin, MD, David Geffen School of Medicine at UCLA, Los Angeles, CA, **Bradley E. Chipps, MD**, Capital Allergy & Respiratory Disease Center, Sacramento, CA and **Frank Trudo, MD**, AstraZeneca, Wilmington, DE
- 5 **Long-Term Effectiveness Of Omalizumab Treatment In Thai Severe Asthmatic Patients: A Real-Life Experience**
Dr. Orapan Poachanukoon, MD, Thammasat University, Pathumtani, Thailand, **Dr. Theerasak Kawamatawong**, Ramathibodi Hospital, Mahidol University, Taiwan, **Dr. Atik Saengasapaviriya**, Phramonkuklao hospital, Thailand, **Dr. Chanchai Sittipunt**, Chulalongkorn University, Thailand, **Dr. Hiroshi Chantaphakul, MD**, FAAAAI, Chutuchak District, Chulalongkorn University Hospital, Bangkok, Thailand, **Prof. Kittipong Maneechotesuwan**, Siriraj hospital, Mahidol university, Bangkok, Thailand, **Dr. Pintip Ngamchanyaporn**, Ramathibodi Hospital, Mahidol University, Thailand, **Dr. Kunchit Piyavechviratana**, Pramongkut Hospital, Sathorn, Thailand, **Dr. Apichart Khanisap**, Thammasat University Hospital, Thailand, **Dr. Siwasak Juthong**, Faculty of Medicine, Songklanakarin University, Thailand, **Dr. Warangkana Rithirak**, Songklanakarin University, Thailand, **Dr. Chaicharn Pothirat**, Chiangmai University, Thailand and **Dr. Watchara Boonsawat**, Srinagarind Hospital, Thailand
- 6 **Role Of Monoclonal Antibody In Sickle Cell Disease Patients With Allergic Rhinitis and Asthma Along With Raised IgE Level**
Dr. Abdul Rehman Syed, MD, King Fahad University Hospital Khobar, Dammam, Saudi Arabia
- 7 **Effects Of Long-Term Treatment With Budesonide/Formoterol (BUD/FM) Delivered By Pressurized Metered-Dose Inhaler (pMDI) On Symptoms In African-American and Caucasian Patients With Moderate To Severe Asthma With and Without Fixed Airway Obstruction (FAO)**
Randall Brown, MD, MPH, Center for Managing Chronic Disease, University of Michigan School of Public Health, Bradley E. Chipps, MD, Capitol Allergy and Respiratory Disease Center, Donald P. Tashkin, MD, David Geffen School of Medicine at UCLA, Los Angeles, CA and **Frank Trudo, MD**, AstraZeneca, Wilmington, DE
- 8 **Retrospective Observational Assessment Of Nasal Polyposis In Asthmatic Patients Treated With Omalizumab**
Dr. Ana Antón-Laiseca, MD, **Dr. Silvia Martínez Blanco, MD**, **Dr. Gabriel González Salazar, MD**, **Dr. Maria Carmen Diéguez Pastor, MD**, **Dr. Ruth Mielgo Ballesteros, MD** and **Dr. Consuelo Fernández Rodríguez, MD, PhD**, Hospital Universitario 12 de Octubre, Spain
- 9 **FDA Guidance-Designed Study Of The Effects Of Intranasal Triamcinolone Acetonide Aqueous (TAA-AQ) On Growth Velocity (GV) Of Children With Perennial Allergic Rhinitis (PAR)**
Dr. David P. Skoner, MD, Temple University School of Medicine, Allegheny General Hospital, Pittsburgh, PA; West Penn Allegheny Health System, Pittsburgh, PA
- 10 **Extended Omalizumab Dosage Intervals and Efficacy**
Dr. Saraleen Benouni, MD¹, **Dr. Lee E. Sheinkopf, MD**, FAAAAI², **Dr. LanAnh T. Do, MD**, FAAAAI³, **Dr. Asif Rafi, MD²** and **Dr. Roger M. Katz, MD**, FAAAAI², ¹UCLA, Los Angeles, CA, ²ucla, los angeles, CA, ³ucla, Los Angeles, CA
- 11 **Effect Of Roflumilast On Asthma Control In Moderate and Severe Asthma Patients**
Prof. V.A. Beloglazov¹, **Dr. Yuri Popenko¹** and **Prof. Lawrence M. DuBuske, MD**, FAAAAI², ¹Crimean State Medical University, Ukraine, ²George Washington University School of Medicine, DC
- 12 **The Potent and Selective CRTH2 Antagonist OC000459 Is Effective In The Treatment Of Eosinophilic Asthma When Given Once Daily**
Dr. Roy Pettipher¹, **Dr. Michael Perkins¹**, **Dr. Lisa Pearce Collins¹**, **Dr. Mark Baillet²**, **Dr. Trevor Lewis³**, **Dr. Jan Steiner⁴**, **Prof. John Bell⁵**, **Dr. Mark Payton¹** and **Dr. Michael Hunter¹**, ¹Atopix Therapeutics, Abingdon, United Kingdom, ²S-Cubed, Abingdon, United Kingdom, ³TL-Wise Consulting, Cambridge, United Kingdom, ⁴Oxford Therapeutics Consulting, Brightwell-cum-Sotwell, United Kingdom, ⁵Medical Sciences Division, Oxford, United Kingdom
- 13 **Safety and Efficacy Of ARRY-502, a Potent, Selective, Oral CRTh2 Antagonist, In Patients With Mild To Moderate Th2-Driven Asthma**
Sally E. Wenzel, MD, FAAAAI¹, **Robert Hopkins**, Director of Clinical Operations², **Dr. Michael Saunders, MD**, Senior Director of Drug Safety², **David Chantry**, Senior Director of Translational Medicine and Cell Biology², **Lisa Anderson**, Clinical Research Manager², **Roger Aitchison**, Senior BioStatistician², **Christine Eberhardt**, Research Investigator², **Stacie Bell**, Director of Clinical Pharmacology², **Dr. Jeremy Cole, MD**, Principal Investigator³, **Dr. James Wolfe, MD**, Physician/Research Investigator⁴, **Dr. Sheldon L. Spector, MD**, FAAAAI⁵, **Dr. Lawrence D. Sher, MD**, FAAAAI⁶, **Dr. Edward M. Kerwin, MD**, FAAAAI⁷ and **Dr. Larry Burgess**, PhD, Executive Director of Medicinal Chemistry², ¹University of Pittsburgh Medical Center NW, Pittsburgh, PA, ²Array BioPharma Inc., Boulder, CO, ³IPS Research Company, Oklahoma City, OK, ⁴Allergy & Asthma Associates of Santa Clara County Research Center, San Jose, CA, ⁵California Allergy & Asthma Medical Group, Los Angeles, CA, ⁶Peninsula Research Associates, Rolling Hills Estates, CA, ⁷Allergy and Asthma Center of Southern OR, Medford, OR

- 14 A Phase I Assessment Of Safety and Tolerability Of RNS60, a Novel Therapeutic Containing Charge-Stabilized Nanostructures In Asthma**
Supurna Ghosh, PhD, Andreas Kalmes, PhD, Jarrad Mock, Jocelyn Sutherland and Richard Watson, MD, Revalesio Corporation, WA
- 15 Tiotropium RespiMat® Add-On To Inhaled Corticosteroids Improves Lung Function In Patients With Symptomatic Mild Asthma: Results From A Phase III Trial**
Pierluigi Paggiaro¹, Dr. David M.G. Halpin, MD², Roland Buhl³, Dr. Michael Engel, MD⁴, Valentina Zubeck⁵, Zuzana Blahova⁶, Dr. Petra Moroni-Zentgraf⁴ and Dr. Emilio Pizzichini⁷, ¹University of Pisa, Pisa, Italy, ²Royal Devon & Exeter Hospital, Exeter, United Kingdom, ³Mainz University Hospital, Mainz, Germany, ⁴Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim Am Rhein, Germany, ⁵Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, CT, ⁶Boehringer Ingelheim RCV GmbH & Co. KG, Vienna, Austria, ⁷NUPAIVA (Asthma Research Centre), Universidade Federal de Santa Catarina, Florianópolis, Brazil
- 16 Tiotropium RespiMat® Add-On Therapy Reduces Airflow Obstruction In Patients With Symptomatic Moderate Asthma, Independent Of T_H2 Inflammatory Status**
Dr. Thomas B. Casale, MD, FAAAAI¹, Dr. Eric Donn Bateman, MD², Prof. Ronald Dahl, MD³, Dr. Emilio Pizzichini⁴, Dr. Mark L. Vandewalker, MD⁵, Dr. Johann Christian Virchow⁶, Dr. Michael Engel, MD⁷, Dr. Petra Moroni-Zentgraf⁷, Dr. Hendrik Schmidt⁸ and Huib A.M. Kerstjens⁹, ¹University Of South Florida Morsani College Of Medicine, Tampa, FL, ²University of Cape Town Lung Institute, Cape Town, South Africa, ³Odense University Hospital, Odense, Denmark, ⁴NUPAIVA (Asthma Research Centre), Universidade Federal de Santa Catarina, Florianópolis, Brazil, ⁵Clinical Research of the Ozarks, Columbia, MO, ⁶University Clinic Rostock, Rostock, Germany, ⁷Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim Am Rhein, Germany, ⁸Boehringer Ingelheim Pharma GmbH & Co. KG, Biberach an der Riss, Germany, ⁹University Medical Center Groningen, University of Groningen, Groningen, Netherlands
- 17 Once-Daily Tiotropium RespiMat® Improves Lung Function In Patients With Severe Symptomatic Asthma Independent Of Leukotriene Modifier Use**
Prof. Ronald Dahl, MD¹, Prof. Dennis E. Doherty², Jonathan Corren, MD³, Dr. Jill Karpel⁴, Huib A. M. Kerstjens⁵, Dr. Michael Engel, MD⁶, Dr. Petra Moroni-Zentgraf⁶, Dr. Hendrik Schmidt⁷ and Dr. Shu Hashimoto, MD, PhD⁸, ¹Odense University Hospital, Odense, Denmark, ²Lexington VA Medical Center, University of Kentucky, Lexington, KY, ³University of California, Los Angeles, CA, ⁴North Shore Medical Arts LLP, Great Neck, NY, ⁵University Medical Center Groningen, University of Groningen, Groningen, Netherlands, ⁶Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim Am Rhein, Germany, ⁷Boehringer Ingelheim Pharma GmbH & Co. KG, Biberach an der Riss, Germany, ⁸Nihon University School of Medicine, Tokyo, Japan
- 19 Test-Retest Reliability Of The ISAAC Questionnaire For a Web-Based Study**
Dr. Koichi Yoshida, MD¹, Dr. Yuichi Adachi, MD, PhD², Dr. Mari Sasaki, MD¹, Dr. Mayumi Furukawa, MD¹, Dr. Toshiko Itazawa, MD, PhD², Dr. Koji Hashimoto, MD, PhD³, Dr. Hiroshi Odajima⁴ and Dr. Akira Akasawa, MD, PhD¹, ¹Division of Allergy, Tokyo Metropolitan Children's Medical Center, Tokyo, Japan, ²Department of Pediatrics, University of Toyama, Toyama, Japan, ³Department of Pediatrics and Child Health, Nihon University School of Medicine, Tokyo, Japan, ⁴Fukuoka National Hospital, Fukuoka, Japan
- 20 Characteristics Of Adolescents With Undiagnosed Asthma In Rural Counties In Georgia**
Dr. Poneh Davoodi, MD¹, Dr. Dennis Ownby, M.D. FAAAAI², Ms. Suzanne Havstad, M.A.³, Dr. Jennifer Waller, PhD⁴, Dr. Christine L.M. Joseph, PhD³ and Dr. Martha Tingen, PhD⁴, ¹Georgia Regents University, ²Division of Allergy-Immunology and Rheumatology, Georgia Regents University, Augusta, GA, ³Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI, ⁴Georgia Regents University, Augusta, GA
- 21 Trends In Prevalence Of Asthma and Allergies In 13-14 Year Old Children Between Two ISAAC Studies In Birjand City, Iran**
Dr. Mohammad Fereidouni, MD, PhD, Asthma, Allergy & Immunology Research Center, Birjand University of Medical Sciences, Iran and Mrs. Shaghayeghsadat Nourani hassankiadeh, birjand university of medical sciences
- 22 An Evaluation Of The Thai-Translated Version Of The Childhood Asthma Control Questionnaire (C- ACT) and The Composite Asthma Severity Index (CASI) Among Thai Asthmatic Children**
Dr. Benjarat Dardaranonda, MD, Department of Pediatrics, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok, THAILAND, Bangkok, Thailand
- 23 Impact Of Change In Inhaled Corticosteroids/Long-Acting Beta Agonist Combination (ICS/LABA) Use On The Risk Of Asthma Exacerbations In Asthma Patients Within a Medical Group**
Dr. Richard H. Stanford, PharmD, MS¹, Saurabh Nagar, MS¹, Dr. Xiwu Lin, PhD¹ and Dr. Dick O'Connor, MD², ¹GlaxoSmithKline, ²Sharp Rees-Stealy Medical Group, San Diego, CA
- 24 HLA-DRB1 Alleles, Levels Of Total IgE and IL-13 In Patients Of Bronchial Asthma From A Local Tertiary Care Hospital In Lahore, Pakistan Mr. Khursheed Javid, M.Phil., University of Health Sciences, Lahore, Pakistan**
- 25 Infectious Asthma Trigger, Acq Score and Minirqlq Score Correlations Support The One Airway Hypothesis**
Dr. Amy Virojanapa, MD¹, Ms. Phoebe Shah², Mr. Arthur Omondi¹ and Dr. Efren L. Rael, MD, FAAAAI³, ¹Penn State, Hershey Medical Center, Hershey, PA, ²UC San Diego, Vista, CA, ³Allergy/Immunology, Penn State University College of Medicine, Hershey, PA

Asthma Epidemiology

2202

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 18 Close Correlation Between Month Of Birth and The Prevalence Of Bronchial Asthma In Schoolchildren In a Taiwanese Population**
Prof. Ho-Chang Kuo, Kaohsiung Chang Gung Memorial Hospital and Chang Gung University, Kaohsiung, Taiwan, Prof. Wei-Chiao Chang, Taipei Medical University, Prof. Kuender D. Yang, Show Chwan Memorial Hospital in Chang Bing, Changhua, Taiwan and Prof. Wei-Pin Chang, Yuanpei University, Taiwan

Primary Antibody Deficiencies

2203

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 26 Comprehensive Immunological and Clinical Features Of Common Variable Immunodeficiency (CVID)**
Dr. Varaz Bozoghlanian, MD¹, Sudhanshu Agrawal, MS² and Sudhir Gupta, MD, PhD, FAAAAI¹, ¹University of California, Irvine, Irvine, CA, ²University of California, Irvine

- 27 **Clinical, Immunological and Genetic Spectrum Of Novel BTK Gene Mutations In X-Linked Agammaglobulinemia Patients and Female Carriers**
Dr. Regan Pyle, DO¹, Dr. John B. Hagan, MD, FAAAAI¹, Amanda Martinez, MS¹, Dr. Avni Y. Joshi, MD¹, Dr. Thomas Boyce, MD¹, Dr. Gerald W. Volcheck, MD, FAAAAI², Dr. Yesim Yilmaz-Demirdag, MD³, Prof. Sami L. Bahna, MD DrPH FAAAAI⁴ and Dr. Roshini S. Abraham, PhD FAAAAI¹, ¹Mayo Clinic, Rochester, MN, ²Mayo Clinic and Foundation, Rochester, MN, ³Columbia University, New York, NY, ⁴LA State University Health Sciences Center, Shreveport, LA
- 28 **CD19⁺CD27⁺CD43⁺CD70⁺CD5⁻ B-1b Cells In Children With Specific Antibody Deficiency, Specific Antibody Deficiency With Decreased IgG, and Common Variable Immunodeficiency**
Dr. Kathryn D. Convers, MD^{1,2}, Barbara Kariuki, MPH¹ and Dr. Alan Knutsen, MD, FAAAAI^{1,2}, ¹Saint Louis University School of Medicine, Saint Louis, MO, ²Cardinal Glennon Children's Medical Center, Saint Louis, MO
- 29 **A Devastating Outcome In Undiagnosed X-Linked Agammaglobulinemia— A Call For Earlier Screening**
Dr. Karen Elizaeth Bruner, MD, Wilford Hall Ambulatory Surgical Center, Lackland AFB, TX and Dr. Anthony Infante, MD, PhD, UT Health Science Center San Antonio, San Antonio, TX
- 30 **Genetic Basis Of CVID-Like Disease**
Dr. Kate Welch, MD, Mt. Sinai Medical Center, Dr. Elena Resnick, MD, Mount Sinai School of Medicine, New York, NY and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI, Mt. Sinai Medical Center, New York, NY
- 31 **A Case Of A CVID Patient and Rabies Exposure**
Dr. Hassan Nasir, DO, Nova Southeastern University College of Osteopathic Medicine, Davie, FL; Larkin Community Hospital, Miami, FL and Dr. Shahnaz Fatteh, Larkin Community Hospital, South Miami, FL
- 32 **Common Variable Immunodeficiency In The Very Old**
Dr. Katherine E. Gundling, MD, UCSF, San Francisco, CA
- 33 **Clinical Predictors Of Granulomatous Disease In Common Variable Immunodeficiency**
Dr. Anna R. Wolfson and Dr. Anna Kovalszki, Beth Israel Deaconess Medical Center, Boston, MA
- 34 **Jacobsen Syndrome With Combined Variable Immunodeficiency (CIVD)**
Dr. Arnaldo C. Porto Neto, MD, PhD, FAAAAI, Dr. Julio Mella Pierezan, Student, Dr. Joao Paulo Bordin, Student, Dr. Julia Noschang, Dr. Juliana Gotardo, Student, Dr. Juliana Moro, Student, Dr. Jorge Luigi Orso, Student, Dr. Jamile Pedroni, Student and Dr. Jessica Zandona, Student, School of Medicine UPF, PASSO FUNDO, Brazil
- 35 **Factors Predicting Long-Term Hypogammaglobulinemia In Lymphoma Survivors**
Dr. Huifang Lu, MD, PhD, UT MD Anderson Cancer Center, Houston, TX and Dr. Xerxes Pundole, UT MD Anderson Cancer Center
- 36 **Assessment Of Benefits Of Scig Valued By Healthcare Providers and Patients: Survey Results**
Ms. Annette R. Zampelli, NP¹, Ms. Carla M. Duff, CPNP MSN² and Dr. Ann Bullinger, PharmD¹, ¹CSL Behring, LLC, King of Prussia, PA, ²University of South Florida, Tampa, FL
- 37 **Pneumococcal Titer Levels: Comparison Of Patients Receiving Intravenous Immunoglobulin Vs. Subcutaneous Immunoglobulin**
Dr. Pamela Abghari, MD^{1,2}, Dr. Elizabeth A. Secord, MD, FAAAAI^{1,2} and Dr. Pavadee Poowuttikul, MD^{1,3}, ¹Children's Hospital of Michigan Department of Allergy Immunology, Detroit, MI, ²Wayne State University, Detroit, MI, ³Pediatrics- Allergy/Immunology Division, Wayne State University School of Medicine, Detroit, MI
- 38 **Hypogammaglobulinemia, Multiple Sclerosis, and Treatment With Intravenous Gammaglobulin**
Dr. Tiffany Dy, MD, Montefiore Medical Center at Albert Einstein College of Medicine, Bronx, NY and Dr. Arye

Rubinstein, MD, FAAAAI, Albert Einstein College of Medicine, Bronx, NY

- 39 **Selective IgM Deficiency Presenting As Cryptogenic Organizing Pneumonia**
Dr. Cory A. Lundberg, DO¹, Dr. Taylor A. Banks, MD¹, Dr. Cecilia Mikita, MD, MPH FAAAAI² and Dr. Jeffrey Mikita, MD¹, ¹Walter Reed National Military Medical Center, Bethesda, MD, ²Walter Reed Army Medical Center, Bethesda, MD
- 42 **High Prevalence Of Bronchiolitis In Children With Primary Immunodeficiencies**
Dr. Celia Pinto Fernandez¹, Dr. María Dolores Gurbindo Gutiérrez¹, Dr. Jose Manuel Zubeldia Ortuno, MD, PhD² and Dr. María Elena Seoane Reula¹, ¹Gregorio Marañón University Hospital, Madrid, Spain, ²Hospital Gregorio Marañon, Madrid, Spain
- 43 **Three Cases Of Good's Syndrome**
Dr. Whitney M. Rassbach, MD, Mount Sinai School of Medicine, New York, NY and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI, Mt. Sinai Medical Center, New York, NY
- 44 **Immunological Analysis Of Primary Selective IgM Deficiency In Adults**
Ankmalika Louis, MD, UNIVERSITY OF CALIFORNIA, IRVINE, CA, Sudhanshu Agrawal, MS, University of California, Irvine and Sudhir Gupta, MD, UNIVERSITY OF CALIFORNIA, IRVINE
- 45 **A Rare Case Of Helicobacter Cellulitis In a Patient With X-Linked Agammaglobulinemia**
Dr. Nina Lakhani, MD¹, Dr. Linda R. Taggart², Dr. Henry Jakubovic³, Dr. Stephen D. Betschel, MD¹ and Dr. Zafir Hussain⁴, ¹University of Toronto, Division of Clinical Immunology and Allergy, Toronto, ON, Canada, ²University of Toronto, Division of Infectious Diseases, Toronto, ³University of Toronto, Division of Laboratory Medicine and Pathology, Toronto, ON, Canada, ⁴University of Toronto, Division of Microbiology, Toronto, ON, Canada
- 46 **Neuropathy In Patients With Underlying Immunodeficiency Syndrome**
Dr. Robyn Kreiner, MD and Dr. Arye Rubinstein, MD, FAAAAI, Albert Einstein College of Medicine, Bronx, NY

Asthma Epidemiology, Risk Factors, and Public Health I

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 47 **Allergic Sensitization and Environmental Exposures In Amish and Hutterite Children**
Dr. Mark Holbreich, MD, FAAAAI¹, Ms. Michelle Stein, MS², Ms. Rebecca Anderson, MS³, Dr. Nervana Metwali, PhD⁴, Dr. Peter S. Thorne, PhD⁴, Dr. Donata Vercelli, MD⁵, Dr. Erika Von Mutius, MD, MSc⁶ and Dr. Carole Ober, PhD³, ¹Allergy and Asthma Consultants, Indianapolis, IN, ²The University of Chicago, Chicago, IL, ³University of Chicago, Chicago, IL, ⁴University of Iowa, Iowa City, IA, ⁵The University of Arizona, Tucson, AZ, ⁶University Children's Hospital, Munich, Germany
- 48 **Association Between Asthma-Related Emergency Department Visits, Tree Pollen, Pollution and Humidity In The Bronx, 2001 - 2008**
Dr. Jennifer Toh, MD¹, Dr. Mili Shum, MD^{2,3}, Dr. Gabriele De Vos, MD⁴, Tulsi Desai⁴, Priyank Patel⁴, Dr. Sunit Jariwala, MD¹ and Dr. David L. Rosenstreich, MD, FAAAAI⁵, ¹Albert Einstein/Montefiore Medical Center, New York, NY, ²Montefiore Medical Center, Bronx, NY, ³Weill Cornell Medical College, New York,

- 49 NY, ⁴Albert Einstein College of Medicine, Bronx, NY, ⁵Albert Einstein/Montefiore Medical Center, Bronx, NY
Association Of Wheezing Illness With Respiratory Viruses In Hospitalized Jordanian Children
Olajumoke Fadugba, MD¹, Eva Kathryn Miller, MD², Najwa Khuri-Bulos, MD, FIDSA, CIC³, Samir Faouri, MD³, Asem Shehabi, PhD⁴, Christopher Fannesbeck, PhD¹, Li Wang, MS¹, John V. Williams, MD¹ and Natasha Halasa, MD, MPH¹, ¹Vanderbilt University Medical Center, Nashville, TN, ²Pediatric Allergy, Immunology, and Pulmonary Medicine, Vanderbilt University Medical Center, Nashville, TN, ³Jordan University Hospital, Jordan, ⁴University of Jordan, Jordan
- 50 **The Effect Of Obesity On Asthma Control As Measured By The Asthma Control Test**
Dr. Aerik A. Williams, MD, MPH¹, Dr. Mark S. Dykewicz, MD, FAAAAI² and Dr. Jason W. Caldwell, DO, FAAAAI¹, ¹Wake Forest University Baptist Medical Center, Winston Salem, NC, ²Saint Louis University School of Medicine, St. Louis, MO
- 51 **Perception Of Asthma Control Is Not Consistent With Reported Symptom Frequency In Urban Adolescents**
Emily C. Ledford, Johns Hopkins School of Medicine, Ms. Jean Curtin-Brosnan, MA, Johns Hopkins University, Baltimore, MD, Dr. Meredith C. McCormack, MD, The Johns Hopkins Pulmonary, Baltimore, MD and Dr. Elizabeth Matsui, MD, The Johns Hopkins University School of Medicine, Baltimore, MD
- 52 **Urban Residence Modifies The Association Between Atopy and Wheeze**
Dr. Pablo F. Endara¹, Dr. Phil J. Cooper^{2,3}, Thomas A.E. Plattsmills, MD, PhD, FAAAAI⁴, Lisa J. Workman, BA⁴, Maritza Vaca⁵, Dr. Martha Chico⁶, Mauricio L. Barreto, PhD⁷ and Prof. Laura Rodrigues⁸, ¹Universidad San Francisco de Quito, ²St. George's University, London, United Kingdom, ³Pontificia Universidad Catolica del Ecuador, ⁴Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, ⁵Laboratorio de FEPIS, Quindí, Esmeraldas Province, Ecuador, ⁶Laboratorio de Investigacion FEPIS, ⁷Instituto de Saúde Coletiva, UFBa, Salvador, BA, Brazil, ⁸London School of Hygiene and Tropical Medicine
- 53 **Allergic Inflammation and Health Outcomes Of Comorbid Asthma and Obesity In Inner-City Black and Hispanic Schoolchildren**
Dr. Perdita Permaul, MD^{1,2}, Dr. William J. Sheehan, MD^{2,3}, Mr. Carter Petty, MA³, Dr. Sachin N. Baxi, MD^{2,3}, Dr. Jonathan M. Gaffin, MD, MMSc^{2,3}, Dr. Lianne S. Kopel, MD^{2,3}, Dr. Watcharoot Kanichongkittiphon, MD, PhD³, Mrs. Chunxia Fu, MS⁴, Dr. Diane R. Gold, MD, MPH^{2,4} and Dr. Wanda Phipatanakul, MD, MS, FAAAAI^{2,3}, ¹Division of Pediatric Allergy/Immunology, Massachusetts General Hospital, Boston, MA, ²Harvard Medical School, Boston, MA, ³Boston Children's Hospital, Boston, MA, ⁴Channing Laboratory, Brigham and Women's Hospital, Boston, MA
- 54 **Targeted Education Of Adult Patients From An Inner City Population At Risk For Non-Adherence With Asthma Therapy**
Dr. Edan Sarid, MD, SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY and Dr. Rauno Joks, MD, Center for Allergy and Asthma Research at SUNY Downstate, Brooklyn, NY
- 55 **Maternal Allergy and Asthma and Their Association With Breastfeeding In Inner-City Mothers In a Birth Cohort Study (URECA)**
Katy F. Jaffee, MS¹, Dr. Cynthia Visness, PhD¹, Dr. George T. O'Connor, MD², Dr. Gordon R. Bloomberg, MD, FAAAAI³, Dr. Meyer Kattan, MD⁴, Robert A. Wood, MD, FAAAAI⁵, Dr. Peter J. Gergen, MD, MPH⁶ and Dr. James E. Gern, MD, FAAAAI⁷, ¹Rho, Inc., Chapel Hill, NC, ²Boston University School of Medicine, Boston, MA, ³Campus Box 8116, St. Louis Children's Hospital, Saint Louis, MO, ⁴NewYork-Presbyterian/Columbia, New York, NY, ⁵Johns Hopkins University Medical Center, Baltimore, MD, ⁶AAIB\DAIT\NIH, Bethesda, MD, ⁷University of Wisconsin School of Medicine and Public Health, Madison, WI
- 56 **Genetic Determinants Of Allergic Sensitization To Cockroach Allergen In Children**
Priya Tripathi, PhD¹, Xiumei Hong, PhD², Deanna Caruso, MS², Peisong Gao, MD, PhD¹ and Dr. Xiaobin Wang, MD, MPH ScD², ¹Division of Allergy & Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, ²Johns Hopkins University School of Public Health, Baltimore, MD
- 57 **Exhaled Nitric Oxide (FeNO) and Dust Mite (Der p1) Exposure Are Significantly Higher In Asthmatic Children Living In Humid Environments**
Dr. Miguel J. Lanz, MD, FAAAAI¹, Benjamin Efaw², Mirna Gonzalez¹ and Dr. Ronald J. Harbeck, PhD², ¹AAADRS Clinical Research Center, Coral Gables, FL, ²National Jewish Health, Denver, CO

Aerobiology I

2205

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 58 **Extraordinary Alternaria Mold Counts During a Severe Drought**
Mr. James J. Anderson, MLT, Environmental Allergy/Oshtech, London, ON, Canada and Dr. Linda B. Ford, MD, FAAAAI, The Asthma & Allergy Center, P.C., Bellevue, NE
- 59 **Culture Of The House Dust Mite Euroglyphus Maynei To Produce Allergen Material**
Dr. Larry G. Arlian, PhD FAAAAI, DiAnn L. Vyszanski-Moher, MS, Dr. Marjorie S. Morgan, PhD and Jacqueline Neal, MS, Wright State University, Dayton, OH
- 60 **Emergency Department Visits For Asthma As a Function Of Pollen and Mold Spore Counts**
Dr. Stacey Galowitz, DO^{1,2}, Dr. Christopher Chang, MD, PhD, FAAAAI¹ and Mr. Michael R. McDowell³, ¹Alfred I duPont Hospital for Children, Wilmington, DE, ²Thomas Jefferson University Hospital, Philadelphia, PA, ³Air Quality Management, New Castle, DE
- 61 **Daily Ragweed Pollen Forecasting**
Estelle Levetin, PhD FAAAAI¹ and Lauren Howard, B.S.^{1,2}, ¹University of Tulsa, Tulsa, OK, ²University of Oklahoma, Oklahoma City, OK
- 62 **Conditions Affect Dust Mite Infestation Of Flour Samples In Tropical Area**
Dr. Theerapan Songnuy, Allergy and Immunology Division, Chulalongkorn University Medical School, Bangkok, Thailand
- 63 **Airborne Alternaria Spore Levels In Kansas City Is Associated With Climatic Changes**
Dr. David A. Jara, MD¹, Dr. Charles Barnes, PhD², Dr. Jay M. Portnoy, MD, FAAAAI² and Dr. Minati Dhar, Ph.D³, ¹Childrens Mercy Hospital, ²Children's Mercy Hospital, Kansas City, MO, ³Children's Mercy Hospital & Clinics, Kansas City, MO
- 64 **Influence Of Meteorological Conditions On Mountain Cedar Pollen**
Landon Bunderson, PhD^{1,2}, Peter Van De Water, PhD³, Jeffrey Luvall, PhD⁴ and Estelle Levetin, PhD FAAAAI², ¹Iowa State University, Ames, IA, ²University of Tulsa, Tulsa, OK, ³California State University, Fresno, Fresno, CA, ⁴NASA Marshall Space Flight Center, Huntsville, AL
- 65 **A Post-Hoc Qualitative Analysis Of Real Time Heads-Up Pollen Counting Versus Traditional Microscopic Counting In The Environmental Exposure Unit (EEU)**
Ms. Lisa Steacy, BSc¹, Mr. Terry Walker, BA¹, Mr. Barnaby Hobsbawn¹, Mrs. Jenny Thiele, MSc² and Dr. Anne K. Ellis, MD, MSc FAAAAI^{1,3}, ¹Allergy Research Unit, Kingston General Hospital,

Kingston, ON, Canada, ²Queens University, Kingston, ON, Canada, ³Departments of Medicine and Biomedical & Molecular Science, Queen's University, Kingston, ON, Canada

66 Real-Time PCR Quantification Of Virginia Live Oak (*Quercus virginiana*) Pollen

Dr. Mark C. Glaum, MD, PhD, FAAAAI^{1,2}, Ms. Eileen Rifkin¹, Dr. Jia-Wang Wang, PhD¹, Dr. Richard F. Lockey, MD^{1,2} and Dr. Dennis K. Ledford, MD, FAAAAI^{1,2}, ¹Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida, Morsani College of Medicine, Tampa, FL, ²James A. Haley Veterans' Affairs Hospital, Tampa, FL

67 Unusual Timing For The Ragweed Ambrosia Pollen Peak In Vinnitsa, Ukraine

Ms. Viktoriya Rodinkova¹, Ms. I Motruk¹, Ms. L. Slobodianiuk¹, Ms. O. Mazur¹, Ms. O. Palamarchuk¹ and Prof. Lawrence M. Dubuske, MD, FAAAAI², ¹Vinnitsa National Pirogov Memorial Medical University, Ukraine, ²George Washington University School of Medicine, DC

Insect Hypersensitivity/Anaphylaxis

2206

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

68 Safety and Efficacy Of a 12-Week Maintenance Interval In Patients Treated With Imported Fire Ant Immunotherapy

Dr. Karla E. Adams, MD¹, Dr. Shayne Stokes, MD², Dr. Kevin M. White, MD¹, Dr. Kirk H. Waibel, MD, FAAAAI³ and Dr. Michael S. Tankersley, MD, FAAAAI⁴, ¹Wilford Hall Ambulatory Surgical Center, Joint Base San Antonio, Lackland AFB, TX, ²Luke AFB, Glendale, AZ, ³Landstuhl RMC, ⁴Wilford Hall Ambulatory Surgical Center, Joint Base San Antonio, San Antonio, TX

69 Epidemiology and Clinical Predictors Of Biphasic Reactions In Children With Anaphylaxis Waleed

D. Alqurashi¹, Ian Stiell², Kevin Chan³, Gina Neto¹ and George Wells⁴, ¹Children's Hospital of Eastern Ontario, Ottawa, ON, Canada, ²Ottawa Hospital Research Institute, Ottawa, ON, Canada, ³Hospital for Sick Children, Toronto, ON, Canada, ⁴University of Ottawa Heart Institute, Ottawa, ON, Canada

70 Age As a Risk Factor For Fatal Food-Induced Anaphylaxis: An Analysis Of UK and Australian Fatal Food Anaphylaxis Data

Dr. Paul J. Turner, FRACP PhD^{1,2}, Dr. Vibha Sharma, FRCPCH³, Prof. Mimi L. K. Tang, MD, PhD, FAAAAI⁴, Ms. M. Hazel Gowland, BA⁵, Dr. Nigel Harper, MBChB FRCA³, Dr. Tomaz Garcez, MRCP FRCPath³, Dr. Richard Pumphrey, FRCPath³ and Dr. Robert J. Boyle, MBChB PhD¹, ¹Imperial College London, United Kingdom, ²University of Sydney, Australia, ³Central Manchester University Hospitals NHS Foundation Trust, United Kingdom, ⁴The University of Melbourne, Melbourne, Australia, ⁵Allergy Action, United Kingdom

71 Dying From Allergies: A Profile Of Fatal Anaphylaxis In The United States: 1999-2010

Dr. Elina Jerschow, MD, M.Sc.¹, Dr. Robert Yao-Wen Lin, FAAAAI^{2,3}, Ms. Moira Scaperotti, Medical Student⁴ and Dr. Aileen McGinn, PhD⁴, ¹Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY, ²New York Downtown Hospital, New York, NY, ³New York Medical College, Valhalla, NY, ⁴Albert Einstein College of Medicine, Bronx, NY

72 Prospective Study To Determine Risk Factors and Severity Of Food-Induced Allergic Reactions In Children

Dr. Angela Tsuang, MD¹, Mr. Nikhil Menon, Medical student¹, Ms. Natasha Setia, Medical student¹, Mr. Larry Geyman, Medical student¹, Ms. Christina Cherny² and Dr. Anna H. Nowak-Wegryzn, MD, FAAAAI³, ¹Mount Sinai School of Medicine, New York, NY,

²Cornell University, ³Icahn School of Medicine at Mount Sinai, New York, NY

73 Factors Associated With Increased Risk Of Anaphylaxis

Aylin Altan Riedel, PhD¹, Erin Buysman, MS¹, Dr. Ray A. Wolf, PharmD², Paul Cavanaugh, Jr, PhD³, Jerald Seare, MD¹ and Tim Bancroft, PhD¹, ¹OPTUM, Prairie Eden, MN, ²Mylan Specialty L.P., New Hope, PA, ³Mylan Specialty, Basking Ridge, NJ

74 A Face-To-Face Educational Program By Allergists Can Improve Knowledge, Attitudes, and Behaviors (KAB) Of Internal Medicine, Pediatric, and Emergency Medicine Residents

Dr. Artemio M. Jongco III, MD, PhD MPH, Feinstein Institute for Medical Research, Manhasset, NY; Cohen Children's Medical Center of New York, Great Neck, NY, Dr. Sheila Bina, MD, Stony Brook University Hospital, Stony Brook, NY, Dr. Robert Sporter, MD, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Dr. Marie A. Cavuoto Petrizzo, MD, FAAAAI, ProHealth Care Associates LLP, Lake Success, NY, Dr. Blanka M. Kaplan, MD, FAAAAI, Department of Pediatrics, Division of Allergy & Immunology, Hofstra-North Shore-LIJ School of Medicine, Great Neck, NY and Dr. Susan Schuval, MD, FAAAAI, Stony Brook U Medical Center, Stony Brook University Medical Center, Stony Brook, NY

75 Anaphylaxis Management Before and After Implementation Of Guidelines In The Pediatric Emergency Department

Dr. Shilpa Desai¹, Dr. Rhett Lieberman¹, Stephen Wisniewski, PhD² and Dr. Todd David Green, MD, FAAAAI¹, ¹Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA, ²University of Pittsburgh

76 Managing Anaphylaxis In Adults: A Review Of All Cases Presenting In A Single Year At An Emergency Department

Dr. Yarden Yanishevsky, MD¹, Dr. Ann Elaine Clarke, MD, MSc^{2,3}, Dr. Sebastian La Vieille, MD⁴, Dr. Scott Delaney, MD⁵, Dr. Reza Ali-zadehfar, MD¹, Mr. Christopher Mill, BSc³, Dr. Lawrence Joseph, PhD³, Dr. Judy Morris, MD, MSc⁶, Dr. Yuka Asai, MD^{3,7} and Dr. Moshe Ben-Shoshan, MD, MSc¹, ¹Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, ²Division of Allergy and Clinical Immunology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ³Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁴Food Directorate, Health Canada, Ottawa, ON, Canada, ⁵Department of Emergency Medicine, McGill University Health Center, Montreal, QC, Canada, ⁶Department of Emergency Medicine, Hôpital du Sacré-Coeur, Montreal, QC, Canada, ⁷Division of Dermatology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada

77 Anaphylaxis Cases Presenting To Primary Care Paramedics In Quebec

Ms. Nofar Kimchi¹, Dr. Ann Elaine Clarke, MD, MSc^{2,3}, Jocelyn Moisan⁴, Colette Lachaine⁵, Dr. Sebastian La Vieille, MD⁶, Dr. Yuka Asai, MD^{3,7}, Dr. Lawrence Joseph, PhD^{3,8}, Mr. Christopher Mill, BSc³ and Dr. Moshe Ben-Shoshan, MD, MSc^{9,10}, ¹Technion American Medical Students Program, Israel, ²McGill University Health Centre, Montreal, Canada, ³Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁴Services préhospitaliers d'urgence de l'Outaouais, Quebec, Canada, QC, Canada, ⁵Direction adjointe de services préhospitaliers d'urgence, MSSS, Quebec, Canada, QC, Canada, ⁶Food Directorate, Health Canada, Ottawa, ON, Canada, ⁷Division of Dermatology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁸Departments of Epidemiology and Biostatistics, McGill University, Montreal, Canada, ⁹Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, ¹⁰Montreal Children's Hospital, Montreal, Canada

- 78 Anaphylaxis Management In A Pediatric Emergency Department**
Natasha Sidhu, MD^{1,2}, Stacie M. Jones, MD^{3,4}, Elizabeth Storm, MD^{1,2}, Maria Melguizo castro^{1,5}, Todd Nick^{1,2} and Tonya Thompson, MD^{1,2}, ¹University of Arkansas for Medical Sciences, Little Rock, AR, ²Arkansas Children's Hospital, ³University of Arkansas for Medical Sciences and Arkansas Children's Hospital, Little Rock, AR, ⁴Arkansas Children's Hospital Research Institute, Little Rock, AR, ⁵Arkansas Children's Hospital, Little Rock, AR
- 79 Characteristics Of Anaphylaxis In a Pediatric Emergency Unit**
Beatriz Ameiro, M.D.¹, Blanca Noguera, M.D.¹, Gabriela Zambrano, M.D.¹, Cristina Morales, M.D.¹, Miguel Guzmán, M.D.¹, María L. Baeza, MD, PhD² and Alberto Alvarez-Perea, MD³, ¹Hospital General Universitario Gregorio Marañón, Allergy Department, Madrid, Spain, ²Hospital General Universitario Gregorio Marañón, Allergy Department, Madrid, Spain, ³Hospital Materno Infantil Gregorio Marañón, Pediatric Allergy Department, Madrid, Spain
- 80 Characteristics Of Anaphylaxis and Angioedema In Pediatric Emergency Center**
Dr. Jung Hyun Kwon, Departments of Pediatrics Ewha Womans University School of Medicine, Korea, Seoul, South Korea and Dr. Hyun Sup Keum, Departments of Pediatrics Ewha Womans University School of Medicine, Korea, South Korea
- 81 Anaphylaxis: Epidemiology and Treatment In The Emergency Department**
Dr. Judy Morris, MD, MSc^{1,2}, Dr. Julie Lapointe¹, Dr. Sebastien La Vieille, MD³, Dr. Harley Eisman, MD^{4,5}, Dr. Reza Alizadehfar, MD⁶, Ms. Emma Perkins, BSc⁷, Mr. Christopher Mill, BSc⁷, Dr. Lawrence Joseph, PhD^{5,7}, Dr. Ann Elaine Clarke, MD, MSc^{7,8} and Dr. Moshe Ben-Shoshan, MD, MSc^{5,6}, ¹Department of Emergency Medicine, Hôpital du Sacré-Cœur, Montreal, QC, Canada, ²University of Montreal, Montreal, QC, Canada, ³Food Directorate, Health Canada, Ottawa, ON, Canada, ⁴Montreal Children's Hospital, Montreal, QC, Canada, ⁵McGill University, Montreal, QC, Canada, ⁶Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, ⁷Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁸Division of Allergy and Clinical Immunology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada
- 82 Anaphylaxis In An Upstate New York Emergency Department: Triggers and Treatments**
Dr. Britta Sundquist, Dr. Jaison Jose, Dr. John Paige, Keith Sweeney, Michael Lavelle, Dr. Daniel Pauze, Dr. Denis Pauze and Dr. Kirsi M. Jarvinen, Albany Medical College, Albany, NY
- 83 The Clinical Characteristics Of Children and Adolescents With Anaphylaxis Who Visited 139 ERs In Korea In 2012**
Dr. Mi-Hee Lee, Department of Pediatrics, Seoul Women's Hospital, Incheon, South Korea, Dr. Eun-Hee Chung, Department of Pediatrics, National Medical Center, Seoul, South Korea and Dr. Young-Shil Lim, Division of Chronic Disease Surveillance, Korea Centers for Disease Control and Prevention, Osong, South Korea
- 84 Pattern Of Epinephrine Use and Referral Of Emergency Department Personnel In A Korean Hospital**
Dr. Jae Won Jeong, Inje University Ilsan PAIK Hospital, Goyang-si, South Korea, Dr. Chansun PARK, Haeunda PAIK Hospital, South Korea and Mi Young KIM, Busan PAIK Hospital, South Korea
- 85 Characterisation Of Anaphylaxis In a Large UK City With An Ethnically Diverse Population**
Richard J. Buka¹, Richard J. Crossman², Cathryn Derbridge¹, Aarnoud P. Huissoon¹, Scott Hackett¹, Matthew W. Cooke^{1,2}, Susan Dorrian¹ and Mamidipudi T. Krishna¹, ¹Birmingham Heartlands Hospital, Birmingham, United Kingdom, ²University of Warwick, United Kingdom
- 86 Ten Years' Experience Of Anaphylaxis In a Single University Hospital In Korea**
Dr. Cheol-Woo Kim, Inha University Hospital, Incheon, South Korea and Jae Hwa Cho, Inha University Hospital, South Korea
- 87 Incidence Of Anaphylaxis In a Vilnius Lithuania Hospital Applying WAO Criteria**
Prof. Audra Blaziene¹, Dr. Neringa Buterleviciute¹, Viktorija Paltarackiene² and Prof. Lawrence M. DuBuske, MD, FAAAAI³, ¹Vilnius University Medical School, Lithuania, ²Vilnius university Medical School, Lithuania, ³George Washington University School of Medicine, Washington, DC
- 88 Factors Associated With a Lower Probability Of Refilling An Epipen Auto-Injector In a Timely Manner**
Erin Buysman, MS¹, Dr. Ray A. Wolf, PharmD², Paul Cavanaugh, Jr, PhD³, Aylin Altan Riedel, PhD¹ and Tim Bancroft, PhD¹, ¹OPTUM, Prairie Eden, MN, ²Mylan Specialty L.P., New Hope, PA, ³Mylan Specialty, Basking Ridge, NJ
- 89 Food-Induced Anaphylaxis: Recognition and Response In Ohio Schools**
Dr. Erica Glancy, MD¹, Dr. Peter J. Mustillo, MD, FAAAAI², Dr. Christine B. Cho, MD³, Dr. Rekha Raveendran, MD⁴ and Dr. Daniel Scherzer, MD², ¹Cleveland Clinic, Cleveland, OH, ²Nationwide Children's Hospital, Columbus, OH, ³National Jewish Health, Denver, CO, ⁴Asthma and Allergy Center LLC, Washington, DC
- 90 Availability and Utilization Of Epinephrine In Utah Schools For The Management Of Anaphylaxis**
Benjamin L. Wright, MD¹, Michelle Fogg, BS², Catherine Sparks, MSN, RN, NCSN³, Brian P. Vickery, MD, FAAAAI⁴, Dr. Joseph L. Roberts, MD, PhD⁵, Yamini Virkud, MD, MA¹ and Mandy Allison, MD, MSPH, M.Ed.⁶, ¹Duke University, Durham, NC, ²Utah Food Allergy Network, Salt Lake City, UT, ³Utah Department of Health, Salt Lake City, UT, ⁴University of North Carolina, Chapel Hill, NC, ⁵Duke University Medical Center, Durham, NC, ⁶University of Colorado Denver, Denver, CO
- 91 Induction Of Remission Of Frequent Idiopathic Anaphylaxis With Rituximab**
Dr. Arturo Borzutzky, MD, Division of Pediatrics, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile, Dr. Pamela S. Morales, MD, Pediatric Rheumatology, Allergy and Immunology Unit, Division of Pediatrics, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile, Dr. Veronica Mezzano, MD, Department of Rheumatology and Clinical Immunology, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile, Ms. Sofia Nussbaum, Universidad de San Sebastian, Santiago, Chile and A. Wesley Burks, MD, FAAAAI, University of North Carolina, Chapel Hill, NC
- 92 Evaluation Of a Diagnostic Protocol For Perioperative Anaphylaxis Due To Isosulfan Blue Dye Allergy**
Ms. Mary Grace Baker, University of Virginia School of Medicine, Charlottesville, VA, Julia A. Cronin, MD, University of Virginia, Division of Asthma, Allergy and Immunology, Charlottesville, VA, Dr. Larry Borish, MD, FAAAAI, Asthma and Allergic Diseases Center, Carter Center for Immunology Research, University of Virginia, Charlottesville, VA and Dr. Monica G. Lawrence, MD, University of Virginia Department of Medicine, Division of Asthma, Allergy and Immunology, Charlottesville, VA
- 93 Acute Serum Tryptase Elevation In ALTE - An Atypical Manifestation Of Bullous Mastocytosis**
Dr. Alexander Alvarez, MD, Virginia Commonwealth University, Dr. Anne-Marie A. Irani, MD, FAAAAI, Virginia Commonwealth University Health Systems, Richmond, VA and Dr. Lawrence B. Schwartz, MD, PhD, FAAAAI, Virginia Commonwealth University, Richmond, VA
- 94 Methodology For Identifying Patients Presenting With Anaphylaxis Using Administrative Claims Data**
Jerald Seare, MD¹, Erin Buysman, MS¹, Dr. Ray A. Wolf, PharmD², Paul Cavanaugh, Jr, PhD³, Aylin Altan Riedel, PhD¹

- and Tim Bancroft, PhD¹, ¹OPTUM, Prairie Eden, MN, ²Mylan Specialty L.P., New Hope, PA, ³Mylan Specialty, Basking Ridge, NJ
- 95 Epicare (Epinephrine Pen Investigation: Compliance and Recommendations)**
Dr. Nisha S. Patel, MD, Thomas Jefferson University, Philadelphia, PA, Dr. Christopher Chang, MD, PhD, FAAAAI, Alfred I duPont Hospital for Children, Wilmington, DE and Dr. Gang Ye, PhD, Nemours, Orlando, FL
- 96 Confusion With Substituting Epinephrine Auto-Injectors: A Focus On Medication Counseling, Dispensing, and Patient Education**
Sonia Dhanjal, PharmD and Stacie Lampkin, PharmD, BCACP, AE-C, D'Youville College School of Pharmacy, Buffalo, NY
- 97 Omalizumab For a Case Of Monoclonal Mast Cell Activation Syndrome With Recurrent Anaphylaxis**
Dr. Amanda Jagdis, University of Toronto, Faculty of Medicine, Toronto, ON, Canada and Dr. Peter Vadas, MD, PhD, St. Michael's Hospital, Toronto, ON, Canada
- 98 Chlorhexidine Impregnated Central Venous Lines: A Potentially Avoidable Cause Of Severe Perioperative Anaphylaxis**
Dr. Aisha Ahmed, MD and Dr. Katherine E. Gundling, MD, UCSF, San Francisco, CA
- 99 Food Dependent Exercise Induced Anaphylaxis Treatment With Specific Oral Tolerance Induction Using IFN-Gamma**
Dr. Jae Ho Lee, MD, PhD, Department of Pediatrics, Chungnam National University, Taejeon, South Korea, Dr. Sun Young You, MD, Department of Pediatrics, Taejeon, South Korea and Dr. Hye Young Han, MD, Department of Pediatrics, School of Medicine, Chungnam National University, Taejeon, South Korea
- 100 Food Associated Exercise Induced Anaphylaxis Associated With Late Phase Skin Test Reactivity To Shrimp**
Dr. Marisol Nardi, New York Downtown Hospital, New York and Dr. Robert Yao-Wen Lin, FAAAAI, New York Downtown Hospital, New York, NY; Weill Cornell Medical College, New York, NY
- 101 Idiopathic Capillary Leak Syndrome**
Dr. Carl B. Lauter, MD, FAAAAI, William Beaumont Hospital
- 102 Comprehensive Metabolomic Analysis Identifies Uric Acid As a Critical Mediator Of Peanut Sensitization**
Mr. Joshua Kong¹, Dr. Kenneth Chalcraft, PhD², Dr. Rodrigo Jimenez-Saiz, PhD¹, Mrs. Tina Walker-Fattouh², Dr. Susanna Goncharova, MD, PhD², Dr. Brian McCarry, PhD² and Dr. Manel Jordana, MD, PhD¹, ¹McMaster Immunology Research Centre (MIRC), McMaster University, Hamilton, ON, Canada, ²McMaster University, Hamilton, ON, Canada
- 103 Pharmacokinetics Of Berberine, a Bioactive Compound In Butanol Purified Food Allergy Herbal Formula-2**
Dr. Nan Yang, PhD, MS¹, Dr. Ying Song, MD¹, Dr. Changda Liu, PhD¹, Sool Yeon Cho, PhD² and Dr. Xiu-Min Li, MD¹, ¹Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ²Hematology, Icahn School of Medicine at Mount Sinai, New York City, NY
- 104 Anaphylaxis After Bitten By Domestic Hamster: A Case Report**
Dr. Leila Borges, MD¹, Dr. Danielle Bichueti Silva, MD², Dr. Tessa Rachel Tranquilini Gonçalves, MD³, Dr. Rafael Rota, MD³, Camila Gonzaga da Silva⁴, Dr. Danieli Hirari, MD⁴, Dr. Marcia Mallozi, MD⁵ and Prof. Dirceu Sole, MD, PhD³, ¹UNIFESP, Brazil, ²Universidade Federal de São Paulo, São Paulo, Brazil, ³Federal University of Sao Paulo, Sao Paulo, Brazil, ⁴Federal University of São Paulo, São Paulo, Brazil, ⁵Federal University of São Paulo, Brazil
- 105 Gene Expression Profiling Of Food-Induced Anaphylaxis Associated With Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)**
Dr. Rosa M. Munoz-Cano, MD, PhD^{1,2}, Dr. Joan Bartra, MD, PhD², Dr. Jorg Scheffel, PhD¹, Dr. Mariona Pascal, PhD³, Dr. Barbara Dema, PhD¹, Dr. Antonio Valero, MD, PhD², Dr. Ana Olivera, PhD¹, Prof. Cesar Picado, MD, PhD² and Dr. Juan Rivera, PhD¹, ¹National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), National Institutes of Health, Bethesda, MD, ²Unitat d'Al·lergia. Servei de Neumologia i Al·lergia Respiratoria. Hospital Clinic. Barcelona. Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona, Spain, ³Servei d'Immunologia. Centre de Diagnòstic Biomèdic. Hospital Clinic., Barcelona, Spain
- 106 Recurrence Rates Of Anaphylaxis In Children**
Dr. Andrew O'Keefe, MD^{1,2}, Dr. Yuka Asai, MD^{3,4}, Mr. Christopher Mill, BSc³, Dr. Harley Eisman, MD⁵, Dr. Sebastian La Vieille, MD⁶, Dr. Reza Alizadehfar, MD^{5,7}, Ms. Emma Perkins, BSc³, Dr. Lawrence Joseph, PhD³, Dr. Ann Elaine Clarke, MD, MSc^{3,8} and Dr. Moshe Ben-Shoshan, MD, MSc^{5,9}, ¹McGill University, Montreal, Canada, QC, Canada, ²Division of Pediatric Allergy and Clinical Immunology, Montreal Children's Hospital, Canada, ³Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁴Division of Dermatology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁵McGill University, Montreal, QC, Canada, ⁶Food Directorate, Health Canada, Ottawa, ON, Canada, ⁷Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, ⁸Montreal General Hospital, ⁹Montreal Children's Hospital, Montreal, Canada
- 107 Sensitization To Recombinant Allergens Of Hevea Brasiliensis In Patients With Latex Anaphylaxis**
Dr. J.M. Escobar Montalvo, MD¹, Ms. A. Gómez Infante, MD¹, Dr. Silvia Martínez Blanco, MD² and Dr. R. Vives Conesa, MD¹, ¹Hospital Universitario 12 de Octubre, Madrid, Spain, ²Hospital Universitario 12 de Octubre, Spain
- 108 Patients Monosensitized To Hev b 8 Performs Surgery Without Avoidance The Latex and Without Complications**
Dr. Adriano Sa, MD, Federal University of São Paulo, São Paulo, Brazil, Dr. Leila Borges, MD, UNIFESP, Brazil, Dr. Nathalia Barroso, Federal University of Sao Paulo, Dr. Luis Felipe C. Ensina, MD, Universidade Federal de São Paulo, São Paulo, Brazil, Ines Nunes, Federal University of São Paulo and Prof. Dirceu Sole, MD, PhD, Federal University of Sao Paulo, Sao Paulo, Brazil

HAE and Angioedema

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 109 Home Treatment With Conestat Alfa In Attacks Of Hereditary Angioedema Due To C1-Inhibitor Deficiency**
Henriette Farkas, MD, PhD DSc¹, Dr. Erika Szabo¹, Dr. Dorottya Csuka, PhD², Dr. Kinga, Viktória Kohalmi¹, Dr. Zsuzsanna Zotter¹ and Dr. Lilian Varga, PhD¹, ¹Semmelweis University, Budapest, Hungary, ²Hungarian HAE Center, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary
- 110 Comparison Of Plasma Kallikrein Inhibition By The Monoclonal Antibody Inhibitor DX-2930 To Endogenous C1-INH**
Daniel Sexton, Jon Kenniston, Ryan Faucette, Andrew Nixon, Christopher TenHoor, Yung H. Chyung and Burt Adelman, Dyax Corp.
- 111 The Prophylactic Use Of C1 Esterase Inhibitor (Berinert®) In HAE Patients Undergoing Invasive Procedures**
Rachel Harrison, BSc¹, Stephanie Santucci, RN¹, Genevieve Gavigan, MAsc, MD² and William H. Yang, MD^{1,2}, ¹Allergy and Asthma Research Corp., Ottawa, ON, Canada, ²University of Ottawa Medical School, Ottawa, ON, Canada
- 112 Self-Administration Of a Novel Subcutaneous Bradykinin B2 Receptor Antagonist, Icatibant (Firazyr®), As An Effective Treatment Option In Patients With Hereditary Angioedema (HAE)**
Stephanie Santucci, RN¹, Hoang Pham, MD 2016, BSc, BA², Rachel Harrison, BSc¹ and William H. Yang, MD^{1,2}, ¹Allergy and

- Asthma Research Corp., Ottawa, ON, Canada, ²University of Ottawa Medical School, Ottawa, ON, Canada
- 113 Current Medical Management Of Hereditary Angioedema (HAE): Follow-Up To a Large Survey Of US Physicians**
Dr. Marc A. Riedl, MD, MS, University of California, San Diego, La Jolla, CA, Dr. Richard G. Gower, MD, FAAAAI, Marycliff Allergy Specialists, Spokane, WA and Dr. Aleena Banerji, MD, Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
- 114 HAE In a Southern Louisiana Kindred: Novel Gene Mutations**
Dr. Adrian Casillas, MD, FAAAAI, Baylor College of Medicine, Houston, TX
- 115 Hereditary Angioedema Without C1 Inhibitor Deficiency: Observation Of Patients Homozygous For FXII GENE Mutation**
Christiane Stieber¹, Camila Veronez², Nathalia Cagini², Elisabete Cordeiro³, Dr. Anete S. Grumach³, Rosemeire Constantino-Silva³, Joao Bosco Pesquero² and Sven Cichon⁴, ¹Life & Brain Center and Institute of Human Genetics, University of Bonn, Germany, ²Federal University of São Paulo, Brazil, ³Faculty of Medicine ABC, Brazil, ⁴Division of Medical Genetics, Department of Biomedicine, University of Basel, Switzerland
- 116 Hereditary Angioedema Without C1 Inhibitor Deficiency: Clinical Evaluation Of 67 Brazilian Patients**
Elisabete Cordeiro¹, Camila Veronez², Christiane Stieber³, Nathalia Cagini², Rosemeire Constantino-Silva¹, Rozana Gonçalves⁴, Gustavo Fusaro⁴, Neusa Wandalsen¹, Sven Cichon⁵, Joao Bosco Pesquero² and Dr. Anete S. Grumach¹, ¹Faculty of Medicine ABC, Brazil, ²Federal University of São Paulo, Brazil, ³Life & Brain Center and Institute of Human Genetics, University of Bonn, Germany, ⁴Federal University of Minas Gerais, Brazil, ⁵Division of Medical Genetics, Department of Biomedicine, University of Basel, Switzerland
- 117 Circulating Extracellular Micrnas In Hereditary Angioedema**
Peisong Gao, MD, PhD¹, Kenneth Witwer, PhD², Melissa McAlexander², Priya Tripathi, PhD¹, Tamara Johnson³ and Dr. Huamin Henry Li, MD, PhD, FAAAAI³, ¹Division of Allergy & Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, ²Johns Hopkins Institute for NanoBioTechnology, Baltimore, MD, ³Institute for Asthma and Allergy, Chevy Chase, MD
- 118 Hereditary Angioedema In The Pediatric Patient**
Dr. Gregory H. Bennett, DO, Penn State Children's Hospital, Hershey, PA and Dr. Timothy J. Craig, DO, FAAAAI, Penn State University College of Medicine, Hershey, PA
- 119 Clinical Features Of Pediatric Hereditary Angioedema**
Shelby N. Elenburg, MD¹, Amal H. Assa'ad, MD, FAAAAI², Dr. Jonathan A. Bernstein, MD, FAAAAI³ and Maya Nanda, MD², ¹University of Tennessee Health Science Center, Memphis, TN, ²Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ³Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH
- 120 A Case Series Of Seven Pediatric Patients Successfully Treated With Ecallantide and Icatibant For Hereditary Angioedema**
Heather Minto, MD^{1,2} and Kelly M. Maples, MD^{1,2}, ¹Eastern Virginia Medical School, Norfolk, VA, ²Children's Hospital of The King's Daughters, Norfolk, VA
- 121 IHAE-QoL: Specific Health-Related Quality Of Life (HRQoL) Questionnaire In Hereditary Angioedema Due To C1 Inhibitor Deficiency (HAE-C1INH)**
Dr. Nieves Prior, MD¹, Prof. Eduardo Remor², Elia Pérez-Fernández, MSc³, Dr. Carmen Gómez-Traseira, MD⁴, Dr. Magdalena Julia Caminoa, MD⁴, Francisco Gaya⁵, Prof. Werner Aberer, MD⁶, Dr. Olga Melcina Barrera, MD⁷, Dr. Stephen D. Betschel, MD⁸, Prof. Laurence Bouillet, MD, PhD⁹, Prof. Anette Bygum, MD¹⁰, Henriette Farkas, MD, PhD DSc¹¹, Dr. Anete S. Grumach¹², Dr. Vesna Grivcheva-Panovska, MD, PhD¹³, Dr. Marcel Levi, MD¹⁴, Dr. Hilary Longhurst, MD¹⁵, Dr. Alejandro Malbran, MD¹⁶, Dr. Dumitru Moldovan, MD, PhD¹⁷, Dr. Gregor Porebski, MD¹⁸, Dr. Avner Reshef, MD¹⁹, Dr. Petra Staubach, MD²⁰, Dr. Andrea Zanichelli, MD²¹, Dr. Yu-xiang Zhi, MD²² and Dr. Teresa Caballero, MD, PhD^{4,23}, ¹Hospital Universitario Severo Ochoa, Madrid, Spain, ²Psychology Faculty, Universidad Autonoma, Madrid, Spain, ³Hospital Universitario Fundación Alcorcón, Madrid, Spain, ⁴Allergy Department, Hospital La Paz Institute for Health Research (IdiPaz), Madrid, Spain, ⁵Research Unit, Hospital La Paz Institute for Health Research (IdiPaz), Madrid, Spain, ⁶Department of Dermatology and Venereology, Medical University of Graz, Graz, Austria, ⁷Institute of Pneumology and Allergy, San Fernando's Hospital, Panama City, Panama, ⁸University of Toronto, Division of Clinical Immunology and Allergy, Toronto, ON, Canada, ⁹National Reference Centre for Angioedema, Internal Medicine Department, Grenoble University Hospital, Grenoble, France, ¹⁰Denmark HAE Centre, Department of Dermatology and Allergy Centre, Odense University Hospital, Odense, Denmark, ¹¹Hungarian HAE Center, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary, ¹²Department of Dermatology, School of Medicine, University of Sao Paulo, Sao Paulo, Brazil, ¹³Unit of Allergology and Clinical Immunology, Department of Dermatology, Medicine School University Sts Cyril and Methodius, Skopje, Macedonia, ¹⁴Department of Internal Medicine, Academic Medical Center, University of Amsterdam, Amsterdam, Netherlands, ¹⁵Barts Health NHS Trust, London, United Kingdom, ¹⁶British Hospital of Buenos Aires, Buenos Aires, Argentina, ¹⁷Department of Allergology-Immunology, Mures County Hospital, Tirgu-Mures, Romania, ¹⁸Department of Clinical and Environmental Allergology, Jagiellonian University, Krakow, Poland, ¹⁹Allergy, Clinical Immunology & Angioedema Unit, Chaim Sheba Medical Center, Tel Hashomer, Israel, ²⁰Department of Dermatology, University Medical Center, University of Mainz, Mainz, Germany, ²¹Internal Medicine Department, Luigi Sacco Hospital, Milan, Italy, ²²Peking Union Medical College Hospital, Beijing, China, ²³Biomedical Research Network on Rare Diseases (CIBERER, U754), Madrid, Spain
- 122 Relationship Between Angioedema Attacks and Health-Related Quality Of Life Outcomes In Patients With Hereditary Angioedema (HAE)**
Dr. Jeff Dayno, MD¹, Dave P. Miller², Ms. Emily Hautamaki, MPH³, Scott Newcomer¹, David Fitts¹ and Dr. William R. Lumry, MD, FAAAAI^{4,5}, ¹ViroPharma Incorporated, ²ICON Clinical Research, ³Oxford Outcomes, an ICON plc company, ⁴AARA Research Center, Dallas, TX, ⁵Allergy and Asthma Specialists, Dallas, TX
- 123 Health-Related Quality Of Life (HRQoL) In Adult Patients With Hereditary Angioedema Due To C1 Inhibitor Deficiency (HAE-C1-INH) Assessed By SF-36v2**
Dr. Teresa Caballero, MD, PhD^{1,2}, Dr. Magdalena Julia Caminoa, MD¹, Elia Pérez-Fernández, MSc³, Dr. Carmen Gómez-Traseira, MD¹, Dr. Anne Aabom, MD⁴, Prof. Werner Aberer, MD⁵, Dr. Stephen D. Betschel, MD⁶, Prof. Anette Bygum, MD⁴, Dr. Dorotya Csuka, PhD⁷, Henriette Farkas, MD, PhD DSc⁷, Dr. Maria Gomide, MD⁸, Dr. Adriane Groffik, MD⁹, Dr. Anete S. Grumach⁸, Mrs. Iris Leivobich¹⁰, Dr. Alejandro Malbran, MD¹¹, Dr. Eniko Mihaly, MD¹², Dr. Dumitru Moldovan, MD, PhD¹³, Dr. Krystyna Obtulowicz, MD¹⁴, Dr. Gregor Porebski, MD¹⁵, Mrs. Celina Rayonne¹⁶, Dr. Avner Reshef, MD¹⁰, Dr. Petra Staubach, MD⁹, Dr. Michaela Wiednig, MD⁵, Maria Joao Forjaz^{17,18} and Dr. Nieves Prior, MD¹⁹, ¹Allergy Department, Hospital La Paz Institute for Health Research (IdiPaz), Madrid, Spain, ²Biomedical Research Network on Rare Diseases (CIBERER, U754), Madrid, Spain, ³Hospital Universitario Fundación Alcorcón, Madrid, Spain, ⁴Denmark HAE Centre, Department of Dermatology and Allergy Centre, Odense University Hospital, Odense, Denmark,

- ⁵Department of Dermatology and Venereology, Medical University of Graz, Graz, Austria, ⁶University of Toronto, Division of Clinical Immunology and Allergy, Toronto, ON, Canada, ⁷Hungarian HAE Center, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary, ⁸Department of Dermatology, School of Medicine, University of Sao Paulo, Sao Paulo, Brazil, ⁹Department of Dermatology, University Medical Center, University of Mainz, Mainz, Germany, ¹⁰Allergy, Clinical Immunology & Angioedema Unit, Chaim Sheba Medical Center, Tel Hashomer, Israel, ¹¹British Hospital of Buenos Aires, Buenos Aires, Argentina, ¹²Department of Allergology-Immunology, Mures County Hospital, Tirgu-Mures, Romania, ¹³Department of Allergology-Immunology, Mures County Hospital, Tirgu-Mures, Romania, ¹⁴Department of Clinical and Environmental Medicine, Jagiellonian University, Krakow, Poland, ¹⁵Department of Clinical and Environmental Allergology, Jagiellonian University, Krakow, Poland, ¹⁶ReSolve Research Solutions Inc., Whitby, Ontario, Canada, ¹⁷National School of Public Health, Carlos III Institute of Public Health, Madrid, Spain, ¹⁸REDISSEC, Madrid, Spain, ¹⁹Hospital Universitario Severo Ochoa, Madrid, Spain
- 124 The Icatibant Outcome Survey: Characteristics Of Patients With Hereditary Angioedema Requiring Reinjection**
Dr. Hilary Longhurst, MD, Barts Health NHS Trust, London, United Kingdom, Prof. Marcus Maurer, MD, Department of Dermatology and Allergy, Charité – Universitätsmedizin, Berlin, Germany, Dr. Vincent Fabien, PhD, Shire, Eysins, Switzerland, Prof. Werner Aberer, MD, Department of Dermatology and Venereology, Medical University of Graz, Graz, Austria, Prof. Laurence Bouillet, MD, PhD, National Reference Centre for Angioedema, Internal Medicine Department, Grenoble University Hospital, Grenoble, France, Dr. Andrea Zanichelli, MD, Dipartimento di Scienze Biomediche e Cliniche, Ospedale Luigi Sacco, Università degli Studi di Milano, Milan, Italy and Dr. Teresa Caballero, MD, PhD, Allergy Department, Hospital La Paz Institute for Health Research (IdiPaz), Madrid, Spain
- 125 The Icatibant Outcome Survey: Characterizing Breakthrough Hereditary Angioedema Attacks In Patients Receiving Long-Term Prophylaxis**
Prof. Werner Aberer, MD, Department of Dermatology and Venereology, Medical University of Graz, Graz, Austria, Prof. Marcus Maurer, MD, Department of Dermatology and Allergy, Charité – Universitätsmedizin, Berlin, Germany, Prof. Laurence Bouillet, MD, PhD, National Reference Centre for Angioedema, Internal Medicine Department, Grenoble University Hospital, Grenoble, France, Amandine Perrin, Shire, Eysins, Switzerland, Dr. Andrea Zanichelli, MD, Dipartimento di Scienze Biomediche e Cliniche, Ospedale Luigi Sacco, Università degli Studi di Milano, Milan, Italy, Dr. Teresa Caballero, MD, PhD, Allergy Department, Hospital La Paz Institute for Health Research (IdiPaz), Madrid, Spain and Dr. Hilary Longhurst, MD, Barts Health NHS Trust, London, United Kingdom
- 126 The Icatibant Outcome Survey: Rate and Impact Of Treatment By Self-Administration**
Dr. Dolores Hernández Fernández de Rojas, MD¹, Dr. Ethel Ibáñez, MD¹, Dr. Hilary Longhurst, MD², Prof. Marcus Maurer, MD³, Dr. Vincent Fabien, PhD⁴, Prof. Werner Aberer, MD⁵, Prof. Laurence Bouillet, MD, PhD⁶, Dr. Andrea Zanichelli, MD⁷ and Dr. Teresa Caballero, MD, PhD⁸, ¹IIS Hospital Universitario La Fe, Valencia, Spain, ²Barts Health NHS Trust, London, United Kingdom, ³Department of Dermatology and Allergy, Charité – Universitätsmedizin, Berlin, Germany, ⁴Shire, Eysins, Switzerland, ⁵Department of Dermatology and Venereology, Medical University of Graz, Graz, Austria, ⁶National Reference Centre for Angioedema, Internal Medicine Department, Grenoble University Hospital, Grenoble, France, ⁷Dipartimento di Scienze Biomediche e Cliniche, Ospedale Luigi Sacco, Università degli Studi di Milano, Milan, Italy, ⁸Allergy Department, Hospital La Paz Institute for Health Research (IdiPaz), Madrid, Spain
- 127 Most Hereditary Angioedema (HAE) Attacks Resolved After One Icatibant Injection: Analysis Of FAST-3 Open-Label Extension Study**
Dr. William R. Lumry, MD, FAAAAI, Allergy and Asthma Specialists, Dallas, TX, Jovanna Baptista, MS, Shire, Lexington, MA, Dr. Marc A. Riedl, MD, MS, University of California, San Diego, La Jolla, CA and Dr. Timothy J. Craig, DO, FAAAAI, Penn State University College of Medicine, Hershey, PA
- 128 Evaluation Of Icatibant Reinjection Of Laryngeal Hereditary Angioedema Attacks: A Pooled Analysis Of Three Phase III Open-Label Extension Studies**
Jovanna Baptista, MS, Shire, Lexington, MA, Dr. Jonathan A. Bernstein, MD, FAAAAI, Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, Dr. William R. Lumry, MD, FAAAAI, Allergy and Asthma Specialists, Dallas, TX and Dr. Marc A. Riedl, MD, MS, University of California, San Diego, La Jolla, CA
- 129 Successful and Safe Use Of Icatibant For Life-Threatening Angioedema Attack During Pregnancy In a Patient With Hereditary Angioedema Type I**
Dr. Karine Bouffleur, MD¹, Ms. Luana Delcaro¹, Dr. Daniel L. Cordeiro, MD¹, Dr. Priscila B. Botelho Palhas, MD¹, Dr. Janaina Fernandes de Melo Sousa, MD¹, Dr. Thaís Mendonça, MD¹, Dr. Janaina Michele de Lima Melo, MD¹, Dr. Gustavo Neppelenbroek, MD¹, Prof. Willy Sarti¹, Dr. Adriana S. Moreno, PhD¹ and Dr. Luisa Karla P. Arruda, MD, PhD, FAAAAI², ¹Ribeirao Preto Medical School, University of Sao Paulo, Ribeirao Preto, Brazil, ²School of Medicine of Ribeirao Preto, Ribeirao Preto, Brazil
- 130 Recombinant Human C1 Inhibitor Treatment Does Not Affect D-Dimer Levels and Is Not Associated With Thromboembolic Events In HAE Patients**
Dr. Avner Reshef, MD, Allergy, Clinical Immunology & Angioedema Unit, Chaim Sheba Medical Center, Tel Hashomer, Israel, Dr. Andrea Zanichelli, MD, Dipartimento di Scienze Biomediche e Cliniche, Ospedale Luigi Sacco, Università degli Studi di Milano, Milan, Italy, Dr. Hilary Longhurst, MD, Barts Health NHS Trust, London, United Kingdom, Yun Hardiman, MS, Santarus Inc., San Diego, CA, Anurag Relan, MD, Pharming Technologies BV, Leiden, Netherlands and C. Erik Hack, MD, University Medical Center Utrecht, Utrecht, Netherlands
- 131 C1-Esterase Inhibitor Concentrate For Acute Attacks Of Laryngeal Edema In Hereditary Angioedema (HAE): Fixed Dosing Vs Body Weight-Adjusted Dosing**
Konrad Bork, MD¹, Dr. Jonathan A. Bernstein, MD, FAAAAI², Henrike Feuersenger³, Thomas Machnig³ and Dr. Timothy J. Craig, DO, FAAAAI⁴, ¹University of Mainz, Mainz, Germany, ²Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, ³CSL Behring GmbH, Marburg, Germany, ⁴Penn State University College of Medicine, Hershey, PA
- 132 Sustained Response Following Acute Treatment Of Hereditary Angioedema Attacks With Recombinant Human C1 Esterase Inhibitor**
H. Henry Li, MD, PhD, Institute for Asthma and Allergy, Chevy Chase, MD, Dr. Marc A. Riedl, MD, MS, University of California, San Diego, La Jolla, CA, Dr. Jonathan A. Bernstein, MD, FAAAAI, Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, Dr. William R. Lumry, MD, FAAAAI, AARA Research Center, Dallas, TX, Dr. Avner Reshef, MD, Allergy, Clinical Immunology & Angioedema Unit, Chaim Sheba Medical Center, Tel Hashomer, Israel, Dr. Dumitru Moldovan, MD, PhD, Department of Allergology-Immunology, Mures County Hospital, Tirgu-Mures, Romania, Tirgu-Mures, Romania, Henriette Farkas, MD, PhD DSc, Semmelweis University, Budapest, Hungary, Dr. Gregor Porebski, MD, Department of Clinical and Environmental Allergology, Jagiellonian University,

- Krakow, Poland, Marcin Stobiecki, MD, Jagiellonian University College, Krakow, Poland, Yun Hardiman, MS, Santarus Inc., San Diego, CA, Anurag Relan, MD, Pharming Technologies BV, Leiden, Netherlands and Prof. Marco Cicardi, MD, PhD, Department of Internal Medicine, Luigi Sacco Hospital, Milan, Italy, Milan, Italy
- 133 Efficacy Of C1Inhibitor Concentrate (Berinert) For Severe Angioedema Attacks Induced By Drugs Targeting The Renin-Angiotensin Aldosterone System**
Prof. Laurence Bouillet, Grenoble university hospital, Grenoble, France, Dr. Bernard Floccard, Lyon university hospital, Lyon, France, Dr. Isabelle Boccon-Gibod, Grenoble University Hospital, Grenoble, France, Dr. Sebastien Trouiller, Centre hospitalier d'Aurillac, Aurillac, France, Dr. Anne Du-Thau, Montpellier university hospital, Montpellier, France and Prof. Olivier Fain, Jean Verdier university hospital, Bondy, France
- 134 Professional Administration Costs In The US For On-Demand Therapy Of Hereditary Angioedema**
Thomas Machnig, CSL Behring GmbH, Marburg, Germany and Mr. Art Zbrozek, RPh, MSc, MBA, CSL Behring LLC, King of Prussia, PA
- 135 Successful Administration Of C1Esterase Inhibitor (C1inh) In An Individual Anaphylactic To It**
Dr. Arthur B. Vegh, MD, FAAAAI¹, Ms. Marni Sellers², Ms. Nancy Boyden² and Ms. Jennifer Vegh², ¹University of Washington, Tacoma, WA, ²none, Tacoma, WA
- 136 Evaluation Of DX-88 (Ecallantide) For Treatment Of Angiotensin Enzyme Inhibitor Induced Angioedema In The Emergency Department**
Dr. Joseph Moellman, MD¹, Dr. Jonathan A. Bernstein, MD, FAAAAI², Ms. Kimberly Hart¹, Dr. Sean Collins³ and Dr. Christopher Lindsell¹, ¹University of Cincinnati, Cincinnati, OH, ²Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, ³Vanderbilt University, Nashville, TN
- 137 Ecallantide In Treatment Of Type III Hereditary Angioedema**
Dr. Anil Nanda, MD, Asthma and Allergy Center, Lewisville, TX; UT Southwestern Medical Center, Dallas, TX and Dr. Anita N. Wasan, MD, Allergy and Asthma Center, Lansdowne, VA
- 138 BCX4161, An Oral Kallikrein Inhibitor: Safety and Pharmacokinetic Results Of a Phase 1 Study In Healthy Volunteers**
Dr. Phil Collis¹, Dr. Melanie Cornpropst¹, Dr. Jo Collier² and Dr. William Sheridan¹, ¹BioCryst Pharmaceuticals, Durham, NC, ²Quotient Clinical, Nottingham, United Kingdom
- 139 Treatment Of Hereditary Angioedema At The Time Of Prodromal Symptoms: International Survey Of Physicians**
Dr. Neelu Kalra, MD, Penn State Hershey Medical Center, Hershey, PA and Dr. Timothy J. Craig, DO, FAAAAI, Penn State University College of Medicine, Hershey, PA
- 141 Structural and Molecular Changes Caused By Mutations Thr328Lys and Thr328Arg In FXII Associated With Hereditary Angioedema With Normal C1 Inhibitor**
Dr. Adriana S. Moreno, PhD, Ribeirao Preto Medical School, University of Sao Paulo, Ribeirao Preto, Brazil, Dr. Helen Arcuri, PhD, Institute of Investigation in Immunology iii, School of Medicine of the University of Sao Paulo, São Paulo, Brazil, Prof. Mario Palma, PhD, Biosciences Institute, State University of São Paulo, Rio Claro, Brazil and Dr. Luisa Karla P. Arruda, MD, PhD, FAAAAI, School of Medicine of Ribeirao Preto, Ribeirao Preto, Brazil
- 142 Ludwig's Angina Masquerading As Angioedema**
Dr. Lynn A. Wiens, MD, FAAAAI, Warren Clinic, Tulsa, OK
- 143 A Simple, Sensitive and Selective Fluorogenic Assay To Monitor Plasma Kallikrein Inhibitory Activity Of BCX4161 In Activated Plasma**
Dr. YS Babu¹, Ms. Ramanda Wilson¹, Dr. Jianwen Zhang¹, Dr. Melanie Cornpropst², Dr. Phil Collis² and Dr. William Sheridan², ¹BioCryst Pharmaceuticals, Inc, Birmingham, AL, ²BioCryst Pharmaceuticals, Durham, NC
- 144 Incidence and Treatment Of Angioedema In a Third Level Spanish Hospital**
Marta Seoane, MD, Maria Elisa Caralli, MD, Sarah Micozzi, MD, Marta Elena Rodriguez-Mazariego, MD and María L. Baeza, MD, PhD, Hospital General Universitario Gregorio Marañón, Allergy Department, Madrid, Spain
- 145 Seasonal Increase In Angioedema In An Inner City Hospital Center**
Helen Zhou, BS, Dr. Ashlei Mathew, MD and Dr. Rauno Joks, MD, Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY
- 146 Seeming Tongue Swelling Responding To Nebulized Ipratropium In An Individual With A Diagnosis Of Type III HAE (Hereditary Angioedema)**
Ms. Jennifer Vegh¹, Dr. Arthur B. Vegh, MD, FAAAAI² and Ms. Nicholette Butler¹, ¹none, Tacoma, WA, ²University of Washington, Tacoma, WA
- 147 Cytokine Expression In a Case Of Cutaneous Mastocytosis With An Unusual Presentation**
Prof. Young Min Ahn, MD, Department of Pediatrics, South Korea, Prof. sang-Hoon Kim, Department of Internal Medicine, South Korea, Prof. Ho-jung Lee, Department of Pathology, Eulji University School of Medicine, South Korea and Prof. Jai Youl Ro, PhD, Sungkyunkwan University School of Medicine, South Korea

Population, Health in Asthma

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 148 Aerochambers and Asthmatics: Do No Harm?**
Dr. Jack Leon-Max Mutnick, MD, Stevens Community Medical Center, Morris, MN
- 149 Characterizing The Severe Asthma Population In The United States: Claims-Based Analysis Of Three Treatment Cohorts In The Year Prior To Treatment Escalation**
Dr. Patrick W. Sullivan, PhD¹, Dr. Jon Campbell, PhD², Dr. Vahram Ghushchyan, PhD², Dr. Gary Globe, PhD³, Dr. Jeff Lange, PhD³ and Dr. J Michael Woolley, PhD³, ¹Regis University, ²University of Colorado Denver, ³Amgen, Inc., Thousand Oaks, CA
- 150 Impact Of Asthma On Child and Family Activities Among a Rural Cohort**
Dr. Allison J. Burbank^{1,2}, Mallikarjuna Rettiganti, PhD^{1,2}, Paige Fisher, BA³ and Tamara T. Perry, MD^{1,2}, ¹University of Arkansas for Medical Sciences, Little Rock, AR, ²Arkansas Children's Hospital, Little Rock, AR, ³Drexel University School of Public Health, Philadelphia, PA
- 151 Inhaled Asthma Medications: Highlighting The Differences In Formulations and Use**
Dr. Lachara Lvingston Livingston, University of South Florida Morsoni College of Medicine, Dr. Gregory Michael Cowan, MD, University of South Florida Morsani College of Medicine and Dr. Richard F. Lockey, MD, Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida Morsani College of Medicine and James A. Haley Veterans' Affairs Hospital, Tampa, FL
- 152 Rhinitis and Asthma Exacerbation Revealing Large Pulmonary Effusion and Pelvic Mass**
Dr. Jennifer Olivier, MD, Tulane University School of Medicine, New Orleans, LA and Dr. Laurianne G. Wild, MD, FAAAAI, Tulane University, New Orleans, LA

153 Deprivation Is Longitudinally Associated With Incident Childhood Asthma

Dr. Elinor Simons, MD, MS, FAAAAI^{1,2}, Dr. Sharon Dell, MD^{2,3}, Dr. Rahim Moineddin, PhD^{4,5} and Dr. Teresa To, PhD^{1,5}, ¹Child Health Evaluative Sciences, Hospital for Sick Children, Toronto, ON, Canada, ²Clinical Epidemiology, Department of Health Policy, Management and Evaluation, University of Toronto, Toronto, ON, Canada, ³Respiratory Medicine and Child Health Evaluative Sciences, Hospital for Sick Children, Toronto, ON, Canada, ⁴Department of Family and Community Medicine, University of Toronto, Toronto, ON, Canada, ⁵Institute for Clinical Evaluative Sciences, Toronto, ON, Canada

154 Use Of Asthma Control Indicators In Measuring Efficacy Of Inhaled Corticosteroids In Asthmatic Smokers: A Systematic Review

Ms. Claire E. Hayes, MPH, CHES, AE-C and Mr. Henry Nuss, PhD, Louisiana State University Health Sciences Center School of Public Health, New Orleans, LA

155 Evaluation Of a Medication Adherence Estimator Survey Compared To Exhaled Nitric Oxide (FeNO) Levels and Asthma Control Test In Difficult-To-Treat/Severe Pediatric Asthma Patients

Jigar Patel¹, Vanessa Y. Cavero, MD², Amy Perkins, MS², Heather Minto, MD² and Maripaz B. Morales, MD², ¹Department of Pediatrics, Eastern Virginia Medical School, Norfolk, VA, ²Children's Hospital of The King's Daughters, Norfolk, VA

Healthcare Delivery in Primary Immunodeficiency

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

156 An Assessment Of Infection Rates and Health Resource Use Among Primary Immunodeficiency Disorder (PID) Patients Prior To Diagnosis

Dr. Chris Rabbat, PhD, Ms. Diane Ito, MA, Ms. Yan Xiong, MS and Dr. Josephine Li-McLeod, PhD, Baxter Healthcare Corporation, Westlake Village, CA

157 A Comparison Of Costs Between Outpatient Hospital, Clinic and Home Settings For Intravenous Immunoglobulin (IVIG) Infusions

Dr. Xiaolan Ye, PhD, Ms. Diane Ito, MA, Ms. Yan Xiong, MS and Dr. Josephine Li-McLeod, PhD, Baxter Healthcare Corporation, Westlake Village, CA

158 Differences In Infection Rates Between Outpatient Hospital, Clinic and Home Infusion Settings For Patients With Primary Immunodeficiency Disorder (PID)

Ms. Diane Ito, MA, Ms. Yan Xiong, MS, Dr. Xiaolan Ye, PhD and Dr. Josephine Li-McLeod, PhD, Baxter Healthcare Corporation, Westlake Village, CA

159 Assessment Of The Quality Of Life and Health Resource Utilization Burden Among Patients With Primary Immunodeficiency Disorder (PID) Prior To Treatment

Dr. John M. Routes, MD, FAAAAI¹, Dr. Beatriz Tavares Costa-Carvalho, MD², Prof. Bodo Grimbacher, MD³, Dr. Kenneth Paris, MD, MPH⁴, Dr. Hans D. Ochs, MD⁵, Ms. Diane Ito, MA⁶, Ms. Yan Xiong, MS⁶, Dr. Josephine Li-McLeod, PhD⁶ and Dr. Richard I. Schiff, MD, PhD⁷, ¹Medical College of Wisconsin, Milwaukee, WI, ²Federal University of Sao Paulo, Brazil, ³Royal Free Hospital & University College, London, United Kingdom, ⁴LSU Health Sciences Center, New Orleans, New Orleans, LA, ⁵University of Washington, Seattle, WA, ⁶Baxter Healthcare Corporation, Westlake Village, CA, ⁷Baxter BioScience, Westlake Village, CA

Diagnostics

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

160 Phadiatop - An Atopy Test With Optimal Allergen Composition Relevant For Most Geographical Regions

Kerstin M. Wall¹, Monica Norén¹ and Dr. Cathy Van Rooyen², ¹Thermo Fisher Scientific, ImmunoDiagnostics, Uppsala, Sweden, ²Ampath National Reference Laboratory, Immunology, Pretoria, South Africa

161 Histamine Skin Reactivity Increased With Body Mass Index In Korean Children

Dr. Jeon Mi Lee, Dr. Ju Wan Kang and Dr. Hyung Ju Cho, Yonsei University College of Medicine

162 The Impact Of Component Resolved Diagnosis On Allergen-Specific Immunotherapy Prescription In Children With Pollen-Related Allergic Rhinitis

Dr. Paolo Matricardi, MD¹, Dr. Giovanna Stringari², Prof. Carlo Caffarelli², Dr. Riccardo Asero, MD³, Dr. Arianna Dondi⁴, Dr. Salvatore Tripodi⁵ and The Italian Pediatric Allergy Network⁶, ¹Charité, Berlin, Germany, ²Pediatric Department, University of Parma, Parma, Italy, ³Clinica San Carlo, Paderno Dugnano, Italy, ⁴Department of Pediatrics, University of Bologna, Bologna, Italy, ⁵Pediatric Department, Ospedale Sandro Pertini, Roma, Italy, ⁶

163 Randomized Evaluation Of Ten Allergy Skin Prick Test Devices

Dr. Yohalakshmi Chelladurai, MD, MPH¹, Prof. Robert G. Hamilton, PhD D.ABMLI FAAAAI² and Dr. Jody R. Tversky, MD², ¹Johns Hopkins University Bloomberg School of Public Health, ²Johns Hopkins University School of Medicine, Baltimore, MD

164 Phenotypic Classification Of Allergen Polysensitization In Geriatric Adults

Dr. Rohit Divekar, MBBS, PhD¹, Dr. John B. Hagan, MD, FAAAAI² and Hirohito Kita, MD², ¹Division of Allergic Diseases, Mayo Clinic, Rochester, MN, ²Mayo Clinic, Rochester, MN

165 Analysis Of The Discordance Between Immunocap and Skin Prick Test For Common Allergens In Patients With Allergic Rhinitis Symptoms

Dr. Do Yang Park¹, Prof. Hyun Jun Kim¹, Dr. Ju Wan Kang², Prof. Yoo Suk Kim¹ and Prof. Chang-Hoon Kim³, ¹Ajou University School of Medicine, ²Yonsei University College of Medicine, ³Department of Otorhinolaryngology, Yonsei University College of Medicine, Seoul, South Korea

166 Role Of House Dust Mites In Allergic and Non Allergic Nasal Diseases

Prof. Maged Refaat, MD¹, Prof. Tarek Mansour¹, Prof. Talaat Samny², Prof. Ahmed Zaki³, Prof. Eman Osman¹, Dr. Eman Ez-zat¹ and Dr. Eman Ahmed¹, ¹Department of Allergy and Clinical immunology, Ain Shams university, Cairo, Egypt, ²Department of ear,nose and throat diseases, Ain Shams university, Cairo, Egypt, ³Department of pathology, Ain Shams university, Cairo, Egypt

167 Immunogenicity and IgE Blocking Capacity Of a Mixture Of Depigmented and Chemically Modified Allergens From Different Homologous Groups

Dr. Victor Miguel Iraola, Mr. José Ramón Leonor, Dr. María Morales, Dr. Raquel Moya, Dr. M. Angeles López Matas, Dr. Ma Teresa Gallego and Dr. Jerónimo Carnés, Laboratorios LETI, Tres Cantos, Spain

168 Modified Shuffled Blo t 5 Recombinant Allergen From *Blomia Tropicalis* Produces a Shift Of Antigenicity For Binding To IgG4 Isotype

Dr. Ernesto Taketomi, MD, PhD¹, Mrs. Bárbara Ávila, MSc¹, Mrs. Karine Almeida, PhD¹, Mrs. Deise Silva, PhD¹, Prof. Odonirio Abrahão Júnior, PhD² and Prof. Jair Cunha-Júnior, PhD¹, ¹Federal University of Uberlândia, Uberlândia, Brazil, ²Federal University of Triangulo Mineiro, Uberaba, Brazil

Oral Immunotherapy

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 169 Induction Of Arah2-Specific Memory B Cells Identified Using a Novel Tetramer-Based Approach Occurs Early and Transiently During Peanut Oral Immunotherapy**
Dr. Sarita U. Patil, MD^{1,2}, Dr. Adebola Ogunniyi, PhD³, Mr. Alex Ma⁴, Ms. Alisa K. Brennan, B.S.⁵, Ms. Theadora Swenson, BA⁶, Mr. Agustin Calatroni, MA MS⁷, Dr. James Moon, PhD⁸, Dr. J.Christopher Love, PhD³ and Wayne G. Shreffler, MD, PhD, FAAAAI^{1,6}, ¹Harvard Medical School, Boston, MA, ²Allergy and Immunology, Massachusetts General Hospital, Boston, MA, ³Massachusetts Institute of Technology, Cambridge, MA, ⁴Massachusetts General Hospital, Charlestown, MA, ⁵Rush Medical College, Chicago, IL, ⁶Massachusetts General Hospital, Boston, MA, ⁷Rho, Inc., Chapel Hill, NC, ⁸Harvard Medical School, Charlestown, MA
- 170 De Novo Generation Of Gastrointestinal Regulatory T Cells In Response To OIT and EPIT**
Leticia Tordesillas, PhD¹, Lucie Mondoulet, PhD², Pierre Henri Benhamou, MD², Hugh A. Sampson, MD, FAAAAI³ and M. Cecilia Berin, PhD¹, ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²DBV Technologies, Bagneux, France, ³Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY
- 171 Long Term Protection Against New Sensitization After Milk-Epit In Mice Sensitized To Milk Is Mediated By Tregs**
Pierre Henri Benhamou, MD¹, Dr. Vincent Dioszeghy, PhD¹, Mrs. Emilie Puteaux¹, Mrs. Mélanie Ligouis¹, Mrs. Véronique Dhelft¹, Mrs. Camille Plaquet¹, Prof. Christophe Dupont, MD, PhD² and Lucie Mondoulet, PhD¹, ¹DBV Technologies, Bagneux, France, ²Hopital Necker Enfants Malades, Paris, France
- 172 Epicutaneous Immunotherapy-Induced Regulatory T Cells Could Migrate To More Various Sites Of Allergen Exposure Compared To Sublingual Or Subcutaneous Immunotherapy In Mice Sensitized To Peanut**
Dr. Vincent Dioszeghy, PhD¹, Lucie Mondoulet, PhD¹, Mrs. Véronique Dhelft¹, Mrs. Mélanie Ligouis¹, Mrs. Emilie Puteaux¹, Mrs. Camille Plaquet¹, Prof. Christophe Dupont, MD, PhD² and Pierre Henri Benhamou, MD¹, ¹DBV Technologies, Bagneux, France, ²Hopital Necker Enfants Malades, Paris, France
- 173 Anaphylactic Reactions After Peanut Oral Immunotherapy**
Noam Berlin¹, Dr. Amanda Jagdis¹, Carly Barron², Sean Maclachlan³, Mohana Giruparajah², Nathan Leader⁴, Dennis Penn⁵ and Dr. Gordon L. Sussman, FAAAAI¹, ¹University of Toronto, Faculty of Medicine, Toronto, ON, Canada, ²Gordon Sussman Clinical Research Inc., Toronto, ON, Canada, ³University of Ottawa, Faculty of Medicine, Ottawa, ON, Canada, ⁴University of Melbourne, Faculty of Medicine, Melbourne, Australia, ⁵MastCell Pharmaceuticals, Inc., Raleigh, NC
- 174 Evaluation Of The Immunological Mechanisms Involved In The Efficacy Of Sublingual Immunotherapy With Ltp (Pru p 3) In Allergic Patients Sensitized To Food By Ltps**
Dr. Francisca Gomez, MD, PhD¹, Dr. Enrique Gomez, MD, PhD², Dr. Maria J Torres, MD, PhD³, Mrs. Luisa Galindo, RN³, Ms. Maria Dolores Ruiz³, Dr. Inmaculada Doña, MD, PhD³, Mrs. Gador Bogas¹, Dr. Paloma Campo, MD, PhD³, Dr. Teresa Posadas³, Dr. Miguel Blanca, MD, PhD³ and Dr. Cristobalina Mayorga, PhD⁴, ¹Allergy Service, Carlos Haya Hospital, Spain, ²Research Laboratory, Carlos Haya Hospital-FIMABIS, Spain, ³Allergy Service, Carlos Haya Hospital, Málaga, Spain, ⁴Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain
- 175 Changes In IgE and IgG4 Epitopes After Milk Oral Immunotherapy (OIT)**
Belén de la Hoz Caballer, MD, PhD¹, Mrs. Cristina Vlaicu¹, Inmaculada Cerecedo Carballo, MD, PhD², Mónica Rodríguez-Álvarez, MD³, Dr. Maria Carmen Diéguez Pastor, MD⁴, Montserrat

Fernández-Rivas, MD, PhD⁵ and Javier Martínez-Botas, PhD^{1,6}, ¹Hospital Universitario Ramón y Cajal. Instituto Ramón y Cajal para la Investigación Sanitaria, Madrid, Spain, ²Hospital del Sureste, Arganda del Rey, Spain, ³Hospital Clínico San Carlos, Spain, ⁴Hospital Universitario 12 de Octubre, Spain, ⁵Hospital Clínico San Carlos, Madrid, Spain, ⁶CIBER de Fisiopatología de la Obesidad y Nutrición (CIBEROBN), Instituto de Salud Carlos III, Madrid, Spain

Mechanisms of Cytokines and Chemokines

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 176 IL-33 and TSLP Mediate Chronic Eosinophilic Airway Inflammation and IgE Antibody Production Induced by Multiple Airborne Allergens**
Koji Iijima, PhD¹, Takao Kobayashi, PhD¹, Kenichiro Hara, MD^{1,2}, Gail Kephart¹ and Hirohito Kita, MD¹, ¹Mayo Clinic, Rochester, MN, ²Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan
- 177 IL-17 Enhances TNF- α -Induced, But Not IL-1 β -Induced, Expression Of Neutrophil-Associated Cytokines By Human Lung Tissue Cells**
Dr. Akio Matsuda, PhD, Dr. Kenichiro Motomura, MD, Dr. Tetsuo Shoda, MD, Dr. Kyoko Futamura, MD, PhD, Dr. Hirohisa Saito, MD., PhD. and Dr. Kenji Matsumoto, MD, PhD, Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan
- 178 Prostaglandin I₂ Receptor (IP) Signaling Inhibits Alternaria-Induced IL-5 and IL-13 Expression Through Group 2 Innate Lymphoid Cells (ILC2)**
Dr. Shinji Toki, PhD, Kasia Goleniewska, Sara Reiss, MS, Dr. Weisong Zhou, PhD and Dr. R. Stokes Peebles Jr., MD, FAAAAI, Vanderbilt University School of Medicine, Nashville, TN
- 179 Local Administration Of CCL28 Is Sufficient To Drive Airway Hyper-Responsiveness and Mucous Cell Metaplasia**
Dr. Becky Buelow, MD, Mrs. Desire Hunter and Dr. Mitchell H. Grayson, MD, FAAAAI, Medical College of Wisconsin, Milwaukee, WI
- 180 Mucosal Uric Acid Induces Interleukin 33 and Initiates Type 2 Immune Responses To Inhaled Protease Allergens**
Kenichiro Hara, MD¹, Koji Iijima, PhD², Takao Kobayashi, PhD², Dr. Satoshi Seno³, Dr. Ichiro Tojima³, Gail Kephart², Dr. Manabu Ueno¹, Dr. Toshitaka Maeno¹, Dr. Masahiko Kurabayashi¹ and Hirohito Kita, MD², ¹Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, ²Mayo Clinic, Rochester, MN, ³Shiga University of Medical Science, Otsu, Shiga, Japan
- 181 Surrogate Biomarkers Of Eosinophilic Airway Inflammation In Asthma: Quantitation Of Major Basic Protein-1 and Charcot-Leyden Crystal Protein/Galectin-10 In Induced Sputum**
Dr. Sharmilee M. Nyenhuis, MD, FAAAAI^{1,2}, Mr. Preeth Alumkal, BS³, Dr. Jian Du, MD³, Brian Maybruck, PhD³, Mr. Mark Vinsky, BS³, Ms. Melissa Morales-Perez, BS³, Dr. Jerry A. Krishnan, MD, PhD⁴ and Dr. Steven J. Ackerman, PhD³, ¹Jesse Brown VA Medical Center, Chicago, IL, ²MC 719, University of Illinois at Chicago, Chicago, IL, ³University of Illinois at Chicago, Chicago, IL, ⁴University of Illinois at Chicago, Chicago, IL
- 182 IL-35-Producing T Cells (iTR35) Inhibit Th2 Effector Function, Induce Infectious Tolerance and Are Elevated Following Grass Pollen Sublingual Immunotherapy**
Dr. Mohamed H. Shamji, BSc MSc PhD¹, Ms. Janice Layhadi, BSc(Hons)², Mr. Alan Perera-web, BSc(Hons)^{2,3}, Ms. Rachel Yan, RN⁴ and Prof. Stephen R. Durham, MA MD FRCP⁵, ¹Imperial College London, South Kensington, United Kingdom, ²Imperial College London, ³Medical Research Council and Asthma UK Cen-

- tre for Allergic Mechanisms of Asthma, UK, ⁴Imperial College London, United Kingdom, ⁵Imperial College London, London, United Kingdom
- 183 Th2 Cytokines Inhibit Toll-Like Receptor 2 Mediated Epidermal Barrier Repair**
Takeshi Yoshida, PhD¹, I-Hsin Kuo, PhD¹, Anna De Benedetto, MD, FAAAAI¹, Donald Y.M. Leung, MD, PhD, FAAAAI² and Lisa A. Beck, MD, FAAAAI¹, ¹University of Rochester Medical Center, Rochester, NY, ²National Jewish Health, Denver, CO
- 184 Epicutaneous Sensitization To Food Allergens Induce IL-4-Producing Cells and T Follicular Helper (Tfh) Cells In An IL-6 and IL-1-Dependent Manner**
Ritobrata Goswami, PhD, Leticia Tordesillas, PhD and M. Cecilia Berin, PhD, Icahn School of Medicine at Mount Sinai, New York, NY
- 185 Enhanced Thymic Stromal Lymphopoietin-Induced Eosinophil-Basophil Lineage Commitment In Atopic Individuals**
Claudia C.K. Hui, MSc¹, Sina Rusta-Sallehy, BSc¹, Dr. Ilan Asher, MD¹, Delia Heroux, BSc¹ and Judah Aryeh Denburg, MD, FRCPC, FAAAAI², ¹McMaster University, Hamilton, ON, Canada, ²Division of Clinical Immunology and Allergy, Department of Medicine, McMaster University, ON, Canada
- 186 CMRF35-Like Molecule 1 (CLM-1) Is Required For IL-33-Induced Eosinophil Activation**
Dr. Ariel Munitz, PhD¹, Mrs. Dana Shik¹, Mr. Itay Moshkovits² and Mrs. Danielle Karo-Atar¹, ¹Department of Clinical Microbiology and Immunology, The Sackler School of Medicine, Tel-Aviv University, Tel Aviv, Israel, ²Tel-Aviv University, Israel
- 187 Role Of Interleukine-33 In Rhinovirus-Induced Allergic Asthma Exacerbation**
Dr. Marie Toussaint, DMV, PhD, Dr. Aran Singanayagam, MD, Prof. Sebastian L. Johnston, MD, PhD and Dr. Nathan Bartlett, PhD, Imperial College London, London, United Kingdom
- 188 TGF-beta1 Mobilizes Mesenchymal Stem Cells In Allergic Asthma**
Ting Xu, MD^{1,2}, Ling-Ling Xian, MD, PhD³, Yufeng Zhou, MD, PhD¹, Beverly Plunkett, MS¹, Xu Cao, PhD³, Mei Wan, MD, PhD³ and Peisong Gao, MD, PhD¹, ¹Division of Allergy & Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, ²Department of Respiratory Medicine, Southern Medical University, Guangzhou, China, ³Department of Orthopedics Surgery, Johns Hopkins University School of Medicine, Baltimore, MD
- 189 IL-10-Producing B Cells Are Increased After Grass Pollen Immunotherapy Compared To Untreated Grass Pollen Allergic Controls: A Blinded Cross-Sectional Study**
Mr. James E G Charlesworth^{1,2}, Dr. Guy W Scadding, MD^{1,2}, Dr. Aarif Eifan, MD², Ms. Rachel Yan, RN², Ms. Andrea Goldstone, RN², Dr. Moises A. Calderon, MD, PhD^{1,2}, Prof. Stephen R. Durham, MA MD FRCP^{3,4} and Dr. Mohamed H. Shamji, BSc MSc PhD⁵, ¹Medical Research Council and Asthma UK Centre for Allergic Mechanisms of Asthma, United Kingdom, ²Imperial College London, United Kingdom, ³Imperial College London, London, United Kingdom, ⁴Medical Research Council and Asthma UK Centre for Allergic Mechanisms of Asthma, London, United Kingdom, ⁵Imperial College London, South Kensington, United Kingdom
- 190 Respiratory Syncytial Virus Induces IL-25 and IL-33 Production In The Lungs**
Matthew T. Stier¹, Kasia Goleniewska² and R. Stokes Peebles^{1,2}, ¹Department of Pathology, Microbiology, and Immunology, Vanderbilt University School of Medicine, Nashville, TN, ²Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN
- 191 Small-Molecule Inhibition Of Stat3 Prevents House-Dust-Mite (HDM)-Induced Airway Inflammation By Blocking Lung Production Of Th17 and Th2 Cytokines**
Dr. Aries C. Gavino, MD and Dr. David J. Tweardy, MD, Baylor College of Medicine, Houston, TX
- 192 Differential Promoter Usage and Regulation Of The Human Interleukin-5 Receptor α (IL-5R α) Gene In Developing Eosinophil Progenitors**
Kimberly G. Laffey, BSc, Dr. Jian Du, MD and Dr. Steven J. Ackerman, PhD, University of Illinois at Chicago, Chicago, IL
- 193 Multiplex Cytokine Analysis Of Cord Blood Non-Adherent Mononuclear Cells From Infants With Attributable Atopic Risk Following IL-5 Stimulation**
Mrs. Jenny Thiele, MSc, Queens University, Kingston, ON, Canada, Ms. Vanessa N. Omana, MSc, Queen's University, ON, Canada and Dr. Anne K. Ellis, MD, MSc FAAAAI, Allergy Research Unit, Kingston General Hospital, Kingston, ON, Canada; Departments of Medicine and Biomedical & Molecular Science, Queen's University, Kingston, ON, Canada
- 194 Association Of IL-33 With Atherogenic Cytokines: A Link Between Allergic Disease and Atherosclerosis**
Dr. Misu Paul, MD¹, Dr. Allison B. Reiss, MD², Dr. Steven Carsons, MD³, Dr. Luz S. Fonacier, MD, FAAAAI⁴ and Dr. Iryna Voloshyna, PhD², ¹Section of Allergy and Clinical Immunology, Department of Medicine, Winthrop University Hospital, Mineola, NY, ²Winthrop Research Institute, Department of Medicine, Winthrop University Hospital, Mineola, NY, ³Division of Rheumatology, Allergy and Immunology, Department of Medicine, Winthrop University Hospital, Mineola, NY, ⁴Section of Allergy and Clinical Immunology, Department of Medicine, Winthrop University Hospital, Mineola, NY
- 195 Modulation Of Human Basophil Degranulation By Geranylgeranyl Compounds**
Dr. Yuko Nakase¹, Dr. Masao Yamaguchi¹, Dr. Naoya Sugimoto¹, Dr. Maho Suzukawa, MD², Dr. Hiroyuki Tamiya¹, Dr. Yasuhiro Kojima¹, Dr. Hisanao Yoshihara¹, Dr. Michio Kuramochi¹, Dr. Hidenori Arai¹, Dr. Hiroyuki Nagase¹ and Dr. Ken Ohta^{1,2}, ¹Teikyo University School of Medicine, Tokyo, Japan, ²National Hospital Organization Tokyo National Hospital, Tokyo, Japan
- 196 Variation In mRNA Expression Of GATA1 and PRG2 In Umbilical Cord Blood Following IL-5 Stimulation**
Ms. Vanessa N. Omana, MSc, Queen's University, ON, Canada, Mrs. Jenny Thiele, MSc, Queens University, Kingston, ON, Canada and Dr. Anne K. Ellis, MD, MSc FAAAAI, Departments of Medicine and Biomedical & Molecular Science, Queen's University, Kingston, ON, Canada
- 197 Mast Cells Drive Tissue Inflammation By Producing IL-33 That Orchestrates a Unique Basophil Phenotype**
Dr. Chia-Lin Hsu, PhD and Dr. Paul Bryce, PhD, Division of Allergy-Immunology, Department of Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL
- 198 Differential Regulation Of Pro-Inflammatory Cytokine Expression Of Airway Smooth Muscle Cells (ASM) By Insulin, Glucose, and Rosiglitazone**
Dr. Qura-Tul-Ain Rashid, MD, Allergy and Immunology, University of Texas Medical Branch, Dr. Lata Kaphalia, PhD, University of Texas Medical Branch, Galveston and Dr. William J. Calhoun, MD, FAAAAI, Allergy And Immunology, University of Texas Medical Branch, Galveston, TX

Role of Granulocytes and Mast Cells in Mechanisms of Allergic Disease

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 199 An Association Between Disease Severity and Levels Of Low-Density Granulocytes In The Peripheral Blood Mononuclear Cell Fraction Of Asthma Subjects**
Dr. Mary C. Tobin, M.D.^{1,2}, Dr. Jun Fu, PhD¹, Ms. Paige Adeli, RN¹ and Dr. Larry L. Thomas, PhD¹, ¹Rush University Medical

- Center, Chicago, IL, ²University Consultants in Asthma and Allergy, Chicago, IL
- 200 Asthma Severity and Expression Of CLC3 On Human Peripheral Blood and Nasal Lavage Eosinophils**
Devendra K. Agrawal, Rohit Gaurav and Agairndra K. Bewtra, Departments of Biomedical Sciences and Internal Medicine, and Center for Clinical and Translational Science, Creighton University School of Medicine, Omaha, NE
- 201 The Interaction Of Bifidobacteria With Human Blood Leukocytes**
Dr. Leonid P. Titov, MD, PhD¹, Dr. A.S. Murashko², Dr. Andrei Y. Hancharou³, Dr. N.A. Golovnyova³, Dr. E.I. Kolomiets³ and Prof. Lawrence M. DuBuske, MD, FAAAAI⁴, ¹Republican Scientific and Practical Center for Epidemiology and Microbiology, Minsk, Belarus, ²Republican Scientific And Practical Center for Epidemiology and Microbiology, Minsk, Belarus, ³Republican Scientific and Practical Center for Epidemiology and Microbiology, Minsk, Belarus, ⁴George Washington University School of Medicine, DC
- 202 Worldwide Impact Of LAD2 Mast Cell Line On Mast Cell Biology Research**
Arnold S. Kirshenbaum, MD, FAAAAI¹, Amy Petrik, PhD², Rosemary Walsh, PhD², Sury Vepa, PhD JD³ and Dean D. Metcalfe, MD, FAAAAI¹, ¹Laboratory of Allergic Diseases, NIAID, NIH, Bethesda, MD, ²Technology Transfer and Intellectual Property Office, NIAID, NIH, Bethesda, MD, ³Office of Technology Transfer, NIH, Rockville, MD
- 203 Non c-Kit Tyrosine Kinase Expression In Mast Cell Leukemia**
Dr. Joseph H. Butterfield, MD, FAAAAI, Mayo Clinic, Rochester, MN
- 204 Characterization Of Systemic Mastocytosis Patients Based Solely On The Minor Criteria**
Dr. Anupama Ravi, MD and Dr. Joseph H. Butterfield, MD, FAAAAI, Mayo Clinic, Rochester, MN
- 205 Basophil Activation Is a Reliable Biomarker Of Allergic Bronchopulmonary Aspergillosis (ABPA) In CF: One Year Results Of a Longitudinal Cohort Study**
Dr. Yael Gernez, MD, PhD^{1,2}, Mr. Jeffrey Waters², Mrs. Colleen Dunn², Zoe Davies², Dr. Rabindra Tirouvanziam³, Mrs. Cassie Everson², Dr. John Tamaresis², Prof. Leonore Herzenberg⁴ and Dr. Richard B. Moss, MD⁵, ¹Highland Hospital, San Francisco, ²Stanford University School of Medicine, Stanford, CA, ³Emory University School of Medicine, Department of Pediatrics, Atlanta, GA, ⁴stanford, School of Medicine, stanford, ⁵Stanford University School of Medicine, Palo Alto, CA
- 206 Exosomes Secretion By Eosinophils: A Possible Role In Asthma Pathogenesis**
Victoria Del Pozo, PhD¹, Carla Mazzeo¹, Ainara Rodriguez Marco², Mar Del Mar IERNANDEZ-NIETO³, Maria Paz Zafra⁴, Veronica Sanz¹ and Prof. Joaquin Sastre, MD, PhD, FAAAAI³, ¹IIS-FJD and CIBERES, ²IIS-FJD, ³Fundacion Jimenez Diaz, Madrid, Spain, ⁴IIS-Fundación Jiménez Díaz
- 207 CD49d-Expressing Neutrophils Are Found In The Nasal Lavage During An Acute Upper Respiratory Illness**
Dr. Jerome Sigua, MD, Dr. Mitchell H. Grayson, MD, FAAAAI, Dr. Pippa Simpson, PhD, Ms. Erika Buell, Mrs. Desire Hunter and Dr. Dorothy S. Cheung, MD, FAAAAI, Medical College of Wisconsin, Milwaukee, WI
- 208 Estradiol Has a Negative Impact On The Anaphylactic Response In Mice, Independent From Mast Cell Degranulation**
Valerie Hox, MD, PhD^{1,2}, Avanti Desai¹, Geethani Bandara, PhD¹, Alasdair M. Gilfillan, PhD¹, Dr. Michael Beaven, PhD³, Dr. Ana Olivera, PhD¹ and Dean D. Metcalfe, MD, FAAAAI¹, ¹Laboratory of Allergic Diseases, NIAID, NIH, Bethesda, MD, ²Laboratory of Clinical Immunology, Department of Microbiology and Immunology, KULeuven, Leuven, Belgium, ³Laboratory of Molecular Immunology, NHLBI, NIH, Bethesda, MD
- 209 Regulation Of Reactive Oxygen Species Production Involving Src Family Kinase In Siglec-8 Induced Eosinophil Cell Death**
Dr. Gen Kano, MD, PhD, Kyoto Prefectural University of Medicine, Kyoto, Japan, Bruce S. Bochner, MD, FAAAAI, Division of Allergy and Clinical Immunology, Northwestern University School of Medicine, Chicago, IL and Dr. Nives Zimmermann, MD, FAAAAI, Children's Hospital Medical Center, Cincinnati, OH
- 210 Ragweed Pollen Extract (RWPE)-Induces TLR4-Dependent Neutrophil Recruitment That Augments Allergic Airway Inflammation**
Dr. Koa Hosoki, MD, PhD, Dr. Leopoldo Aguilera-Aguirre, PhD, Prof. Istvan Boldogh, PhD, Dr. Qian Sun, PhD and Prof. Sanjiv Sur, MD, University of Texas Medical Branch, Galveston, TX
- 211 LAMP1 and CD63 Expression In Mouse Mast Cells and Human Basophils Rendered Hyporesponsive By Antigen/IgE-Mediated Activation and Desensitization**
Prof. Pedro Giavina-Bianchi, MD, PhD, FAAAAI¹, Dr. Matthieu Picard, MD², Dr. Joana Caiado, MD², Dr. Veronica Mezzano, MD² and Dr. Mariana C. Castells, MD, PhD, FAAAAI², ¹Clinical Immunology and Allergy Division, University of Sao Paulo, Boston, MA, ²Division of Rheumatology, Allergy and Immunology, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA
- 212 Vectorial Exposure and Fusion Of Secretory Granule Content At The Mast Cell Degranulatory Synapse**
Dr. Nicolas Gaudenzio¹, Mr. Regis Jouliat², Prof. Salvatore Valitutti² and Dr. Eric Espinosa², ¹Stanford University, Stanford, CA, ²INSERM U1043, Toulouse, France
- 213 Airway Tissue, But Not Luminal, Eosinophilia Is Related To The Magnitude Of Airway Hyperresponsiveness In a Transgenic Murine Model Of Cat Allergy**
Mr. Daniel M. Moldaver¹, Dr. Mantej S. Bharhani¹, Ms. Jennifer Wattie¹, Ms. Tarandeep Singh¹, Ms. Melissa Babra¹, Dr. Marianne van Hage, MD², Dr. Mark D. Inman, MD, PhD¹ and Dr. Mark Larché, PhD¹, ¹McMaster University, Hamilton, ON, Canada, ²Karolinska Institutet, Department of Medicina Solna, Clinical Immunology and Allergy Unit, Stockholm, Sweden
- 214 IgE-Mediated Mast Cell Responses Are Inhibited By Thymol-Mediated Activation-Induced Cell Death**
Dr. Joshua B. Wechsler, MD¹, Dr. Chia-Lin Hsu, PhD² and Dr. Paul Bryce, PhD², ¹Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ²Division of Allergy-Immunology, Department of Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL
- 215 Mechanisms Of Non-IgE-Mediated Uptake Of Antigen By Human Mast Cells**
Dr. Brant Ward, MD, PhD, Ms. Sahar Lotfi-Emran and Dr. Lawrence B. Schwartz, MD, PhD, FAAAAI, Virginia Commonwealth University, Richmond, VA
- 216 Human EMR1, An Eosinophil-Specific Surface Receptor Of Unknown Function, Is Modulated In Vivo and In Vitro**
Dr. Fanny Legrand¹, Dr. Nenad Tomasevic², Mrs. Michelle Makiya¹, Dr. Christopher Bebbington² and Dr. Amy D. Klion, MD¹, ¹National Institutes of Health, Bethesda, MD, ²Allakos
- 217 Cyclo-Oxygenase Inhibition Increases The Frequency Of CD49d+ Neutrophils In The Bronchoalveolar Lavage (BAL) During a Respiratory Viral Infection**
Ms. Jennifer A. Hass, Ms. Erika Buell, Mrs. Desire Hunter, Dr. Dorothy S. Cheung, MD, FAAAAI and Dr. Mitchell H. Grayson, MD, FAAAAI, Medical College of Wisconsin, Milwaukee, WI
- 218 High Blood Eosinophils Predict Reductions In Sputum Mast Cells and Lung Function In Response To Triamcinolone In Asthma**
Dr. Merritt L. Fajt, MD¹, Ms. Crystal Uvalle, BS¹, Mr. John Trudeau, BA¹ and Sally E. Wenzel, MD, FAAAAI², ¹The University of Pittsburgh Asthma Institute at UPMC and the University of Pittsburgh School of Medicine, Department of Pulmonary, Allergy

and Critical Care Medicine, ²The University of Pittsburgh Asthma Institute at UPMC and the University of Pittsburgh School of Medicine, Department of Pulmonary, Allergy and Critical Care Medicine, Pittsburgh, PA

- 219 Analyses Of IL-33-Producing Cells During Multiple Antigen Challenges In Murine Asthma**
Dr. Takeshi Nabe¹, Mr. Hiroki Wakamori¹, Ms. Anna Takiguchi¹, Mrs. Haruka Kida¹, Prof. Susumu Ohya¹, Dr. Nobuaki Mizutani², Prof. Shin Yoshino² and Prof. David Chaplin³, ¹Kyoto Pharmaceutical University, Kyoto, Japan, ²Kobe Pharmaceutical University, Kobe, Japan, ³University of Alabama at Birmingham, Birmingham, AL
- 220 Repeat Lipopolysaccharide Exposure Is Sufficient To Impair Viral Induced Pro-Atopic, CD49d Expressing Neutrophil Recruitment To The Lung**
Dr. Wei An, MD^{1,2}, Ms. Jennifer A. Hass², Ms. Erika Buell², Mrs. Desire Hunter², Dr. Dorothy S. Cheung, MD, FAAAAI² and Dr. Mitchell H. Grayson, MD, FAAAAI², ¹Froedtert Hospital, Milwaukee, WI, ²Medical College of Wisconsin, Milwaukee, WI
- 221 Important Role For Mast Cells But Not Basophils In An Adjuvant-Free Model Of Active Anaphylaxis In Mice**
Dr. Laurent L. Reber, PhD¹, Dr. Hajime Karasuyama, MD, PhD², Dr. Mindy Tsai, DMSc¹ and Dr. Stephen J. Galli, MD¹, ¹Stanford University School of Medicine, Stanford, CA, ²Tokyo Medical and Dentistry Graduate School, Tokyo, Japan
- 222 Functional Phenotype Of CD49d-Expressing Neutrophils Differs Between Viral Infection and TLR Stimulation**
Dr. Dorothy S. Cheung, MD, FAAAAI, Erika Buell, Mrs. Desire Hunter and Dr. Mitchell H. Grayson, MD, FAAAAI, Medical College of Wisconsin, Milwaukee, WI
- 223 Mast Cells Preferentially Migrate To Denatured Collagens Compared To Native Collagens**
Thomas Kaido¹, Robert T. Reid¹, Anthony Montgomery² and Richard Reid¹, ¹The Banck Center, San Diego, CA, ²University of California San Diego, San Diego, CA
- 224 Expression Of The Transcription Factor E4BP4 In Human Basophils**
Dr. Bettina M. Jensen, Mrs. Maria Gohr and Prof. Lars K. Poulsen, PhD FAAAAI, Allergy Clinic, Copenhagen University Hospital - Gentofte, Hellerup, Denmark
- 225 Cross-Talk Between Human Mast Cells and Bronchial Epithelial Cells In The Production Of Plasminogen Activator Inhibitor-1 Via TGF- β 1**
Dr. Seong Ho Cho, MD¹, Dr. Sun Hye Lee, PhD¹, Dr. Atsushi Kato, PhD², Dr. Tetsuji Takabayashi, MD¹, Dr. Soon Shin¹ and Dr. Robert P. Schleimer, PhD FAAAAI¹, ¹Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL

Hospital of Chicago, Chicago, IL; Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL

- 227 Epinephrine Use In Positive Oral Food Challenges Performed As Screening For Food Allergy Therapeutic Trials**
Ms. Sally A. Noone, RN MSN CCRC¹, Jaime Ross, RN², Hugh A. Sampson, MD, FAAAAI³ and Dr. Julie Wang, MD, FAAAAI², ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²The Icahn School of Medicine at Mount Sinai, New York, NY, ³Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY
- 228 School Experience With Food Allergy Reactions Highlight The Need For Training and Availability Of Epinephrine**
Mrs. Katherine A. Schmeissing, MS, R.N.¹, Christine Szychliński, APN, CPNP², Dr. Jacqueline Pongracic, MD, FAAAAI^{1,3} and Dr. Anne Marie Singh, MD⁴, ¹Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ²Division of Allergy & Immunology, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ³Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL
- 229 Early and Significant Improvement In The Intensity Of Allergic Rhinitis Symptoms After Treatment With Intranasal Ciclosporin 200 Mcg Qd: Open Trial In Mexican Population**
Francisco Javier Saynes-Marin¹, Araceli Arellano-Plancarte², Jazmin Chiu-Ugalde², Estefania Torres-Medina², Jose Antonio Vargas-Romero² and Juan Carlos López-Alvarenga^{2,3}, ¹Hospital Angeles Metropolitan, Mexico City, Mexico, ²Medical Department, Takeda México S.A. de C.V., Edo. de Méx., Mexico, ³Dirección de Investigación, Hospital General de México "Eduardo Liceaga", Mexico City, Mexico
- 230 Viral Induced Ibuprofen Sensitivity Leading To Anaphylaxis In Preschool Aged Children**
Mrs. Jodi A. Shroba, RN MSN CPNP and Ms. Kathryn Chojnacki, Children's Mercy Hospital
- 231 Anthropomorphic Variations According To Clinical Pattern In Cow's Milk Allergic Children**
Ms. Diana Colson¹, Prof. Nicolas Kalach, MD, Ph D², Ms. Pascale Soulaïnes³ and Prof. Christophe Dupont, MD, PhD^{3,4}, ¹Nutricia Nutrition Clinique, Saint Ouen, France, ²Hôpital Saint Vincent de Paul, Groupement des Hospitaux de l'Institut Catholique de Lille (GH-ICL), Lille, France, ³Hopital Necker Enfants Malades, Paris, France, ⁴DBV Technologies, Paris, France
- 232 Development and Piloting Of a Food Allergy Education Program For Parents Of Young Children**
Ms. Catherine Gillespie, RN MN CAE¹, Ms. Nancy Ross, RN CAE¹, Dr. Nestor F. Cisneros, MD FRCP² and Dr. Allan Becker, MD FRCP³, ¹Children's Hospital, Winnipeg, MB, Canada, ²University of Manitoba, Winnipeg, MB, Canada, ³University Of Manitoba, Winnipeg, MB, Canada
- 233 The Proficiency Status In The Use Of Inhaler and The Effect Of Education On Inhaler Technique**
Eun-Jung Jo, MD¹, Jung-Ha Mok, MD¹, Seung-Eun Lee, MD², Mi-Hyun Kim, MD¹, Kwangha Lee, MD, PhD¹, Ki-Uk Kim, MD, PhD¹, Min-Ki Lee, MD, PhD¹ and Hye-Kyung Park, MD, PhD¹, ¹Department of Internal Medicine, Pusan National University School of Medicine, Busan, South Korea, ²Department of Internal Medicine, Pusan National University Yangsan Hospital, Yangsan, South Korea
- 234 The Natural History Of Wheat Hypersensitivity In Thai Children**
Dr. Nunthana Siripipattanamongkol, MD, Mahidol university, Bangkok, Thailand
- 235 Development Of a Multidisciplinary Clinic To Improve Care Of Adolescent Asthmatic Patients** Ms. Lila C. Kertz, MSN RN CPNP AE-C, Washington University, St. Louis, MO

Allied Health Saturday Poster Session

2214

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

- 226 Tolerability Of Two Different Immunoglobulin Intravenous Product In Patients With Primary Immunodeficiency Disease**
Amanda Skoskiewicz, MSN, CPNP, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, Melanie M. Makhija, MD, Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL; Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL and Ramsay L. Fuleihan, MD, Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's

- 236 Food Allergy Herbal Formula-2 (FAHF-2) – Adherence To Treatment**
Jaime Ross, RN¹, Suzanne K. Carlisle, RN BSN CCRP², Maripaz Vazquez, RN, BSN, CDE³, Stacie M. Jones, MD⁴, Dr. Jacqueline Pongracic, MD, FAAAAI⁵ and Dr. Julie Wang, MD, FAAAAI¹, ¹The Icahn School of Medicine at Mount Sinai, New York, NY, ²University of Arkansas for Medical Sciences, Little Rock, AR, ³Division of Allergy and Immunology, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, Chicago, IL, ⁴Slot 512-13, University of Arkansas for Medical Sciences, Little Rock, AR, ⁵Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL
- 237 Adapting Waiting-List For Allergy By Health Care On-Line: Coordination Between Providers and Allergist In The Public System**
Dr. Inmaculada Sánchez-Machín, MD¹, Dr. Paloma Poza Guedes², Dr. Ruperto Gonzalez Perez¹, Dr. Yvelise Barrios, MD, PhD³ and Dr. Victor Matheu, MD¹, ¹Hospital del Tórax-Ofra, Sta Cruz de Tenerife, Spain, ²Hospital Ofra-Tórax, santa cruz de tenerife, Spain, ³Hospital Universitario de Canarias, Tenerife, Spain
- 238 Aerobiology Of Texas Panhandle and Efficiency Of AHPCO Technology As Air Purifier, Surface Sterilizer In Food Processing**
Dr. Nabarun K. Ghosh, PhD¹, Dr. Constantine K. Saadeh, MD, FAAAAI², Dr. Jeff Bennert, PhD CTN³ and Ms. Griselda Estrada, BS¹, ¹West Texas A&M University, Canyon, TX, ²Allergy ARTS ACCR, Amarillo, TX, ³AIR OASIS, Amarillo, TX

Novel Genetic Factors in Asthma

2601

Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

- 239 IL-33 and IL1RL1 Single Nucleotide Polymorphisms and Their Association With Asthma Among Puerto Ricans**
Dr. Javier A. Mendez, MD, Dr. Sylvette Nazario, MD, Dr. Angel Laureano, MD, Dr. Adriana Baez, PhD and Ms. Bianca Rivera, PhDc, University of Puerto Rico School of Medicine, San Juan, PR
- 240 Genetic Effect Of Single-Nucleotide Polymorphisms In The PPARGC1B Gene On Airway Hyperreactivity In Asthmatic Patients**
Dr. Jong-Sook Park, MD, Dr. Myung-Sin Kim, Dr. Sung-Woo Park, Dr. An-Soo Jang and Dr. Choon-Sik Park, MD, Soonchunhyang University Bucheon Hospital, Bucheon, South Korea
- 241 Polymorphisms In IL10, TGF β , TLR4, TLR8 and ADBR2 Genes Resulted Associated To Asthma In Brazilian Family Trio Study**
Mrs. Isabel Rugué Genov, MD, Federal University of São Paulo, São Paulo, Brazil, Mrs. Angela Falcai, PhD, ICB USP, São Paulo, Brazil, Dr. Lucila Camargo, MD, UNIFESP, São Paulo, Brazil, Dr. Marcia Mallozi, MD, Federal University of São Paulo, Brazil, Dr. Virginia Ferriani, MD, PhD, School of Medicine of Ribeirao Preto-University of Sao Paulo, Brazil, Prof. Alessandra Pontillo, PhD, University of São Paulo, Brazil, Prof. Antonio Condino-Neto, MD, PhD, Institute of Biomedical Sciences, Department of Immunology, University of São Paulo, Sao Paulo, Brazil and Prof. Dirceu Sole, MD, PhD, Federal University of Sao Paulo, Sao Paulo, Brazil
- 242 Genetic Variation Along The Histamine Pathway In Children With Allergic Vs. Non-Allergic Asthma**
Dr. Sara Anvari, MD¹, Dr. Carrie A. Vyhldal, PhD², Mo Rezaie-khaligh, MS², Dr. Hongying Dai, PhD² and Dr. Bridgette L. Jones, MD, FAAAAI^{1,2}, ¹Children's Mercy Hospital & Clinics, Division of Allergy, Asthma and Immunology, Kansas City, MO, ²Children's Mercy Hospital & Clinics, Division of Pediatric Clinical Pharmacology, Kansas City, MO
- 243 Association Of Polymorphism At The CD14 Promoter (CD14-C159T) With Atopic and Non-Atopic Asthma In Adults From Crimea, Ukraine**
Dr. Yuri Bisyuk¹, Prof. V.A. Beloglazov¹, Dr. A.I. Dubovyi¹, Dr.

L.K. Znamenska¹ and Prof. Lawrence M. DuBuske, MD, FAAAAI², ¹Crimean State Medical University, Ukraine, ²George Washington University School of Medicine, DC

Mechanisms and Immunotherapy

2602

Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

- 244 The Utility Of Anti-Pneumococcal Antibody Measurement In Patients With Primary Immunodeficiency Receiving Immunoglobulin**
Dr. Stephen Jolles, Dr. Adrian Heaps, Dr. Mo Moody and Dr. Rachel Jones, University Hospital of Wales, Cardiff, United Kingdom
- 245 Diagnostic Immunization With Bacteriophage Φ X 174 In Patients With Common Variable Immunodeficiency/Hypogammaglobulinemia**
Dr. Lauren Smith, MD¹, Dr. Rebecca H. Buckley, MD, FAAAAI¹ and Dr. Patricia L. Lugar, MD, MS², ¹Department of Pediatrics, Duke University Medical Center, Durham, NC, ²Duke University Medical Center, Durham, NC
- 246 Immunochip Study Reveals Regions On Chromosomes 2 and 6 May Contribute To The Spectrum Of CVID**
Dr. Tracy Hwangpo, MD/PhD¹, Ewa Szymanska, PhD¹, Mrs. Marsha Brand¹, Dr. Peter Gregerson, MD², Dr. Peter Burrows, PhD³, Dr. Elizabeth Brown, PhD⁴, Dr. Richard Reynolds, PhD⁵ and Dr. Harry Schroeder, MD/PhD⁶, ¹UAB, ²The Feinstein Institute for Medical Research, ³UAB, Department of Microbiology, ⁴UAB, Department of Epidemiology, ⁵UAB, Department of Medicine, ⁶UAB, Department of Medicine and Department of Microbiology, AL
- 247 Rule Of Different Memory Cells In Common Variable Immunodeficiency and Specific Antibody Deficiency**
Amer M. Khojah, MD, Umm Al Qura University, Makkah, Saudi Arabia; Inova Fairfax Hospital for children, Fall Church, VA, Oral Alpan, MD, Amerimmune, LLC, VA; O&O ALPAN, LLC and Ameera Bukhari, MS, Taif University, Saudi Arabia
- 248 Evaluation of a Novel Missense Activation-Induced Deaminase AID Mutation in a Child with Hyper IgM Syndrome: Is it a Pathogenic Mutation?**
Dr. Ottavia M. Delmonte, M.D., Pediatric Residency Program, Boston Children's Hospital, Harvard Medical School, Boston, MA, Dr. Feilong Meng, PhD, Howard Hughes Medical Institute, Program in Cellular and Molecular Medicine and Immune Disease Institute, Boston Children's Hospital, Department of Genetics, Harvard Medical School, Boston, MA, Dr. Frederick Alt, PhD, Howard Hughes Medical Institute, Program in Cellular and Molecular Medicine and Immune Disease Institute, Boston Children's Hospital, Department of Genetics, Harvard Medical School, Boston, MA, Dr. Luigi D. Notarangelo, MD, Division of Immunology, Boston Children's Hospital, Harvard Medical School, Boston, MA; The Manton Center for Orphan Disease Research, Boston Children's Hospital, Boston, MA and Dr. Jolan E. Walter, MD, PhD, Division of Allergy/Immunology, Massachusetts General Hospital for Children, Harvard Medical School, Boston, MA

Asthma Environmental Risk Factors and Infections

2603

Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

- 249 Surfactant Protein A (SP-A) Reduces Human Rhinovirus 16 (RV16)-Induced Inflammatory Responses In Bronchial Epithelial Cells and Inhibits Viral Replication In H1-HeLa Cells**
Sasipa Tanyaratsrisakul, PhD¹, Ying Wang, MD², Monica Kraft, MD², Mari Nakamura, MD¹ and Prof. Dennis R. Voelker, PhD¹,

- ¹Department of medicine, National Jewish Health, Denver, CO, ²Department of Medicine, Duke University Medical Center, Durham, NC
- 250 The Home Microbiome and Childhood Asthma**
Dr. Christina E. Ciaccio, MD, FAAAAI, Mr. Kevin Kennedy, MPH CIEC, Prof. Charles S. Barnes, PhD, Dr. Jay M. Portnoy, MD, FAAAAI and Dr. Lanny J. Rosenwasser, MD, FAAAAI, Children's Mercy Hospital, Kansas City, MO
- 251 Effect Of Prenatal Antioxidant Intake On Infants' Respiratory Infection**
Dr. Eun Lee¹, Seo Ah Hong², Dr. Song I Yang, MD¹, Prof. Kyung Won Kim, MD, PhD³, Prof. Youn Ho Shin⁴, Kang Mo Ahn⁵, Dr. Soo-Jong Hong, MD, PhD¹ and And the COCOA study group, ¹Department of Pediatrics, Childhood Asthma Atopy Center, Research Center for Standardization of Allergic Diseases, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, ²Asan Institute for Life Sciences, University of Ulsan College of Medicine, Seoul, Korea, ³Department of Pediatrics, Severance Children's Hospital, College of Medicine, Yonsei University, Seoul, Korea, Seoul, South Korea, ⁴Department of Pediatrics, CHA Medical Center, CHA University School of Medicine, Seoul, Korea, South Korea, ⁵Department of Pediatrics, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, South Korea
- 252 Epidermal Growth Factor Receptor (EGFR) Mediates Cell Fusion and Infectivity Of Respiratory Syncytial Virus (RSV)**
Sujin Lee^{1,2}, Michael G. Currier^{1,2}, Anne L. Hotard^{1,2}, Jia Meng^{1,2}, Carla Pretto^{1,2}, Ultan F. Power³, Remi Villenave³, Michael D. Shields^{3,4}, Michael H. Chi⁵, R. Stokes Peebles⁶ and Martin L. Moore^{1,2}, ¹Department of Pediatrics, Emory University, GA, ²Children's Healthcare of Atlanta, GA, ³Centre for Infection and Immunity, School of Medicine, Dentistry and Biomedical Science, Queens University Belfast, Northern Ireland, ⁴The Royal Belfast Hospital for Sick Children, Northern Ireland, ⁵Allergy, Pulmonary, and Critical Care Medicine; Department of Medicine; Vanderbilt University School of Medicine, TN, ⁶Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN
- 253 Cluster Analysis Of An Inner-City Cohort Of Infant Wheezers**
Dr. Monica B. Reddy, MD¹, Andrew H. Liu, MD², Allison Schiltz^{1,2}, Mrs. Anna Forssen, MS² and Dr. Mary D. Klinnert, PhD^{1,2}, ¹University of Colorado School of Medicine, ²National Jewish Health, Denver, CO

Atopic Dermatitis

2604

Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

- 254 A Randomized, Multi-Center, NIH/NIAID Funded Study To Assess The Immunogenicity Of Fluzone® Intradermal and Intramuscular Vaccines In Atopic Dermatitis**
Donald Y.M. Leung, MD, PhD, FAAAAI¹, Lisa A. Beck, MD, FAAAAI², Dr. Jon M. Hanifin, MD, FAAAAI³, Dr. Lynda C. Schneider, MD, FAAAAI⁴, Dr. Amy Paller, MD⁵, Dr. Gloria David, PhD⁶, Ms. Katherine Monti⁶, Mr. Brett Jepson⁶ and Dr. Adriana Weinberg, MD⁷, ¹National Jewish Health, Denver, CO, ²University of Rochester Medical Center, Rochester, NY, ³Oregon Health & Science University, Portland, OR, ⁴Boston Children's Hospital, Boston, MA, ⁵Northwestern University Feinberg School of Medicine, Chicago, IL, ⁶Rho, Inc., Chapel Hill, NC, ⁷University of Colorado Health Sci Ctr., Denver, CO
- 255 Which Infants With Eczema Are At Risk Of Food Allergy? Results From A Population Based Study**
Dr. Jana K. Eckert, PhD¹, Dr. Pamela Martin, PhD¹, Dr. Adrian Lowe, PhD^{1,3}, Dr. Jennifer Koplin, PhD¹, Prof. Shyamali Dharmage, MD, PhD^{1,3}, Prof. Lyle Gurrin, PhD^{1,3}, Prof. Mimi L. K. Tang, MD, PhD, FAAAAI⁴, Prof. Anne-Louise Ponsonby, PhD¹, Dr. Melanie Matheson, PhD³, Dr. David Hill, MBBD, FRACP¹ and Prof. Katrina Jane Allen, MD, PhD, FAAAAI^{1,5}, ¹Murdoch Childrens Research Institute, Victoria, Australia, ³University of Melbourne, Victoria, Australia, ⁴The University of Melbourne, Melbourne, Australia, ⁵Royal Children's Hospital, Victoria, Australia
- 256 Exome Chip Genotyping Reveals Association With PDE4C and Atopic Dermatitis In Populations Of European and African Descent**
Nicholas M. Rafaels¹, Lili Huang, MPH¹, Donald Y.M. Leung, MD, PhD, FAAAAI², Lisa A. Beck, MD, FAAAAI³, Dr. Candelaria I. Vergara, MD, PhD¹, Dr. Mark Boguniewicz, MD, FAAAAI², Dr. Tissa Hata, MD⁴, Dr. Lynda C. Schneider, MD, FAAAAI⁵, Dr. Jon M. Hanifin, MD, FAAAAI⁶, Dr. Richard Gallo, MD, PhD⁷, Dr. Li Gao, MD, PhD¹, Dr. Ingo Ruczinski, PhD⁸, Dr. Rasika A. Mathias, ScD¹ and Dr. Kathleen C. Barnes, PhD FAAAAI¹, ¹Division of Allergy and Clinical Immunology, Department of Medicine, Johns Hopkins University, Baltimore, MD, ²National Jewish Health, Denver, CO, ³University of Rochester Medical Center, Rochester, NY, ⁴University of California, San Diego, San Diego, CA, ⁵Boston Children's Hospital, Boston, MA, ⁶Oregon Health & Science University, Portland, OR, ⁷Division of Dermatology, University of California, San Diego, San Diego, CA, ⁸Johns Hopkins University School of Public Health, Baltimore, MD
- 257 Exploring a Role for Laminin Proteins in the Pathogenesis of Atopic Dermatitis**
Erin J. Klaffky, MD, PhD, Rachana Agrawal, PhD and Judith A. Woodfolk, MBChB, PhD, FAAAAI, University of Virginia, Charlottesville, VA
- 258 Thymic Stromal Lymphopoietin and Interleukin-33 Promote Skin Inflammation and Containment Of Vaccinia Virus In A Mouse Model Of Atopic Dermatitis**
Dr. Michiko K. Oyoshi, PhD, MSc, Ms. Jacqueline Beaupré, Mr. Nicholas Venturelli and Raif S. Geha, MD, Division of Immunology, Boston Children's Hospital, Harvard Medical School, Boston, MA

Health Disparities

2605

Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

- 259 What Really Happens In The Home: The Medication Environment Of Urban, Minority Youth**
Dr. Molly Martin, MD, MAPP and Andrea A Pappalardo, MD, Rush University Medical Center, Chicago, IL
- 260 Young, African American Adults With Asthma: What Matters To Them?**
Dr. Aimee L. Speck, M.D.¹, Dr. Belinda Nelson, PhD², Mrs. S. Olivia Jefferson, MSW³ and Dr. Alan P. Baptist, MD, MPH FAAAAI¹, ¹University of Michigan, Division of Allergy and Clinical Immunology, Ann Arbor, MI, ²University of Michigan, Health Behavior and Health Education, School of Public Health, Ann Arbor, MI, ³University of Michigan, Department of Health Behavior and Health Education, School of Public Health, Ann Arbor, MI
- 261 Language Disparities Among Minority Patients with Poor Asthma Control**
Dr. Jose R. Zaragoza-Buxo, MD, Penn State University College of Medicine, Hershey, PA and Dr. Efen L. Rael, MD, FAAAAI, Allergy/Immunology, Penn State University College of Medicine, Hershey, PA
- 262 Race/Ethnicity and SES Are Predictors Of Allergic Sensitization To Environmental and Food Allergens**
Dr. Amina Abdeldaim, MD¹, Dr. Supinda Bunyavanich, MD, MPH², Ms. Sheryl Rifas-Shiman, MPH³, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI⁴, Dr. Diane R. Gold, MD, MPH⁵, Dr. Carlos

- Camargo Jr., MD, DrPH⁶, Dr. Emily Oken, MD⁷, Dr. Matthew Gillman, MD, SM³ and Dr. Augusto A. Litonjua, MD, MPH⁸, ¹Channing Division of Network Medicine, Brigham and Women's Hospital, MA, ²Division of Pediatric Allergy & Immunology, Department of Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ³Harvard Medical School, Boston, MA, ⁴Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, ⁵Channing Laboratory, Brigham and Women's Hospital, Boston, MA, ⁶Department of Emergency Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, ⁷Harvard Medical School, ⁸Channing Division of Network Medicine, Brigham and Women's Hospital, Boston, MA
- 263 Unrecognized Allergic Rhinoconjunctivitis and Allergic Sensitization Among Latino Youth (GALA II Study)**
Ulysses Burley, MPH¹, Dr. Joy Hsu, MD, MScF², Duanny Alva, MD-IMG, MPH¹, Ms. Elizabeth Nguyen, BS³, Ms. Lindsey Roth, MA⁴, Dr. Joshua Galanter, MD⁴, Dr. Sam Oh, PhD, MPH⁴, Ms. Celeste Eng, BS⁴, Mr. Fred Lurmann, MS⁵, Dr. Rajesh Kumar, MD, MS, FAAAAI⁶, Dr. Harold J. Farber, MD, MSPH⁷, Dr. Denise Seribrisky, MD⁸, Dr. Luisa Borrell, DDS, PhD⁹, Dr. Saunak Sen, PhD¹⁰, Dr. William Rodriguez-Cintron, MD¹¹, Dr. Jose Rodriguez-Santana, MD¹², Dr. Esteban Gonza Burchard, MD, MPH⁴ and Prof. Pedro C. Avila, MD, FAAAAI¹, ¹Feinberg School of Medicine, Northwestern University, Chicago, IL, ²Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Department of Medicine, University of California, San Francisco, California, San Francisco, CA, ⁴Department of Medicine, University of California, San Francisco, San Francisco, CA, ⁵Sonoma Technology, Inc., Petaluma, CA, ⁶Pediatric allergy, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ⁷Baylor College of Medicine and Texas Children's Hospital, Houston, TX, ⁸Pediatric Pulmonary Division, Jacobi Medical Center, Bronx, NY, ⁹Department of Health Sciences, Graduate Program in Public Health, Lehman College, City University of New York, Bronx, NY, ¹⁰Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA, ¹¹Veterans Caribbean Health Care System, San Juan, PR, ¹²Centro de Neumologia Pediatrica, San Juan, PR
- 264 The Nasal NO Response To External Acoustic Energy: A Pilot Study**
Dennis Shusterman, MD, MPH, University of California, San Francisco, Richmond, CA
- 265 Flagellin/Toll-Like Receptor 5 Induces Interleukin-17C In Human Nasal Epithelia**
Dr. Hyun Jin Min¹, Dr. Tae-Hoon Kim², Su-Yeon Choi², Prof. Joo-Heon Yoon^{1,2} and Prof. Chang-Hoon Kim^{1,3}, ¹Department of Otorhinolaryngology, Yonsei University College of Medicine, Seoul, South Korea, ²Research Center for Human Natural Defense System, Yonsei University College of Medicine, Seoul, South Korea, ³The Airway Mucus Institute, Yonsei University College of Medicine, Seoul, South Korea
- 266 Phenotyping Non-Allergic and Local Allergic Rhinitis**
Dr. Carmen Rondon, MD, PhD¹, Dr. Paloma Campo, MD, PhD¹, Dr. Esther Barrionuevo Sanchez, MD¹, Ms. Cristina De Leiva Molina¹, Dr. Leticia Herrero Lifona, MD, PhD¹, Ms. Maria Auxiliadora Guerrero¹, Dr. Francisca Gómez, MD, PhD¹, Dr. Natalia Blanca-López, MD, PhD², Dr. Gabriela Canto, MD, PhD² and Dr. Miguel Blanca, MD, PhD¹, ¹Allergy Service, Carlos Haya Hospital, Málaga, Spain, ²Allergy Service, Infanta Leonor Hospital, Madrid, Spain
- 267 Role Of Basophil Activation Test For Identifying Subjects With Local Allergic Rhinitis**
Dr. Paloma Campo, MD, PhD¹, Dr. Carmen Rondon, MD, PhD¹, Dr. Enrique Gómez, PhD², Dr. Esther Barrionuevo Sanchez¹, Mrs. Luisa Galindo, RN¹, Mr. JA Huertas¹, Dr. Cristobalina Mayorga, PhD² and Dr. Miguel Blanca, MD, PhD¹, ¹Allergy Service, Carlos Haya Hospital, Málaga, Spain, ²Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - IBIMA, Málaga, Spain
- 268 Does Serum Leptin Differ Between Patients With Rhinitis Of Allergic Vs Nonallergic Aetiology?**
Prof. Ayse Fusun Kalpaklioglu, MD and Dr. Ayse Baccioglu, MD, Kirikkale University Faculty of Medicine Department of Allergic Diseases
- Mechanisms of Steroid and Arachidonic Acid Pathways in Allergic Disease**
2607
Saturday, March 1st, 2014, 2:00 PM - 3:15 PM
- 269 LTC4, But Not LTD4 Or LTE4, Activates Platelets Through a CysLT2R and P2Y12 Receptor-Dependent Pathway**
Dr. Joshua A. Boyce, MD, FAAAAI^{1,2}, Dr. Tao Liu, PhD^{1,2} and Dr. Hannah Cummings, PhD^{1,2}, ¹Harvard Medical School, Boston, MA, ²Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA
- 270 Predictors Of Response To Glucocorticoids In Hypereosinophilic Syndromes**
Paneez Khoury, MD¹, Annalise Abiodun, RN¹, Kelli Williams, MD, M.P.H.¹, JeanAnne Ware, CRNP¹, Nicole Holland-Thomas, MSN, RN² and Dr. Amy D. Klion, MD¹, ¹National Institutes of Health, Bethesda, MD, ²SAIC-Frederick Inc., Bethesda, MD
- 271 Differential Proteomic Analysis Of Eosinophils From Patients With Glucocorticoid Responsive Or Resistant Hypereosinophilic Syndrome**
Konrad Pazdrak, MD, PhD¹, Paneez Khoury, MD², Kizhake V. Soman, PhD¹, Nicole Holland-Thomas, MSN, RN³, Mrs. Michelle Makiya², Christof Straub, PhD¹, Zheng Wu, PhD¹, Dr. Amy D. Klion, MD² and Alexander Kurosky, PhD¹, ¹University of Texas Medical Branch, Galveston, TX, ²National Institutes of Health, Bethesda, MD, ³SAIC-Frederick Inc., Bethesda, MD
- 272 Glucocorticoid Receptor- α Up-Regulation In C57BL/6 Diet-Induced Obese Mice With House Dust Mite-Mediated Asthma**
Dr. Jennifer Diaz, MD^{1,2}, Dr. Malvika Solanki, MBBS, MPH³, Dr. Xiangying Xue, MD³, Prodyot Chatterjee, PhD³, Dr. Madhu Gupta, MBBS³, Dr. Vincent R. Bonagura, MD, FAAAAI⁴ and Christine Metz, PhD³, ¹Feinstein Institute for Medical Research, Manhasset, NY, ²Allergy and Immunology, North Shore-LIJ Health System, Great Neck, NY, ³Feinstein Institute for Medical Research, NY, ⁴Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY
- 273 Reduced EP2 Receptor Expression Accounts For Prostaglandin E2 Resistance In Nasal Polyp Fibroblasts From Patients With Aspirin Exacerbated Respiratory Disease; Possible Role For Histone Acetylation In Control Of EP2 Receptor Expression**
Dr. Katherine N. Cahill, MD^{1,2}, Mr. Derek Thibault³, Dr. Benjamin A. Raby, MD, MPH³, Dr. Andrea Baccarelli, MD, MPH PhD⁴, Dr. Neil Bhattacharyya, MD^{2,3}, Dr. Joshua A. Boyce, MD, FAAAAI^{1,2} and Dr. Tanya M. Laidlaw, MD, FAAAAI^{1,2}, ¹Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA, ²Harvard Medical School, Boston, MA, ³Brigham and Women's Hospital, Boston, MA, ⁴Harvard School of Public Health, Boston, MA

Bronchoprovocation and Asthma Comorbidities

3201

Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 274 Association Between Body Mass Index (BMI) and Fraction Of Exhaled Nitric Oxide (FeNO) Levels In The National Health and Nutrition Examination Survey (NHANES) 2007-2010**
Dr. Sindhura Gogineni, MD, Dr. Joseph Espiritu and Dr. Aditya Uppalapati, MD, St. Louis University, St. Louis, MO **275 Daily Global Stress Is Associated With Nocturnal Awakenings Due To Asthma In School-Age Children**
Dr. Caroline C. Horner, MD, FAAAAI¹, Courtney Dula, MS¹, Dr. Leonard B. Bacharier, MD, FAAAAI², Dr. Jane Garbutt, MBChB¹, Dr. Robert C. Strunk IV, MD, FAAAAI¹, Mr. Carlos Gonzalez, MS¹, Ms. Elena Deych, MS¹ and Dr. William Shannon, PhD¹, ¹Washington University School of Medicine, Saint Louis, MO, ²Department of Pediatrics, Washington University School of Medicine and St. Louis Children's Hospital, Saint Louis, MO
- 276 A Seven Minute High Intensity Workout Is Well Tolerated In Adults With Asthma and Results In Decreased Salivary Leukotrienes**
Dr. Katherine G. Conner, MD¹, Dr. Meaghan Misiash, M.D.¹, Dr. Maria Talamo², Ms. Caitlin Champion¹, Julie McDaniel¹, Dr. Jun Fu, PhD¹ and James N Moy, MD^{1,2}, ¹Rush University Medical Center, Chicago, IL, ²John H. Stroger Hospital of Cook County, Chicago, IL
- 277 Obesity and Depression Affecting Asthma Morbidity: An Analysis Of Montefiore Asthma Center's Poorly Controlled Asthmatics**
Dr. Sunit Jariwala, MD¹, Dr. Jennifer Toh, MD¹ and Dr. Sumita Sinha, MD², ¹Albert Einstein/Montefiore Medical Center, New York, NY, ²Albert Einstein/Montefiore Medical Center, Bronx, NY
- 278 Psycho Social Stresses and Asthma Morbidity In Children**
Dr. Ejaz Yousef, MD FAAAAI, Marshfield Clinic, Marshfield, WI; Marshfield Clinic, Marshfield, WI
- 279 Does The Sinusitis Affect Bronchial Hyperresponsiveness In Asthmatic Children ?**
Chikako Motomura, Dr. Hiroshi Odajima, Yuko Amimoto, Rintaro Ono, Keisuke Watanuki, Yoko Murakami, Naohiko Taba, Satoshi Honjho and Sankei Nishima, Fukuoka National Hospital, Fukuoka, Japan
- 280 Allergic Bronchopulmonary Mycosis. Are We Overdiagnosing In Cape Town, South Africa?**
Dr. Tamara Kerbelker, MBChB, Red Cross War Memorial Children's Hospital, Cape Town, South Africa
- 281 Risk Factors For Postoperative Pulmonary Complications After Noncardiothoracic Surgery In Adult Asthma Patients**
Seung-Eun Lee, MD^{1,2}, Eun-Jung Jo, MD², Hye-Kyung Park, MD², Woo-Hyeon Cho, MD^{1,2}, Doo-Soo Jeon, MD^{1,2} and Prof. Yun-Seong Kim, MD^{1,2}, ¹Respiratory and allergy clinic, Pusan National University Yangsan Hospital, South Korea, ²Department of Internal Medicine, Pusan National University School of Medicine, South Korea
- 282 Rates Of Comorbidities Are Related To Level Of Asthma Control**
Dr. Mark Stevens, MD¹, Dr. Jeffrey R. Stokes, MD, FAAAAI¹, Ryan Walters, M.S.², Dr. Michael Schatz, MD, MS, FAAAAI³ and Dr. Thomas B. Casale, MD, FAAAAI⁴, ¹Creighton University Medical Center, Omaha, NE, ²Creighton University, ³Kaiser Permanente Southern California, San Diego, CA, ⁴Univeristy Of South Florida Morsani College Of Medicine, Tampa, FL
- 283 Rates Of Co-Morbidities Are Related To Asthma Severity**
Dr. Jeffrey R. Stokes, MD, FAAAAI¹, Dr. Mark Stevens, MD¹, Ryan Walters, M.S.², Dr. Michael Schatz, MD, MS, FAAAAI³ and Dr. Thomas B. Casale, MD, FAAAAI⁴, ¹Creighton University Medical Center, Omaha, NE, ²Creighton University, ³Kaiser Permanente Southern California, San Diego, CA, ⁴Univeristy Of South Florida Morsani College Of Medicine, Tampa, FL
- 284 Exercise-Induced Bronchospasm In Adolescents: Characteristics Of Lung Function and Accuracy Of Symptoms**
Mr. Daniel Andrade Hygido¹, Ms. Beatriz Schwinden¹, Dr. Paulo Freitas¹ and Dr. Jane Da Silva^{1,2}, ¹University of Southern Santa Catarina - UNISUL, Tubarão - SC, Brazil, ²Hospital Universitário Polydoro Ernani de São Thiago - HU/UFSC, Florianópolis - SC, Brazil
- 285 Variation Of Bronchial Hyperresponsiveness According To Age and Gender In Pediatric Population**
Dr. Young Ho Kim, MD¹, Dr. Eun Lee, MD², Dr. Song I Yang, MD², Dr. Young Ho Jung, MD², Dr. Hyung Young Kim, MD³, Dr. Ju-Hee Seo, MD⁴, Dr. Byoung-Ju Kim, MD, PhD⁵, Dr. Hyo-Bin Kim, MD, PhD⁶, Prof. So Yeon Lee, MD, PhD⁷, Prof. Dae Jin Song, MD, PhD⁸, Prof. Woo Kyung Kim, MD, PhD⁹, Dr. Gwang Cheon Jang, MD, PhD¹⁰, Prof. Jung Yeon Shim, MD, PhD¹¹, Prof. Jinho Yu, MD, PhD², Prof. Soo-Jong Hong, MD, PhD¹² and Dr. Ji-Won Kwon, MD¹³, ¹Department of Pediatrics, Seoul National University Bundang Hospital, Seongnam, South Korea, South Korea, ²Childhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea, ³Department of Pediatrics, Kosin University Gospel Hospital, Kosin University College of Medicine, Seoul, South Korea, ⁴Department of Pediatrics, Korea Cancer Center Hospital, Seoul, South Korea, ⁵Department of Pediatrics, Haeundae Paik Hospital, Inje University College of Medicine, Busan, South Korea, ⁶Department of Pediatrics, Inje University Sanggye Paik Hospital, Seoul, South Korea, ⁷Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, ⁸Department of Pediatrics, Korea University Guro Hospital, Seoul, South Korea, ⁹Department of Pediatrics, Seoul Paik Hospital, Inje University College of Medicine, Seoul, South Korea, ¹⁰Department of Pediatrics, National Health Insurance Corporation Ilsan Hospital, Seoul, South Korea, ¹¹Department of Pediatrics, Kangbuk Samsung Hospital, Sungkyunkwan University College of Medicine, Seoul, South Korea, ¹²Research Center for Standardization of Allergic Disease, University of Ulsan College of Medicine, Seoul, Korea, ¹³Department of Pediatrics, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, South Korea
- 286 Nasal Provocation Test In The Diagnosis Of Mite Allergic Rhinitis : Standard Or Rapid ?**
Prof. Frederic de BLAY, Dr. Celine Lutz, Dr. Mael Bellier, Prof. Jean Jacques Braun and Mrs. Brigitte Sbinne, CHRU Strasbourg, France
- 287 Nocturnal Asthma In Latino Children Is Associated With Severe Disease and Allergenic Triggers (GALA II Study)**
Dr. Geeta Bhargave, MD¹, Dr. Joy Hsu, MD, MSCI¹, Ms. Elizabeth Nguyen, BS², Ms. Lindsey Roth, MA³, Dr. Joshua Galanter, MD³, Dr. Sam Oh, PhD, MPH³, Ms. Celeste Eng, BS³, Mr. Fred Lurmann, MS⁴, Dr. Harold J. Farber, MD, MSPH⁵, Dr. Denise Seribrisky, MD⁶, Dr. Luisa Borrell, DDS, PhD⁷, Dr. Saunak Sen, PhD⁸, Dr. William Rodriguez-Cintron, MD⁹, Dr. Jose Rodriguez-Santana, MD¹⁰, Dr. Esteban Gonza Burchard, MD, MPH³ and Prof. Pedro C. Avila, MD, FAAAAI¹, ¹Feinberg School of Medicine, Northwestern University, Chicago, IL, ²Department of Medicine, University of California, San Francisco, California, San Francisco, CA, ³Department of Medicine, University of California, San Francisco, San Francisco, CA, ⁴Sonoma Technology, Inc., Petaluma, CA, ⁵Baylor College of Medicine and Texas Children's Hospital, Houston, TX, ⁶Pediatric Pulmonary Division, Jacobi Medical Center, Bronx, NY, ⁷Department of Health Sciences, Graduate Program in Public Health, Lehman College, City University of New York, Bronx, NY, ⁸Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA, ⁹Veterans Caribbean Health Care System, San Juan, PR, ¹⁰Centro de Neumologia Pediatrica, San Juan, PR

SUNDAY

Biomarkers and Asthma Control I

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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 288 Nasal Challenge With 50mgs Of L-Aspirin For Diagnosis Of ASA Exacerbated Respiratory Disease**
Dr. Jose Manuel Reyna Guerra, MD, National Institute Of Respiratory Diseases, Distrito Federal, Mexico
- 289 Clinical Usefulness Of Bronchial Mannitol Provocation Test In Children With Asthma Symptoms**
Dr. Young A. Park, MD¹, Hyun Bin Park, MD¹, Dr. Yoon Hee Kim, MD¹, Dr. Hee Seon Lee, MD¹, Dr. Yoon Ki Han, MD¹, Dr. Min Jung Kim, MD¹, Hye Mi Jee, MD², Prof. Kyung Won Kim, MD, PhD¹, Prof. Myung Hyun Sohn, MD, PhD¹ and Prof. Kyu-Earn Kim, MD, PhD¹, ¹Department of Pediatrics, Severance Children's Hospital, College of Medicine, Yonsei University, Seoul, Korea, Seoul, South Korea, ²Department of Pediatrics, CHA University School of Medicine, Seongnam, Korea, South Korea
- 290 Salivary Alpha Amylase Activity Is a Potential Surrogate Biomarker For Inhaled Beta-2 Agonist Responsiveness**
Andrea A Pappalardo, MD^{1,2}, Jamie H Kiehm, MD¹, Caitlin M Campion¹, Dr. Larry L. Thomas, PhD¹ and James N Moy, MD^{1,2}, ¹Rush University Medical Center, Chicago, IL, ²John H. Stroger Hospital of Cook County, Chicago, IL
- 291 Feno Decreases Significantly During Improved Symptom Control In Pediatric Patients After Acute Asthma Exacerbations Necessitating Emergency Department Care**
Dr. Eric M. Karlin, MD, Division of Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN, Tebeb Gebretsadik, MPH, Department of Biostatistics, Vanderbilt University School of Medicine, Nashville, TN; Division of Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, and Center for Asthma and Environmental Sciences Research, Vanderbilt University School of Medicine, Nashville, TN, Dr. Emily W. Langley, MD, Division of Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee, Dr. Tina V. Hartert, MD, MPH, Vanderbilt University School of Medicine, Nashville, TN, Dr. R. Stokes Peebles Jr., MD, FAAAAI, Division of Allergy, Pulmonary and Critical Care Medicine, Vanderbilt University School of Medicine, Nashville, TN and Dr. Donald H. Arnold, MD, MPH, Center for Asthma and Environmental Health Sciences Research, Vanderbilt University School of Medicine, Nashville, TN; Departments of Pediatrics and Emergency Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee
- 292 Risk Factors Of High Feno Levels & Cut-Off Value Of Feno In Elementary School Children With Asthma**
Dr. Hyun Ju Cho, MD¹, Dr. Young-Ho Ho Jung, MD^{1,2}, Dr. Eun Lee, MD^{1,3}, Dr. Song I Yang, MD^{1,4}, Dr. Hyung Young Kim, MD^{4,5}, Dr. Ju-Hee Seo, MD^{6,7}, Dr. Ji-Won Kwon, MD^{4,8}, Dr. Byoung-Ju Kim, MD, PhD^{9,10}, Dr. Hyo-Bin Kim, MD, PhD^{11,12}, Prof. So Yeon Lee, MD, PhD^{12,13}, Prof. Dae Jin Song, MD, PhD^{4,14}, Prof. Woo-Kyung Kim, MD, PhD^{2,15}, Dr. Gwang Cheon Jang, MD, PhD^{4,16}, Prof. Jung Yeon Shim, MD, PhD^{4,17} and Dr. Soo-Jong Hong, MD, PhD^{1,2}, ¹Childhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea, ²Research Center for Standardization of Allergic Disease, Seoul, South Korea, ³childhood Asthma atopy center, asan medical center, University of Ulsan College of Medicine, South Korea, ⁴Research Center for Standardization of Allergic Diseases, Seoul, South Korea, ⁵Department of Pediatrics, Kosin University Gospel Hospital, Kosin University College of Medicine, Seoul, South Korea, ⁶Department of Pediatrics, Korea Cancer Center Hospital, Seoul, South Korea, ⁷Department of pediatrics, Korea Cancer Center Hospital, South Korea,

- ⁸Department of Pediatrics, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, South Korea, ⁹Department of Pediatrics, Hae-undae Paik Hospital, Inje University College of Medicine, Busan, South Korea, ¹⁰Department of Pediatrics, Hae-undae Paik Hospital, Inje University College of Medicine, ¹¹Department of Pediatrics, Inje University Sanggye Paik Hospital, Seoul, South Korea, ¹²Research Center for Standardization of Allergic Diseases, Seoul, South Korea, South Korea, ¹³Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, ¹⁴Department of Pediatrics, Korea University Guro Hospital, Seoul, South Korea, ¹⁵Department of Pediatrics, Seoul Paik Hospital, Inje University College of Medicine, Seoul, South Korea, ¹⁶Department of Pediatrics, National Health Insurance Corporation Ilsan Hospital, Seoul, South Korea, ¹⁷Department of Pediatrics, Kangbuk Samsung Hospital, Sungkyunkwan University College of Medicine, Seoul, South Korea
- 293 Metabolomic Profiles Of Exhaled Breath Condensate In Asthmatics**
Dr. Sandra Ho, MD¹, Dr. Bruce Luxon, PhD¹, Dr. Wendy Baker, PhD¹, Dr. Heidi Spratt, PhD¹, Dr. Rohit Divekar, MBBS, PhD², Emily Aaron¹ and Dr. William J. Calhoun, MD, FAAAAI¹, ¹Institute of Translational Sciences, University of Texas Medical Branch, Galveston, TX, ²Division of Allergic Diseases, Mayo Clinic, Rochester, MN
- 294 Extended Nitric Oxide Analysis and Bronchial Hyperresponsiveness In Children With Asthma According To Atopy**
Dr. Yoon Hee Kim, MD, Dr. Min Jung Kim, MD, Dr. Hee Seon Lee, MD, Dr. Yoon Ki Han, MD, Dr. Young A. Park, MD, Prof. Kyu-Earn Kim, MD, PhD, Prof. Kyung Won Kim, MD, PhD and Prof. Myung Hyun Sohn, MD, PhD, Department of Pediatrics, Severance Children's Hospital, College of Medicine, Yonsei University, Seoul, Korea, Seoul, South Korea
- 295 Reference Values and Determinants Of Fractional Concentration Of Exhaled Nitric Oxide (FeNO) In Healthy Children**
Dr. Young Ho Jung, MD^{1,2}, Dr. Hyun Ju Cho, MD¹, Dr. Ji-Won Kwon, MD^{2,3}, Dr. Song I Yang, MD^{1,2}, Dr. Eun Lee, MD^{1,4}, Dr. Hyung Young Kim, MD^{2,5}, Dr. Ju-Hee Seo, MD^{6,7}, Dr. Byoung-Ju Kim, MD, PhD^{8,9}, Dr. Hyo-Bin Kim, MD, PhD^{9,10}, Prof. So Yeon Lee, MD, PhD^{9,11}, Prof. Dae Jin Song, MD, PhD^{2,12}, Prof. Woo Kyung Kim, MD, PhD^{2,13}, Dr. Gwang Cheon Jang, MD, PhD^{2,14}, Prof. Jung Yeon Shim, MD, PhD^{2,15} and Prof. Soo-Jong Hong, MD, PhD^{2,16}, ¹Childhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea, ²Research Center for Standardization of Allergic Diseases, Seoul, South Korea, ³Seoul National University Bundang Hospital, Seoul National University College of Medicine, ⁴childhood Asthma atopy center, asan medical center, University of Ulsan College of Medicine, South Korea, ⁵Department of Pediatrics, Kosin University Gospel Hospital, Kosin University College of Medicine, Seoul, South Korea, ⁶Department of Pediatrics, Korea Cancer Center Hospital, Seoul, South Korea, ⁷Department of pediatrics, Korea Cancer Center Hospital, South Korea, ⁸Department of Pediatrics, Hae-undae Paik Hospital, Inje University College of Medicine, Busan, South Korea, ⁹Research Center for Standardization of Allergic Diseases, Seoul, South Korea, South Korea, ¹⁰Department of Pediatrics, Inje University Sanggye Paik Hospital, Seoul, South Korea, ¹¹Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, ¹²Department of Pediatrics, Korea University Guro Hospital, Seoul, South Korea, ¹³Department of Pediatrics, Seoul Paik Hospital, Inje University College of Medicine, Seoul, South Korea, ¹⁴Department of Pediatrics, National Health Insurance Corporation Ilsan Hospital, Seoul, South Korea, ¹⁵Department of Pediatrics, Kangbuk Samsung Hospital, Sungkyunkwan University College of Medicine, Seoul, South Korea, ¹⁶Childhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, South Korea

- 296 Improvement Of FENO In Youth With Asthma After Attending An Asthma Summer Camp**
Dr. Jonathan A. Olsen, DO¹, Dr. Mark Stevens, MD¹, Mr. Patrick Foster, B.S.² and Dr. Russell Hopp, DO, FAAAAI³, ¹Creighton University Medical Center, Omaha, NE, ²American Lung Association, Omaha, NE, ³Creighton University School Medicine, Omaha, NE
- 297 Exhaled Nitric Oxide (FeNO) and T-Helper 2 Cell Biomarkers: Can They Predict Treatment Response To Dupilumab, An IL-4R α Antibody, In An Eosinophilic Asthma Population?**
Brian N. Swanson, PhD¹, Lin Wang, PhD¹, Jeffrey Ming, MD¹, Jennifer D. Hamilton, PhD², Ariel Teper, MD¹, Thomas Dicioccio, PhD², Yongtao Li, PhD¹, Dr. Neil Graham, MD², Dr. Gianluca Pirozzi, MD, PhD¹ and Sally E. Wenzel, MD, FAAAAI³, ¹Sanofi, Bridgewater, NJ, ²Regeneron Pharmaceuticals, Inc., Tarrytown, NY, ³University of Pittsburgh Medical Center NW, Pittsburgh, PA
- 298 Asthma Management Costs With Feno In Addition To Standard Guidelines**
Dr. Glenn Crater, MD¹, Dr. Craig F. LaForce, MD, FAAAAI², Ms. Nancy Herje, BSN, RN, MBA¹, Dr. Elizabeth Brooks, PhD³ and Dr. Kathy Rickard, M.D.¹, ¹Aerocrine, Inc., Morrisville, NC, ²North Carolina Clinical Research, Raleigh, NC, ³Reimbursement Principles, Highlands Ranch, CO
- 299 Developmental Assessment Of Serum Periostin As An Asthma Biomarker In Children**
Dr. Halie M. Anderson¹, Dr. Robert F. Lemanske Jr., MD, FAAAAI², Joseph R. Arron³, Cecile Holweg⁴, Ms. Victoria Rajamanickam⁵, Dr. James E. Gern, MD, FAAAAI² and Dr. Daniel J. Jackson, MD⁶, ¹University of Wisconsin, Madison, WI, ²University of Wisconsin School of Medicine and Public Health, Madison, WI, ³Genentech, Inc., South San Francisco, CA, ⁴Genentech, Inc., South San Francisco, CA, ⁵University of Wisconsin Hospitals and Clinics, ⁶Pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, WI

Atopic Disease Basic Science

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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 300 T-Cell Profiles In Bronchoalveolar Lavage (BAL) Of Wheezing Children With and Without A History Of Respiratory Syncytial Virus (RSV) Lower Respiratory Tract Infection**
Dr. Chang-Kuen Kim, MD, FAAAAI, Asthma & Allergy Center, Inje University Sanggye Paik Hospital, Seoul, South Korea, Dr. Jin-Tack Kim, MD, PhD, Department of Pediatrics, Uijeongbu St. Mary's Hospital, The Catholic University of Korea, College of Medicine, Uijeongbu, Gyeonggi-Do, South Korea, Sally E. Wenzel, MD, FAAAAI, University of Pittsburgh Medical Center NW, Pittsburgh, PA and Dr. Marzena E. Krawiec, MD, National Jewish Medical and Research Center, Denver, CO
- 301 Increased Blood Th2-Like Invariant Natural Killer T Cells In Patients With Asthma**
Prof. Young-II Koh, MD and Jae-Uoong Shim, Chonnam National University Medical School
- 302 Establishment and Treatment Of a Steroid Resistant Asthma Model By Adoptive Transfer Of Helper T Cell Clones**
Dr. Akio Mori, MD, PhD¹, Mr. Satoshi Kouyama, MSc¹, Ms. Miyako Yamaguchi¹, Ms. Yo Iijima¹, Dr. Jun Itoh, MD¹, Dr. Hiroaki Hayashi, MD¹, Dr. Takafumi Minami, MD¹, Dr. Kentaro Watarai, MD¹, Dr. Chihiro Mitsui, MD¹, Dr. Chiyako Oshikata, MD¹, Dr. Hidenori Tanimoto, MD¹, Dr. Yuma Fukutomi, MD¹, Dr. Kiyoshi Sekiya, MD¹, Dr. Takahiro Tsuburai, MD, PhD¹, Dr. Masami Taniguchi, MD, PhD¹, Dr. Yuji Maeda, MD¹, Dr. Mamoru Oh-tomo, MD¹, Dr. Maki Hasegawa, MD, PhD¹, Dr. Kazuo Akiyama, MD¹ and Dr. Osamu Kaminuma, PhD², ¹National Hospital Organization, Sagamihara National Hospital, Sagamihara, Japan, ²Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan
- 303 CD4⁺ T Cells From Nasal Polyp Explants Contain Abundant Th2 Cells Expressing Functional Interleukin-25 Receptors Together With Th17 Cells**
Mrs. Emily Lam, MSc¹, Dr. Harsha H. Kariyawasam, MD, PhD², Prof. Stephen R. Durham, MA MD FRCP³, Ms. Joanne Rimmer, FRCS(ORL-HNS)², Dr. Valerie J. Lund, MD², Dr. David Cousins, PhD¹ and Dr. Stephen Till, MD, PhD¹, ¹King's College London, London, United Kingdom, ²Royal National Throat, Nose & Ear Hospital London, University College London, London, United Kingdom, ³Imperial College London, London, United Kingdom
- 304 Successful Desensitization To Paclitaxel For Stage 4 Ovarian Cancer**
Dr. Erica T. Gastelum, MD, UCSF Fresno, Madera, CA, Kush Das, Baz Allergy, Asthma & Sinus Center, Fresno, CA, Dr. Praveen Buddiga, MD, FAAAAI, University of California San Francisco-Fresno, Fresno, CA; Baz Allergy Asthma & Sinus Center, Fresno, CA and Dr. Malik N. Baz, MD, UCSF-Fresno, Fresno, CA; Baz Allergy Asthma and Sinus Center, Fresno, CA
- 305 IL-17 Plays a Major Role In Driving The Recruitment Of B Cells Into Bronchial Tissue Of Asthmatic Patients**
Dr. S Al-Muhsen, MD, King Saud University, College of Medicine, Riyadh, Saudi Arabia, Mrs. Mary -Angeline Puraza, King Saud University, Riyadh, Saudi Arabia, Dr. Qutayba Hamid, MD, PhD, FAAAAI, McGill University Health Centre, Montreal, QC, Canada and Dr. Rabih Halwani, PhD, King Saud University, college of Medicine, Riyadh, Saudi Arabia
- 306 A Comparison Of Asthma Prevalence and Severity Among Urban and Rural African American Teenage Youth**
Dr. Dennis Ownby, M.D. FAAAAI¹, Dr. Martha Tingen, PhD², Ms. Suzanne Havstad, M.A.³, Dr. Jennifer Waller, PhD², Dr. Christine Cole Johnson, PhD MPH FAAAAI³ and Dr. Christine L.M. Joseph, PhD³, ¹Division of Allergy-Immunology and Rheumatology, Georgia Health Sciences University, Augusta, GA, ²Georgia Regents University, Augusta, GA, ³Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI
- 307 Interleukin-4 and Transforming Growth Factor-Beta Single Nucleotide Genes Polymorphisms Confer Susceptibility To Atopic Dermatitis**
Dr. Nima Rezaei, MD, PhD^{1,2}, Ms. Zahra Aryan^{2,3}, Dr. Nasrin Behniafard, MD⁴, Ms. Elham Farhadi, MSc⁵, Dr. Soheila Soutoudeh, MD⁴, Dr. Mojdeh Khaledi, MD⁶, Dr. Maryam Mahmoudi, MD⁷, Prof. Asghar Aghamohammadi⁸, Prof. Ali Akbar Amirzargar, PhD² and Dr. Mohammad Gharagozlu, MD⁴, ¹Research Center for Immunodeficiencies, Children's Medical Center, Tehran University of Medical Sciences, Tehran, Tehran, Iran, ²Molecular Immunology Research Center; and Department of Immunology, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, ³Student Scientific Research Center (SSRC), School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, ⁴Children's Medical Center, Tehran University of Medical Sciences, Tehran, Tehran, Iran, ⁵Hematology Department, School of Allied Medical Science, Tehran University of Medical Sciences, Tehran, Tehran, Iran, ⁶Growth and Development Research Center, Tehran University of Medical Sciences, Tehran, Tehran, Iran, ⁷School of Nutrition and Dietetics, Tehran University of Medical Sciences, Tehran, Tehran, Iran, ⁸Research Center for Immunodeficiencies, Children's Medical Center, Tehran University of Medical Sciences, Tehran, Iran
- 308 A Comparison Of Regulatory T-Cell Receptor V β (3,5) Expression In Patients With Food Allergy and Atopic Dermatitis**
Benjamin Prince, MD^{1,2}, Kristin A. Erickson¹, Christine Szychlinski, APN, CPNP², Miao Cai, MS² and Dr. Anne Marie Singh, MD^{1,3}, ¹Northwestern University Feinberg School of Medicine, Chicago, IL, ²Division of Allergy & Immunology, Ann & Robert

- H. Lurie Children's Hospital of Chicago, Chicago, IL, ³Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL
- 309 Correlation Between Fractional Exhaled Nitric Oxide and Asthma Exacerbation**
Dr. Navinda Mahawichit, MD, Mahidol University, Bangkok, Thailand
- 310 IL17RB+ Granulocytes In Asthma Patients**
Dr. Lin Li, MD¹, Dr. Matthew A. Schaller, PhD², Dr. Alan P. Baptist, MD, MPH FAAAAI¹ and Dr. Nicholas W. Lukacs, PhD³, ¹University of Michigan, Division of Allergy and Clinical Immunology, Ann Arbor, MI, ²University of Michigan, Department of Pathology, Ann Arbor, MI, ³University of Michigan, Ann Arbor, MI
- 311 Pollen From Genetically Modified Bt Maize Does Not Promote Allergic Responses In Mice**
Mrs. Monica Andreassen^{1,2}, Dr. Elena Rocca³, Dr. Thomas Bøhn^{3,4}, Dr. Odd-Gunnar Wikmark³, Prof. Johnnie Van den Berg⁵, Prof. Martinus Lovik², Prof. Terje Traavik^{3,4} and Dr. Unni C. Nygaard², ¹GenØk - Centre for Biosafety, Tromsø, Norway, ²Norwegian Institute of Public Health, Oslo, Norway, ³GenØk - Centre for Biosafety, Norway, ⁴University of Tromsø, Norway, ⁵North-West University, Potchefstroom, South Africa
- 312 Effects Of rs3744262 On DNA Methylation and Symptoms In Participants With Allergic Rhinitis During Grass Pollen Exposure In The Environmental Exposure Unit (EEU)**
Dr. Michelle North, PhD¹, Ms. Sarah Mah, BSc.², Mr. Andrew G. Day, MSc³, Dr. Michael Kobor, PhD^{2,4} and Dr. Anne K. Ellis, MD, MSc FAAAAI^{1,5}, ¹Departments of Medicine and Biomedical & Molecular Science, Queen's University, Kingston, ON, Canada, ²Centre for Molecular Medicine & Therapeutics, Child & Family Research Institute, Vancouver, BC, Canada, ³Clinical Research Centre, Kingston General Hospital, Kingston, ON, Canada, ⁴University of British Columbia, Vancouver, BC, Canada, ⁵Allergy Research Unit, Kingston General Hospital, Kingston, ON, Canada
- 313 Chronic Spontaneous Urticaria – An Evaluation Of An Indirect Immunofluorescence Method For Detecting Anti-Mast Cell IgG Antibodies**
Bahar Bahrani, Natasha Gattey and Peter Hull, University of Saskatchewan, Canada
- 314 Protease Activity Of Per a 10 Causes CD 40 Cleavage On Dendritic Cells and Th2 Polarization**
Ms. Komal Agrawal, MSc, CSIR-IGIB, DELHI, India and Dr. Naveen Arora, Ph.D., CSIR Institute of Genomics and Integrative Biology, New Delhi, India
- 315 Type 2 Immunity Can Have a Protective Role In Host Defense Against Venoms In Mice**
Dr. Thomas Marichal, DVM PhD¹, Dr. Philipp Starkl, PhD¹, Dr. Laurent Reber, PhD¹, Dr. Janet Kalesnikoff, PhD¹, Dr. Hans C. Oettgen, MD, PhD, FAAAAI², Dr. Mindy Tsai, DMSc¹, Dr. Martin Metz, MD, PhD³ and Dr. Stephen J. Galli, MD¹, ¹Stanford University School of Medicine, Stanford, CA, ²Boston Children's Hospital, Boston, MA, ³Charite Campus Mitte, Berlin, Germany
- 316 CD4+ and CD8+ T Cells Bearing Naïve and Memory Markers In Blood Of Immigrants To Brooklyn Who Develop Asthma and Allergic Disease**
Dr. Ashlei Mathew, MD^{1,2}, Dr. Irina Katayeva, MD^{1,3}, Seto Chice, MS^{1,4}, Dr. Stephan Kohlhoff, MD^{1,5}, Dr. Rauno O. Joks, MD, FAAAAI^{1,2}, Dr. Helen G. Durkin, PhD^{1,4} and Dr. Maria-Anna Vastardi, MD^{1,3}, ¹Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY, ²Department of Medicine, State University of New York Downstate Medical Center, Brooklyn, NY, ³Lutheran Medical Center, Brooklyn, NY, ⁴Department of Pathology, State University of New York Downstate Medical Center, Brooklyn, NY, ⁵Department of Pediatrics, State University of New York Downstate Medical Center, Brooklyn, NY
- 317 17β-Estradiol Increases IL-17A Protein Expression From Mouse CD4+ Th17 Differentiated Cells**
Jacqueline-Yvonne Cephus, BS¹, Dr. Dawn C. Newcomb Baker, PhD², Madison Boswell¹, Kasia Goleniewska³ and Dr. Ray Peebles, MD¹, ¹Allergy, Pulmonary, and Critical Care Medicine; Department of Medicine; Vanderbilt University School of Medicine, Nashville, TN, ²Division of Allergy, Pulmonary and Critical Care Medicine, Vanderbilt University School of Medicine, Nashville, TN, Nashville, TN, ³Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN
- 318 17-β Estradiol Positively Correlates With IL-17A+ CCR6+ Memory CD4+ T Cells In Patients With Severe Asthma**
Dr. Dawn C. Newcomb Baker, PhD^{1,2}, Jacqueline-Yvonne Cephus, BS³, Dr. Emily W. Langley, MD⁴, Amy S. Feldman, MD⁵, Mrs. Nanalene Frey⁶, Ms. Kristen Cooper⁶, Dr. John M. Fahrenholz, MD, FAAAAI⁷ and R. Stokes Peebles⁸, ¹Vanderbilt University School of Medicine, Nashville, TN, ²Medicine, Vanderbilt University Medical Center, Nashville, TN, ³Allergy, Pulmonary, and Critical Care Medicine; Department of Medicine; Vanderbilt University School of Medicine, Nashville, TN, ⁴Division of Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee, ⁵Division of Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, and Center for Asthma and Environmental Sciences Research, Vanderbilt University School of Medicine, Nashville, TN, ⁶Vanderbilt University Medical Center, ⁷Vanderbilt University Medical Center, Nashville, TN, ⁸Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN
- 319 Allergic Sensitization and Determination Of Serum Eosinophil Cationic Protein and Triptase In Preschool Population In Hermosillo, Sonora, Mexico**
Dr. Claudia Gallego-Corella¹, Dr. Guadalupe Corella², Ms. Andrea Romo³, Prof. Antonio Rascón⁴ and Mr. Pablo Martínez³, ¹Medicine Faculty, Xochicalco University, Tijuana, Mexico, ²Health, Nutrition and Environment, Department of Chemical and Biological Sciences, University of Sonora, Mexico, Hermosillo, Mexico, ³Department of Chemical and Biological Sciences, University of Sonora, Mexico, Hermosillo, Mexico, ⁴Health, Nutrition and Environment, Department of Chemical and Biological Sciences, University of Sonora, Mexico, Hermosillo, Mexico
- 320 Fungal Cross-Allergenicity In Specific Ige Testing**
Dr. Mercedes C. Amado, MD, FAAAAI¹, Dr. Jay M. Portnoy, MD, FAAAAI² and Dr. Charles Barnes, PhD², ¹Children's Mercy Hospital, Shawnee Mission, KS, ²Children's Mercy Hospital, Kansas City, MO
- 321 Monocytes From Peanut-Allergic Patients Express Higher Levels Of RALDH2 In Response To Peanut Protein Than Monocytes From Tolerant Subjects**
Elizabeth Fleming, BS¹, Bert Ruiter, PhD¹, Barry K. Hurlburt, PhD², Soheila J. Maleki, PhD² and Wayne G. Shreffler, MD, PhD, FAAAAI¹, ¹Massachusetts General Hospital, Boston, MA, ²USDA-ARS-SRRC, New Orleans, LA
- 322 Peanut Protein Induces Expression Of RALDH2 In Human Dendritic Cells In a TLR2-Dependent Manner**
Bert Ruiter, PhD¹, Elizabeth Fleming, BS¹, Barry K. Hurlburt, PhD², Soheila J. Maleki, PhD² and Wayne G. Shreffler, MD, PhD, FAAAAI¹, ¹Massachusetts General Hospital, Boston, MA, ²USDA-ARS-SRRC, New Orleans, LA
- 323 IL-4 Receptor Alpha and STAT6 Single Nucleotide Polymorphisms Are Associated With Increased Risk Of Asthma In A Saudi Arabian Population**
Dr. Rabih Halwani, PhD¹, Dr. Alejandro Vazquez-Tello², Mr. Amer Jamhawi², Dr. Hamdan Jahdali³ and Dr. Saleh Al-Muhsen, MD⁴, ¹King Saud University, college of Medicine, Riyadh, Saudi Arabia, ²King Saud University, Riyadh, Saudi Arabia, ³King Saud University

for Health Sciences, Riyadh, Saudi Arabia, ⁴King Saud University, College of Medicine, Riyadh, Saudi Arabia

T Cell Mediated Immunity

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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 324 Infants With Idiopathic T Cell Lymphopenia Identified On New York State Newborn Screen: A Follow Up Report**
Dr. Stephanie Albin, MD¹, Dr. Harshna Mehta, MD¹ and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI², ¹The Icahn School of Medicine at Mount Sinai, New York, NY, ²Mt. Sinai Medical Center, New York, NY
- 325 Frequency Of Cellular and Humoral Immunodeficiencies In Di-george Syndrome Patients Seen At New York Presbyterian Columbia Between 2006-2012**
Dr. Collette Spalding, MD¹, Dr. Kyung Hwa Jung, PhD¹, Dr. Rachel L. Miller, MD, FAAAAI¹ and Dr. Yesim Demirdag, MD², ¹Division of Pulmonary, Allergy and Critical Care Medicine, Columbia University, New York, NY, ²Department of Pediatric Allergy/Immunology, Columbia University, New York, NY
- 326 A Novel ORAI1 Mutation Resulting In T⁺B⁺NK⁺ SCID With Normal Lymphocyte Proliferation**
Janet S. Chou, MD¹, Christina S.K. Yee, MD, PhD¹, Mr. Wayne Bainter, BS¹, Dr. Luigi D. Notarangelo, M.D.², Dr. Suleiman M. S. E. Al-Hammadi, MD, FAAAAI³ and Raif S. Geha, MD¹, ¹Division of Immunology, Boston Children's Hospital, Harvard Medical School, Boston, MA, ²Stem Cell Institute, Boston, MA, ³FMHS, UAE University, Al-Ain, United Arab Emirates
- 327 Coronin-1A Oligomerization Is Critical For Host Defense Against Viral Pathogens**
Christina S.K. Yee, MD, PhD¹, Ozden Sanal, MD², Janet S. Chou, MD¹, Raif S. Geha, MD¹, Deniz Ayvaz, MD³, Caner Aytakin, MD³ and A. Nurten Akarsu, MD, PhD⁴, ¹Division of Immunology, Boston Children's Hospital, Harvard Medical School, Boston, MA, ²Department of Pediatrics, Hacettepe University Ihsan Dogramaci Children's Hospital, Ankara, Turkey, ³Department of Pediatric Immunology, Dr Sami Ulus Maternity and Children's Research and Educational Hospital, Ankara, Turkey, ⁴Department of Medical Genetics, Hacettepe University Ihsan Dogramaci Children's Hospital, Ankara, Turkey
- 328 Newborn Screening For Severe Combined Immunodeficiency In Iowa: TREC Assay Results and Characteristics Of SCID and T-Cell Lymphopenic Patients**
Farheen Mirza, MD¹, Emily Phillips, RN BSN CCRC¹, Travis Henry, PhD¹ and Dr. Mary Beth Fasano, MD, FAAAAI², ¹University of Iowa, ²C42-E6 GH, University of Iowa College Medicine, Iowa City, IA
- 329 Thymus Graft Factors Critical For Negative Selection Of Direct Allospecific T Cells**
Dr. Ivan K. Chinn, MD, Dr. Ivo D. Shterev, PhD, Kristina J. Riebe and Dr. Douglas C. Rouse, DVM, Duke University Medical Center, Durham, NC
- 330 Successful Hematopoietic Stem Cell Transplant For CD40 Deficiency Manifesting As Hyper-IgM Syndrome With Absent CD40 Expression and Marked Lymphocytosis**
Dr. Joyce Hsu, MD, Medicine, Boston Children's Hospital, Boston, MA, Dr. Michel Massaad, PhD, Boston Children's Hospital and Dr. Luigi D. Notarangelo, MD, Stem Cell Institute, Boston, MA
- 331 IL-2 Receptor Gamma-Chain(IL2RG) Defect Can Present With Features Other Than Increased Susceptibility To Infection**
Dr. Bob Geng, MD¹, Dr. Maria Garcia-Lloret, MD, FAAAAI², Dr. Yen Tun Wang, MD³, Dr. Ki-Young Yoo, MD³, Dr. Raymond Barnhill, MD³, Dr. Derek Wong, MD³ and Dr. E. Richard Stiehm, MD, FAAAAI², ¹UCLA, Los Angeles, CA, ²Division of Allergy and

Immunology, Department of Pediatrics, David Geffen School of Medicine at UCLA, Los Angeles, CA, ³UCLA, CA

- 332 Studies On Cohort Of Infants With Di-George Syndrome Detected By New York State Newborn Screening For Severe Combined Immunodeficiency (SCID)**
Dr. Doerthe A. Andreae, MD¹, Dr. Stephanie Albin, MD¹, Dr. Harshna Mehta, MD¹ and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI², ¹The Icahn School of Medicine at Mount Sinai, New York, NY, ²Mt. Sinai Medical Center, New York, NY
- 333 Immunologic Profile Of Single Ventricle Survivorship Participants: Risk Factors For Clinically Significant Immunologic Dysfunction**
Dr. Megan Morsheimer, MD, MPH, Dr. Jack Rychik, MD, FACC, Ms. Katie Dodds, RN, MSN, CRNP and Dr. Jennifer Heimall, MD, Children's Hospital of Philadelphia, Philadelphia, PA
- 334 Chronic Non-Iatrogenic Lymphatic Loss Syndromes Identified Though Abnormal TREC Analysis From The Texas Newborn Screening Program (NBS)**
Dr. Qurat U. Kamili, MD¹, Niti Y. Chokshi, MD², Dr. Jordan Orange, MD, PhD, FAAAAI³, Dr. I. Celine Hanson, MD, FAAAAI⁴ and Dr. Lisa R. Forbes, MD⁴, ¹Baylor College of Medicine and Texas Children's Hospital, Section of Immunology, Allergy and Rheumatology, Houston, TX, ²Baylor College of Medicine and Texas Children's Hospital, Section of Immunology, Allergy and Rheumatology, Houston, TX, ³Baylor College of Medicine and Texas Children's Hospital, Section of Immunology, Allergy and Rheumatology, Houston, TX, ⁴Baylor College of Medicine-Texas Children's Hospital, Section of Immunology, Allergy, and Rheumatology, Houston, TX
- 335 An Adult With Disseminated Herpes Zoster Infection Found To Have Rare Combined CD4, CD8 T-Cell and NK-Cell Deficiency**
Neil Parikh, MD, UCLA-VA Greater Los Angeles Healthcare System, Los Angeles, CA and Joseph S. Yusin, MD, FAAAAI, VA Greater Los Angeles Health Care System, Los Angeles, CA
- 336 Clinical and Virological Characteristics Of HIV-Associated Lymphomas In Patients With Perinatally-Acquired HIV In The Era Of Antiretroviral Therapy**
Dr. Jasmeen S. Dara, MD, Montefiore Medical Center/Albert Einstein College of Medicine, Dr. Stefan Barta, Montefiore Medical Center and Dr. Jenny Shliozberg, MD, FAAAAI, Montefiore Medical Center, Bronx, NY

Asthma Epidemiology, Risk Factors and Public Health II

3205

Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 337 Study On Air Pollution and Respiratory Health Of Children In Delhi, India**
Ms. Jincy Mathew, M.Tech, CSIR- Institute of Genomics and Integrative Biology, Delhi, India, Dr. Radha Goyal, Ph.D, CSIR- National Environmental Engineering Research Institute, Delhi, India, Dr. Krinshna K Taneja, Ph.D, CSIR- Institute of Genomics and Integrative Biology, Delhi, India and Dr. Naveen Arora, Ph.D, CSIR Institute of Genomics and Integrative Biology, New Delhi, India
- 338 Trans-Generational Transmission Of Ozone - Induced Airway Dysfunction**
Prof. Park Choon Sik, Mr. Bae Da-Jeong, Dr. Park Jong-Sook and Dr. Prof. An Soo, Soonchunhyang University Bucheon Hospital, Gyeonggi-Do, South Korea
- 339 Dust Mite Allergen In Bed Dust Predicts Rhinitis Symptom Persistence In Urban Pre-Adolescent Children With Higher Elemental Carbon Particulate Matter Exposure**
Dr. Young Yoo, MD, PhD^{1,2}, Dr. Luis M. Acosta, MD¹, Prof. Inge Goldstein, DrPH³, Prof. Andrew Rundle, DrPH⁴, Omar Olmedo¹,

SUNDAY

Adnan Divjan¹, Dr. Beihzhan Yan⁵, Prof. Judith Jacobson, DrPH⁴, Dr. Rachel L. Miller, MD, FAAAAI⁶, Dr. Steven Chillrud⁵ and Prof. Matthew S. Perzanowski, PhD¹, ¹Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, ²Department of Pediatrics, College of Medicine, Korea University, Seoul, South Korea, ³Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, ⁴Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, ⁵Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY, ⁶Division of Pulmonary, Allergy and Critical Care Medicine, Columbia University, New York, NY

340 Associations Between Outdoor Of PM2.5 With Cough and Wheeze Symptoms In Asthmatic Children In Korea

Prof. Woo Kyung Kim, MD, PhD^{1,2}, Mrs. Young Wook Lee¹ and Dr. Hae-Sun Yoon¹, ¹Allergy & respiratory research laboratory, Inje University College of Medicine, Seoul, South Korea, ²Department of Pediatrics, Seoul Paik Hospital, Inje University College of Medicine, Seoul, South Korea

341 Effect Of Duration Of Residence In Brooklyn On IgE Responses Of Immigrants

Dr. Edward Kleiman, MD¹, Dr. Maria-Anna Vastardi, MD^{2,3}, Dr. Irina Katayeva, MD^{2,3}, Dr. Helen G. Durkin, PhD² and Dr. Rauno O. Joks, MD, FAAAAI¹, ¹SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY, ²Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY, ³Lutheran Medical Center, Brooklyn, NY

342 Impact Of Energy Expenditure On Ozone-Induced Inflammation

Dr. Krista Todoric, MD¹, Dr. Michelle L. Hernandez, MD¹, Dr. Haibo Zhou, PhD² and Dr. David B. Peden, MD, MS, FAAAAI¹, ¹University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, NC, ²University of North Carolina at Chapel Hill, School of Public Health

343 Exposure Of Mice To Silica Crystals and Poly I:C Synergistically Enhances Neutrophil Infiltration and Epithelial Damage In The Airway

Dr. Hirotohi Unno, M.D., Dr. Hideaki Morita, MD., PhD., Dr. Hirohisa Saito, MD., PhD., Dr. Kenji Matsumoto, MD, PhD and Dr. Akio Matsuda, PhD, Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan

344 Modest Effects Of Bisphenol A Exposure In Mouse Models Of Respiratory Allergy and Food Allergy

Dr. Unni C. Nygaard¹, Dr. Mari Samuelsen¹, Dr. Nina Vinje¹, Mrs. Monica Andreassen^{1,2}, Prof. Martinus Lovik¹ and Dr. Johanna Bodin¹, ¹Norwegian Institute of Public Health, Oslo, Norway, ²GenØk - Centre for Biosafety, Tromsø, Norway

Aerobiology II

3206

Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

345 In Vitro Allergy Testing: Relationship Patterns Between Allergen Pairs

Dr. John S. Kaptein, PhD¹, C.K. Lin, PhD¹ and Dr. Bruce J. Goldberg, MD, PhD, FAAAAI², ¹Southern California Permanente Medical Group, Los Angeles, CA, ²Kaiser Permanente, Los Angeles, CA

346 Comparison Of Total Protein Profile Of Alternaria Alternata Extract Obtained From Various U.S. Allergenic Extract Manufacturers

Dr. Jay E. Slater, MD¹, Ms. Allison Zoch², Ms. Shoshana Newman-Gerhardt² and Dr. Taruna Khurana, PhD³, ¹FDA/CBER/OVRR/DBPAP, Rockville, MD, ²FDA/CBER, ³CBER FDA

347 IgE Antibodies To Cat and Cat Components In Relation To Asthma In a Population Study Of 963 18 Year Olds From Six Schools In Northern Sweden

Ms. Hayley James, BS¹, Prof. Matthew S. Perzanowski, PhD², Eva Ronmark, PhD³, Bo Lundback, MD, PhD³, Jillian Roper¹ and Thomas A.E. Platts-Mills, MD, PhD, FAAAAI⁴, ¹University of Virginia, Charlottesville, VA, ²Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, ³Karolinska Institutet, Stockholm, Sweden, ⁴Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA

348 Epitope Mapping Of An Anti-Bla g 1 ScFv Used For Cockroach Allergen Quantitation

Dr. Geoffrey Mueller, PhD¹, Mr. John Ankney², Dr. Lars Pedersen¹, Dr. Taruna Khurana, PhD³, Dr. Jay E. Slater, MD⁴, Ms. Jill Glesner⁵, Dr. Anna Pomes, PhD FAAAAI⁵ and Dr. Robert London¹, ¹National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC, ²National Institute of Environmental Health Sciences, NIH, ³FDA Center for Biologics Evaluation and Research, ⁴FDA/CBER/OVRR/DBPAP, Rockville, MD, ⁵Indoor Biotechnologies, Inc., Charlottesville, VA

349 Antigenic Analysis Of The Major Cockroach Allergen Bla g 5 and Its Dust Mite Homolog Der p 8

Ms. Jill Glesner¹, Dr. Geoffrey Mueller, PhD², Dr. Lars Pedersen², Dr. Martin D. Chapman, PhD FAAAAI¹ and Dr. Anna Pomes, PhD FAAAAI¹, ¹Indoor Biotechnologies, Inc., Charlottesville, VA, ²National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC

350 Immunomodulatory Effects Of Rye Grass Pollen Allergen Lol p 5 On The Prostaglandin E₂ Pathway and Kallikrein-Kinin System Of Respiratory Epithelial Cells

Cecilia Tong, Alice Vrieling, Martha Ludwig and Geoffrey Stewart, University of Western Australia

351 Development and Characterization Of a Murine Model Of Repeated Dry Exposure To Aerosolized Fungal Conidia

Dr. Ajay Nayak, PhD¹, Dr. Amanda Buskirk, PhD^{1,2}, Mr. W.Travis Goldsmith³, Ms. Angela Lemons¹, Dr. Justin Hettick, PhD¹, Dr. Michael Kashon, PhD⁴, Ms. Amy Cumpston³, Mr. Jared Cumpston³, Mr. Howard Leonard³, Mr. Walter McKinney³, Dr. David Frazer, PhD³, Dr. Donald H. Beezhold, PhD FAAAAI¹ and Dr. Brett J. Green, PhD¹, ¹CDC/NIOSH/ACIB, Morgantown, WV, ²West Virginia University, Morgantown, WV, ³CDC/NIOSH/PPRB, Morgantown, WV, ⁴CDC/NIOSH/BEB, Morgantown, WV

352 Cross-Reactivity Between Recombinant Tropomyosin From *Chortoglyphus* and Natural Tropomyosin Of Other Extracts

Dr. Jerónimo Carnés¹, Dr. M. Angeles López Matas¹, Dr. Manuel Boquete, MD², Dr. Raquel Moya¹ and Dr. Victor Miguel Iraola¹, ¹Laboratorios LETI, Tres Cantos, Spain, ²Hospital Xeral de Calde, Lugo, Spain

353 Identification Of The Cysteine Protease Amb a x As A Novel Major Allergen From Short Ragweed Pollen (*Ambrosia artemisiifolia*)

Dr. Philippe Moingeon, PhD¹, Julien Bouley, PhD², Maxime Le Mignon, PhD², Véronique Baron-Bodo, PhD², Véronique Bordas, PhD², Laetitia Bussièrès², Marie-Noëlle Couret³, Aurélie Lautrette, PhD², Thierry Batard, PhD⁴, Rachel Groeme², Henri Chabre, PhD² and Emmanuel Nony², ¹Stallergenes SA, Antony, France, ²Stallergenes, France, ³Stallergenes, ⁴Stallergenes, Antony, France

354 Characterization Of The Allergenic Activity Of Tropomyosin From *Aedes Aegypti*

Mr. Jose F. Cantillo, Complutense University of Madrid, Spain; Inmunotek S.L., Alcalá de Henares, Spain, Prof. Leonardo Puerta, Institute for Immunological Research/University of Cartagena, Cartagena, Colombia, Dr. Enrique Fernandez-Caldas, Inmunotek, S.L, Spain and Dr. Sylvie Lafosse-Marin, Cabinet de Immunologie, Fort de France, Martinique

- 355 Allergy To Ferret**
Mr. Ignacio Esteban Gorgojo¹, Javier Cuesta Herranz¹, Carlos Pastor², Aroa Sanz Maroto², Mr. David Gonzalez³ and Dr. Manuel De Las Heras¹, ¹Department of Allergy, Fundación Jiménez Díaz, Madrid, Spain, ²Department of Immunology, Fundación Jiménez Díaz, Spain, ³Allergy unit, Hospital de Fuenlabrada, Spain
- 356 Do Residual Wheal Skin Prick Test Responses To Perennial and Seasonal Allergens Correlate With Their Specific IgE Levels In Allergic Subjects?**
Dr. AnneMarie Salapatek, PhD, Victoria Nelson, M.Sc and Dr. Piyush Patel, MD, FRCP, Inflamax Research, Mississauga, ON, Canada

Food Allergy I

3207

Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 357 Peanut Epicutaneous Immunotherapy (EPIT) In Peanut-Allergic Children: 18 Months Treatment In The Arachild Study**
Prof. Christophe Dupont, MD, PhD¹, Dr. Thierry Bourrier², Prof. Frederic de BLAY³, Dr. Lydie Guénard-Bilbault³, Dr. Christine Sauvage⁴, Dr. Marie-Odile Cousin⁴, Dr. Gisèle Kanny, MD, PhD⁵, Dr. Sophie Jarlot⁵ and Dr. Chantal Karila, MD⁶, ¹Hopital Necker Enfants Malades, Paris, France, ²Lenval Hospital, Nice, France, ³CHRU Strasbourg, France, ⁴Saint Vincent de Paul Hospital, Lille, France, ⁵CHU Nancy Hopital Central, Nancy, France, ⁶Hopital Necker, Paris, France
- 358 Predictors For Allergic Symptoms During Build-Up and Maintenance Phases Of Oral Immunotherapy To Peanut**
Dr. Marie M. de Alwis, MD^{1,2}, Dr. Jason Lee, MD, FAAAAI¹, Dr. Mitchell R. Lester, MD, FAAAAI¹, Dr. Louis M. Mendelson, MD, FAAAAI¹, Dr. Glenda Nouman, MD¹ and Dr. Jeffrey M. Factor, FAAAAI¹, ¹New England Food Allergy Treatment Center, West Hartford, CT, ²Connecticut Children's Medical Center, Hartford, CT
- 359 Quality Of Life With Sublingual Immunotherapy For Peanut**
Nicole Leung¹, Yamini Virkud, MD, MA², Pamela H. Steele, MSN CPNP AE-C³, Janet S. Kamilaris, RN⁴, Edwin Kim, MD, MS⁵, Brian P. Vickery, MD, FAAAAI³, Dr. Audrey Dunn Galvin⁶ and A. Wesley Burks, MD, FAAAAI³, ¹Duke University, ²Duke University, Durham, NC, ³University of North Carolina, Chapel Hill, NC, ⁴Carolinas Health Care System, Charlotte, NC, ⁵University of North Carolina at Chapel Hill, Chapel Hill, NC, ⁶University College Cork, Cork, Ireland
- 360 Low Dose Maintenance Peanut Oral Immunotherapy Can Produce Sustained Unresponsiveness**
Julia A. Cronin, MD, University of Virginia, Division of Asthma, Allergy and Immunology, Charlottesville, VA, Julia Wisniewski, MD, University of Virginia, Division of Pediatric Respiratory Medicine and Allergy, Charlottesville, VA and Scott P. Commins, MD, PhD, University of Virginia Health System, Charlottesville, VA
- 361 Increases In Peanut-Specific IgA1 and IgA2 During Peanut Immunotherapy Do Not Correlate With Clinical Tolerance**
Adrienne L. Yancey¹, Michael D. Kulis Jr., PhD¹, Pamela H. Steele, MSN CPNP AE-C¹, Edwin Kim, MD, MS¹, Brian P. Vickery, MD, FAAAAI² and A. Wesley Burks, MD, FAAAAI¹, ¹University of North Carolina School of Medicine, Chapel Hill, NC, ²University of North Carolina, Chapel Hill, NC
- 362 Peanut OIT-Induced IgG Suppresses Ex Vivo Activation Of Allergic Donor Basophils Via a Combination Of Antigen Interception and Receptor-Bound Inhibition**
Caitlin Burk, Michael D. Kulis Jr., PhD, Edwin Kim, MD, MS, Brian P. Vickery, MD, FAAAAI and A. Wesley Burks, MD, FAAAAI, University of North Carolina at Chapel Hill, Chapel Hill, NC
- 363 Omalizumab Pretreatment Does Not Protect Against Peanut Oral Immunotherapy-Related Adverse Gastrointestinal Events**
Uyenphuong Le, MD¹, Yamini Virkud, MD, MA², Brian P. Vickery, MD, FAAAAI¹, Pamela H. Steele, MSN CPNP AE-C¹, Janet S.

- Kamilaris, RN³, Michael D. Kulis Jr., PhD¹, Jelena Berglund, PhD, RAC² and A. Wesley Burks, MD, FAAAAI¹, ¹University of North Carolina, Chapel Hill, NC, ²Duke University, Durham, NC, ³Carolinas Health Care System, Charlotte, NC
- 364 Single Practice Five-Year Experience Treating Food Allergy With Oral Immunotherapy: Efficacy and Epinephrine Treated Reactions**
Mrs. Angela R. Hague, PA-C, Dr. Richard L. Wasserman, MD, PhD, FAAAAI, Dr. Stacy K. Silvers, MD and Dr. Robert W. Suger- man, MD, FAAAAI, DallasAllergyImmunology, Dallas, TX
- 365 Single Practice, Five-Year Experience Treating Food Allergy With Oral Immunotherapy (FOIT): Successes and Failures**
Ms. Dena M. Pence, RT, Mrs. Angela R. Hague, PA-C, Dr. Richard L. Wasserman, MD, PhD, FAAAAI, Dr. Robert W. Suger- man, MD, FAAAAI and Dr. Stacy K. Silvers, MD, DallasAllergyImmunology, Dallas, TX
- 366 Single Practice Five Year Experience Treating Food Allergy With Oral Immunotherapy (FOIT): Effect On Antigen Specific IgE (asIgE)**
Dr. Stacy K. Silvers, MD, Mrs. Angela R. Hague, PA-C, Ms. Dena M. Pence, RT, Dr. Robert W. Suger- man, MD, FAAAAI and Dr. Richard L. Wasserman, MD, PhD, FAAAAI, DallasAllergyImmunol- ogy, Dallas, TX
- 367 Secondary Eosinophilic Reactions During ORAL Immunother- apy**
Prof. Yitzhak Katz, MD, FAAAAI^{1,2}, Dr. Michael Goldberg, MD, PhD², Dr. Liat Nachshon, MD², Dr. Marc E. Rothenberg, MD, PhD, FAAAAI^{3,4}, Dr. Miguel Leon Stein, MD, FAAAAI⁵, Dr. Efrat Broide^{6,7}, Dr. Gratiana Hermann⁶, Dr. Arnon Elizur, MD^{1,2} and Dr. Michael B. Levy, MD, FAAAAI², ¹Tel Aviv University, Tel Aviv, Israel, ²Assaf Harofeh, Zerifin, Israel, ³Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁴Children's Hospital Medical Center, Cincinnati, OH, ⁵Assaf Harofeh Medical Center, Rehovot, Israel, ⁶Assaf Hrofeh Meducal center, Israel, ⁷Tel-Aviv university
- 368 Rate Of Anaphylaxis Caused By Oral Immunotherapy In Chil- dren With Cow's Milk Allergy**
Prof. Giovanni B. Pajno, MD, FAAAAI¹, Dr. Giuseppe Crisa- fulli^{1,2}, Dr. Giuseppina Salzano^{1,2}, Dr. Roberta Vadalà^{1,2}, Dr. Stefania Arasi^{1,2}, Dr. Salvatore Barberi³ and Dr. Lucia Caminiti^{1,2}, ¹University of Messina, Messina, Italy, ²Dept of Pediatrics, Allergy Unit, University of Messina, ³Pediatric Clinic, San Paolo Hospital, University of Milan, Milan, Italy
- 369 Long-Term Follow Up In Cow's Milk Anaphylaxis After Suc- cessful Rush Oral Immunotherapy**
Mrs. Paloma Poza-Guedes, Dr. Ruperto González-Pérez, Dr. In- maculada Sánchez-Machín, MD and Dr. Victor Matheu, MD, Hos- pital del Tórax-Ofra, Sta Cruz de Tenerife, Spain
- 370 Milk Oral Immunotherapy. Standard Versus Personalized Pro- tocols: Efficiency and Safety**
Alberto Alvarez-Perea, MD, Dr. Elena Alonso-Lebrero, PhD, Fer- nanda Freire, MD, Dr. Sonsoles Infante, MD, Victoria Fuentes- Aparicio, MD and Lydia Zapatero, MD, Hospital Materno Infantil Gregorio Marañón, Pediatric Allergy Department, Madrid, Spain
- 371 Cross-Desensitization To Goat and Sheep Milk Protein In Cow's Milk Protein Desensitized Patients**
Dr. Michael Levy, MD, FAAAAI¹, Dr. Liat Nachshon, MD¹, Dr. Michael Goldberg, MD, PhD¹, Dr. Arnon Elizur, MD^{1,2} and Prof. Yitzhak Katz, MD, FAAAAI^{1,2}, ¹Assaf Harofeh, Zerifin, Israel, ²Tel Aviv University, Tel Aviv, Israel
- 372 Long Term Follow Up Of Children Who Incorporated Exten- sively Heated (baked milk) In The Diet**
Dr. Anna H. Nowak-Wegrzyn, MD, FAAAAI¹, Mrs. Beth D. Strong, RN CCRC², Ms. Diane Ananos¹ and Hugh A. Sampson, MD, FAAAAI³, ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²Icahn School of medicine at Mount Sinia, New York, NY, ³Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY

SUNDAY

- 373 Baked Milk Oral Immunotherapy For Severe IgE-Mediated Cow's Milk Protein (CMP) Allergic Patients: Interim Results**
Dr. Michael Goldberg, MD, PhD¹, Dr. Liat Nachshon, MD¹, Dr. Arnon Elizur, MD², Dr. Moshe Appel³, Dr. Michael B. Levy, MD, FAAAAI¹ and Prof. Yitzhak Katz, MD, FAAAAI^{1,2}, ¹Assaf Harofeh, Zerifin, Israel, ²Department of Pediatrics, Sackler School of Medicine, Tel Aviv, Israel, ³Assaf Harofeh, Israel
- 374 Progression Towards Increasing Tolerance To Less Extensively Heat-Denatured Milk Products**
Hugh A. Sampson, MD, FAAAAI¹, Dr. George N. Konstantinou, MD, PhD, MSc^{2,3}, Jacob Daniel Kattan, MD⁴, Madhan Masilamani, PhD⁴, Mrs. Beth D. Strong, RN CCRC⁵, Mr. Tee Bahnsen, BS, MPH⁶, Ms. Kaitie Fernandez⁷ and Dr. Anna H. Nowak-Wegrzyn, MD, FAAAAI⁴, ¹Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ²424 General Military Training Hospital, Thessaloniki, Greece, ³First Pediatric Department, Aristotle University of Thessaloniki, Hippokraton General Hospital, Thessaloniki, Greece, ⁴Icahn School of Medicine at Mount Sinai, New York, NY, ⁵Icahn School of medicine at Mount Sinia, New York, NY, ⁶Rho Federal Systems Division, Inc., Chapel Hill, NC, ⁷Rho Federal Systems Division, Inc., Chapel Hill, NC, Chapel Hill, NC
- 375 Cow's Milk Allergen Specific CD4+ T Cell Responses In Patients With Persistent Cow's Milk Allergy**
Dr. Fatima S. Khan, MD, Altru, Grand Forks, ND, Nupur Bhatnagar, PhD, Benaroya Research Institute, Seattle, WA, Dr. David Robinson, Virginia Mason Medical Center and William W. Kwok, PhD, Benaroya Research Institute at Virginia Mason, Seattle, WA
- 376 The Role Of Skin Prick Testing and Specific IgE To Boiled Versus Unheated Cow Milk In Cow Milk Allergic Children**
Dr. Anilkumar Katta, MD, Saint Louis University, Saint Louis, MO, Dr. Julie Hong, MD, St. Louis University, Portland, OR and Dr. Alan Knutsen, MD, FAAAAI, Saint Louis University School of Medicine, Saint Louis, MO
- 378 Comparing The Utility Of Skin Prick Testing Using Commercial Extracts and Fresh Food In Diagnosing Peanut Allergy**
Dr. Carah Santos, MD, Dr. Matthew Strand, PhD, Pearlanne Zelarney, MS and David Mark Fleischer, MD, FAAAAI, National Jewish Health, Denver, CO
- 379 Variability Of Major Allergens In Commercially Available Peanut Extracts For Skin Prick Testing**
Dr. Yong Luo, MD, PhD, Dr. Vincent R. Bonagura, MD, FAAAAI and Dr. David Rosenthal, DO, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY
- 380 Ara h 2 and The Relative Risk Of Other Sensitizations**
Dr. James Thompson, Fellow-In-Training, .. Evans, GA, Dr. Daniel Duquette, PhD, UW La Crosse, La Crosse, WI and Dr. Brock Williams, PhD, U. of Missouri Medical School, Olathe, KS
- 381 Variability Of Repeat Peanut Serum IgE Levels**
Tricia D. Lee, MD, Icahn School of Medicine at Mount Sinai, Jacob Daniel Kattan, MD, Icahn School of Medicine at Mount Sinai, New York, NY, Dr. Manish Ramesh, MD, PhD, Mount Sinai School of Medicine, New York, NY and Dr. Julie Wang, MD, FAAAAI, The Icahn School of Medicine at Mount Sinai, New York, NY
- 382 Does Peanut Allergen Conjunctival Provocation Test Reflect Specific IgE Levels To Peanut?**
Helene Lindvik, MD¹, Petter Mowinckel, M.Sc.², Jesintha Navaratnam, MD³, Prof. Karin Cecilie Lødrup Carlsen, MD, PhD^{1,4}, Prof. Magnus Borres, Md, Phd, FAAAAI⁵, Dr. Bente Kvenshagen, MD² and Prof. Kai Hakon Carlsen, MD, PhD^{1,4}, ¹Department of Paediatrics, Oslo University Hospital, Oslo, Norway, ²Oslo University Hospital, Oslo, Norway, ³Department of Ophthalmology, Oslo University Hospital, Oslo, Norway, ⁴The Faculty of Medicine, University of Oslo, Oslo, Norway, ⁵Department of Women's and Children's Health, Uppsala University, and Thermo Fisher Scientific, Uppsala, Sweden
- 383 The Use Of The ISAC Microarray Platform In Food Allergic Patients**
Jacob Daniel Kattan, MD¹, Gustavo Gimenez, BA¹, Jay A. Lieberman, MD² and Hugh A. Sampson, MD, FAAAAI³, ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²University of Tennessee, Memphis, TN, ³Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY
- 384 IgE Antibodies To Ara h 2 and Ara h 6 By Immunocap ISAC Distinguish Peanut Anaphylaxis Children From Asymptomatic Peanut Sensitization**
Dr. Rumiko Shibata, MD, PhD¹, Dr. Youko Murakami, MD¹ and Dr. Hiroshi Odajima², ¹Department of Pediatrics, Fukuoka National Hospital, Fukuoka, Japan, ²Fukuoka National Hospital, Fukuoka, Japan
- 385 Molecular Component Testing For Peanut Allergy Reactivity Differs Based On Age**
Dr. Michelle L. Altrich, PhD, Viracor-IBT Laboratories, Lee's Summit, MO
- 386 CD-Sens and Component Resolved Diagnostics In Diagnosing Hazelnut Allergy**
Dr. Josef Brandström, MD¹, Prof. Magnus Borres, Md, Phd, FAAAAI², Prof. S. G. O. Johansson, MD, PhD, FAAAAI³, Ms. Agneta Jansson Roth¹, Ms. Ann-Charlotte Sundqvist¹, Dr. Gunnar Lilja, MD, PhD¹, Dr. Anna Nopp, PhD³ and Dr. Caroline Nilsson, MD, PhD¹, ¹Department of Clinical Science and Education, Södersjukhuset, Karolinska Institutet and Sachs' Children's Hospital, Södersjukhuset, Stockholm, Sweden, ²Department of Women's and Children's Health, Uppsala University, and Thermo Fisher Scientific, Uppsala, Sweden, ³Department of Medicine, Clinical Immunology and Allergy Unit, Karolinska Institutet, Stockholm, Sweden
- 387 Effect Of Oleic Acid On The Allergenic Properties Of Peanut and Cashew Allergens**
Si-Yin Chung, PhD¹, Christopher P. Mattison, PhD¹, Shawndrika Reed¹, Dr. Richard L. Wasserman, MD, PhD, FAAAAI² and Wendy A. Desormeaux¹, ¹USDA-ARS-SRRC, New Orleans, LA, ²Allergy/Immunology Research Center of North Texas, Dallas, TX
- 388 Identification Of Conformational IgE Epitopes Of Ara h 2 and Ara h 6**
Dr. Xueni Chen, University of Colorado, Aurora, CO and Dr. Stephen C. Dreskin, MD, PhD, FAAAAI, University of Colorado Denver, Aurora, CO
- 389 Basophil Response To Storage Proteins and Oleosins From Sunflower Seed**
Maria Luisa Macias¹, Dr. Francisca Gómez, MD, PhD², Araceli Diaz³, Dr. Cristobalina Mayorga, PhD¹, Dr. Ana Aranda, PhD¹, Miguel González¹, Dr. Natalia Blanca-López, MD, PhD⁴, Dr. Gabriela Canto, MD, PhD⁴, Ms. Miriam Osorio¹, Dr. Maria Garrido, PhD³, Dr. Maria J Torres, MD, PhD² and Dr. Miguel Blanca, MD, PhD², ¹Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain, ²Allergy Service, Carlos Haya Hospital, Málaga, Spain, ³Plant Biotechnology Institute (UPM-INIA), Madrid, Spain, ⁴Allergy Service, Infanta Leonor Hospital, Madrid, Spain
- 390 Utility Of Ovomucoid Specific IgE In Predicting Unheated Egg Food Challenge Outcomes**
Dr. Katherine S. Larabee, MD¹, Dr. William J. Sheehan, MD^{2,3}, Dr. Lisa M. Bartnikas, MD^{2,3}, Mr. Carter Petty, MA³, Dr. Lynda C. Schneider, MD, FAAAAI^{2,3} and Dr. Wanda Phipatanakul, MD, MS, FAAAAI^{2,3}, ¹Massachusetts General Hospital for Children, Boston, MA, ²Harvard Medical School, Boston, MA, ³Boston Children's Hospital, Boston, MA
- 391 Allergy Testing In Childhood: Agreement Between Skin Prick Test and Specific IgE In Preschool Children**
Ann-Marie M. Schoos, MD, Bo Chawes, MD, Nilofar Følsgaard, MD, Nasim Samandari, MD, Klaus Bønnelykke, MD and Dr. Hans Bisgaard, MD DMSci, Danish Pediatric Asthma Center, Gentofte, Denmark

- 392 Measurement Of Allergenic Components For Predicting Clinically Relevant Shrimp Allergy In House Dust Mite Sensitized Children** Prof. Man-Yong Han, MD, PhD, Department of Pediatrics, CHA University School of Medicine, Seongnam, South Korea, Prof. Heysung Baek, MD, PhD, Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea and Prof. Ha-Baik Lee, MD, PhD, Department of Pediatrics, Hanyang University School of Medicine, Seoul, South Korea
- 393 Cross Reactivity Of Alpha Gal Allergy With An Extended Red Meat Panel**
Dr. Linda Flebbe-Rehwaldt, PhD, Viracor-IBT Laboratories, Lee's Summit, MO and Dr. Michelle L. Altrich, PhD, Viracor-IBT Laboratories, Lee's Summit, MO
- 394 Prediction Of Tolerance To Food Allergens By The Allergen-Specific IgE/Total IgE Ratio**
Ms. Claudia Lau¹, Dr. Ruchi Gupta, MD, MPH^{1,2}, Dr. Aaron Donnell, MD³, Prof. Robert G. Hamilton, PhD D.ABMLI FAAAAI⁴ and Dr. Kelly Newhall, MD³, ¹Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ²Northwestern University Feinberg School of Medicine, Chicago, IL, ³Chicago Family Asthma & Allergy, Chicago, IL, ⁴Johns Hopkins University School of Medicine, Baltimore, MD
- 395 T Regulatory Cells and Food Specific Responses In Peanut and Egg Allergic Children**
Nashmia Qamar, DO, Anna B. Fishbein, Kristin A. Erickson, Miao Cai, MS, Christine Szychlinski, MS, APN, CPNP, Ramsay L. Fuleihan, MD and Dr. Anne Marie Singh, MD, Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL
- 396 Surveillance Of Persistent Nut Allergy Including The Use Of Basophil Activation Test In Pediatric Patients**
Dr. Ashleigh A. Olson, MD¹, Kristin A. Erickson², Miao Cai, MS², Ms. Christine Szychlinski, APN, CPNP³ and Dr. Anne Marie Singh, MD², ¹Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ²Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ³Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL
- 397 Assessment Of a Modified Basophil Activation Test In The Diagnosis Of Peanut Allergy**
Dr. Monika Saeedian, MD, University of California, Los Angeles and Dr. Maria Garcia-Lloret, MD, UCLA
- 398 Utility Of Probability Curves Using 3gAllergy For Diagnosis Of Wheat Allergy**
Sakura Sato¹, Kiyotake Ogura¹, Yasunori Sato² and Motohiro Ebisawa, MD, PhD, FAAAAI¹, ¹Clinical Research Center for Allergy and Rheumatology, Sagami National Hospital, Kanagawa, Japan, ²Department of Biostatistics, Clinical Research Center Chiba University
- 399 Skin Prick Test and Specific IgE To Purified Peanut Allergens Are Related To The Age Of Onset Of Symptoms**
Dr. Maria Salas, MD, PhD¹, Dr. Francisca Gomez, MD, PhD², Dr. Ana Aranda, PhD³, Dr. Carmen Rondon, MD, PhD¹, Dr. Natalia Blanca-López, MD, PhD⁴, Dr. Gabriela Canto, MD, PhD⁴, Dr. Maria J Torres, MD, PhD¹, Dr. Cristobalina Mayorga, PhD³, Dr. Miguel Blanca, MD, PhD¹ and Maria Isabel Sánchez Rivas⁵, ¹Allergy Service, Carlos Haya Hospital, Málaga, Spain, ²Allergy Service, Carlos Haya Hospital, Spain, ³Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain, ⁴Allergy Service, Infanta Leonor Hospital, Madrid, Spain, ⁵Allergy Service Carlos Haya Hospital, Malaga, Spain
- 400 The Relationship Between Mitochondrial Haplogroups Variant on Children with Cow Milk Allergy Expressed As Atopic Dermatitis and Gastrointestinal Disease**
Dr. Juan Carlos Muino, MD, PhD, FAAAAI¹, Dr. Raul Boudet¹, Dr. Maria Chaig¹, Dr. Roberto Chaig¹, Prof. Nelida Gerez² and Prof. Juan Carlos Copioli¹, ¹FAC CS MED UNC, Cordoba, Argentina, ²FAC CS MED UNC, Córdoba, Argentina
- 401 Detection Of Peanut Allergens In Breast Milk and Saliva**
Dr. Kelli M. Rose, MD¹, Christian Plaisance², Casey C. Grimm, PhD², Hsiaopo Cheng, M.S.², Tysheena Charles, MS², Saeed A. Jortani³ and Soheila J. Maleki, PhD², ¹Tulane University, New Orleans, LA, ²USDA-ARS-SRRC, New Orleans, LA, ³University of Louisville, Louisville, KY
- 402 Importance Of High Molecular Weight Proteins In Walnut Allergy**
Melanie L. Downs, M.S.^{1,2}, Dr. Aida Semic-Jusufagic, MD², Dr. Angela Simpson, MD², Prof. Adnan Custovic, MD, PhD, FAAAAI², Dr. Savas Savatianos, MD³, Dr. Nikolaos G. Papadopoulos, MD, FAAAAI³, Dr. Joan Bartra, MD, PhD⁴, Dr. Montserrat Fernandez-Rivas⁵, Joe L. Baumert¹, Steve L. Taylor, PhD¹ and Prof. E.N. Clare Mills, BSc PhD², ¹Food Allergy Research and Resource Program, University of Nebraska-Lincoln, Lincoln, NE, ²Institute of Inflammation and Repair, University of Manchester, Manchester, United Kingdom, ³Allergy Department, 2nd Pediatric Clinic, University of Athens, Athens, Greece, ⁴Allergy Unit, Service of Pneumology and Respiratory Allergy, Hospital Clinic (ICT), Barcelona, Spain, ⁵Allergy Department, Hospital Clinico San Carlos, IdISSC, Madrid, Spain
- 403 Characterizing The Effect Of Sodium Sulfite On Cashew Allergens**
Christopher P. Mattison, PhD¹, Wendy A. Desormeaux¹, Dr. Richard L. Wasserman, MD, PhD, FAAAAI² and Casey C. Grimm, PhD¹, ¹USDA-ARS-SRRC, New Orleans, LA, ²Allergy/Immunology Research Center of North Texas, Dallas, TX
- 404 Cross-Sensitization To Rosaceae Fruits and Their Molecular Components In Japanese School Children**
Dr. Junya Hirayama¹, Dr. Atsushi Yamashita¹, Dr. Mizuho Nagao, MD¹, Dr. Reiko Tokuda^{1,2}, Dr. Keigo Kainuma, MD¹ and Dr. Takao Fujisawa, MD, FAAAAI¹, ¹Institute for Clinical Research, Mie National Hospital, ²Tokuda Family Clinic
- 405 Food-Specific IgE Panel Testing Commonly Results In Misdiagnosis and Inappropriate Dietary Exclusion**
Dr. Maryam Saifi, MD, University of Texas Southwestern Medical Center, Dallas, Mrs. Maria G. Crain, CPNPAC-C, Children's Medical Center Dallas, Dallas, TX, Dr. Pooja Varshney, MD, Dell Children's Medical Center, Specially for Children, Austin, TX and Dr. J. Andrew Bird, MD, FAAAAI, UT Southwestern Medical Center, Dallas, TX
- 406 Epitope Mapping The Peanut Panallergen Ara h 8**
Barry K. Hurlburt, PhD¹, Hsiaopo Cheng, M.S.¹, Dr. Lesa Offermann², Dr. Maksymilian Chruszcz, PhD³, Dr. Alexandra F. Santos, MD, MSc⁴, Prof. Gideon Lack, MD FRCPCH⁵ and Soheila J. Maleki, PhD¹, ¹USDA-ARS-SRRC, New Orleans, LA, ²university of south carolina, columbia, SC, ³University of South Carolina, Columbia, SC, ⁴King's College London, London, United Kingdom, ⁵St Thomas' Hospital, St Thomas' Hospital, London, United Kingdom
- 407 Simulated Roasting Affects Patient IgE Binding To Ara h 2**
Tysheena Charles, MS^{1,2}, Casey C. Grimm, PhD², Jane McBride², Samuel Landry, PhD¹ and Soheila J. Maleki, PhD², ¹Tulane University Health Sciences Center, New Orleans, LA, ²USDA-ARS-SRRC, New Orleans, LA
- 408 Transfer Of Peanut IgE Sensitization Following Kidney and Pancreas Transplant**
Alalia Berry, M.D., University of Utah, Department of Medicine, Salt Lake City, UT, Dr. Rafael Firszt, MD, MBA, Pediatrics, University of Utah, Salt Lake City, UT, Dr. Fuad Shihab, MD,

University of Utah, Division of Nephrology, Salt Lake City, UT, Dr. Jeffrey Campsen, M.D. FACS, University of Utah, Division of Transplant Surgery, Salt Lake City, UT and Craig Myrick, R.N., Intermountain Donor Services, Salt Lake City, UT

Urticaria

3208

Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 409 Outcome Measures Of Challenge Testing In Patients With Physically Induced-Urticaria**
Dr. Dean D. Metcalfe, MD¹, Sarah Arceo, RN¹, Michael L. Young, RN MPH², Celeste Nelson, NP¹ and Dr. Hirsh D. Komarow, MD³, ¹NIH/NIAID/Laboratory of Allergic Diseases, Bethesda, MD, ²Clinical Research Directorate/CMRP, SAIC-Frederick Inc, Frederick National Laboratory for Clinic Research, Frederick, MD, ³Laboratory of Allergic Diseases, NIAID/NIH, Bethesda, MD
- 410 Whole Blood Histamine Concentration Response To Omalizumab In Patients With Chronic Idiopathic/Spontaneous Urticaria: Post Hoc Analysis Of Asteria I, Asteria II and Glacial Studies**
Dr. Sarbjit S. Saini, MD, FAAAAI¹, Dr. Karin Rosen, MD, PhD², Dr. Hsin-Ju Hsieh, PhD², Ms. Patricia M. Sterba, MS¹, Mr. John-Paul Courneya, MS¹, Dr. Henry Hulter² and Dr. Hubert Chen², ¹Johns Hopkins University, Baltimore, MD, ²Genentech, Inc., South San Francisco, CA
- 411 Efficacy Of Omalizumab In Patients With Chronic Idiopathic/Spontaneous Urticaria With Different Background Therapy: Post Hoc Analysis Of Asteria I, Asteria II, and Glacial Studies**
Dr. Jonathan A. Bernstein, MD, FAAAAI¹, Dr. Sarbjit S. Saini, MD, FAAAAI², Prof. Marcus Maurer, MD³, Dr. Hsin-Ju Hsieh, PhD⁴, Dr. Hubert Chen⁴, Dr. Janice Canvin, MD, FRCPC⁵, Dr. Thomas B. Casale, MD, FAAAAI⁶, Dr. Allen P. Kaplan, MD, FAAAAI⁷ and Dr. Karin Rosen, MD, PhD⁴, ¹Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, ²Johns Hopkins University, Baltimore, MD, ³Department of Dermatology and Allergy, Charité – Universitätsmedizin, Berlin, Germany, ⁴Genentech, Inc., South San Francisco, CA, ⁵Novartis Pharmaceuticals UK Limited, Horsham, West Sussex, United Kingdom, ⁶Univeristy Of South Florida Morsani College Of Medicine, Tampa, FL, ⁷Medical University of South Carolina, Charleston, SC
- 412 Angioedema and Angioedema Management From Asteria I and Asteria II: Phase III Studies To Evaluate The Efficacy and Safety Of Omalizumab In Patients With Chronic Idiopathic/Spontaneous Urticaria Who Remain Symptomatic Despite H1 Antihistamine Treatment**
Dr. James Zazzali, PhD, Dr. Karin Rosen, MD, PhD, Mary S. Bradley, MS and Karina Raimundo, BPharm, MS, Genentech, Inc., South San Francisco, CA
- 413 Improvements In Health-Related Quality Of Life From Asteria I & II: Phase III Studies To Evaluate The Efficacy and Safety Of Omalizumab In Patients With Chronic Idiopathic/Spontaneous Urticaria Who Remain Symptomatic Despite H1 Antihistamine Treatment**
Karina Raimundo, BPharm, MS, Dr. James Zazzali, PhD, Benjamin Trzaskoma and Dr. Karin Rosen, MD, PhD, Genentech, Inc., South San Francisco, CA
- 414 Estimating The Minimal Important Difference (MID) Of The Measures In The Urticaria Patient Daily Diary (UPDD): Updated Findings Using Data From The Asteria I, Asteria II, and Glacial Studies Of Omalizumab In Chronic Idiopathic/Spontaneous Urticaria**
Susan Mathias¹, Dr. Ross D. Crosby², Dr. Karin Rosen, MD, PhD³ and Dr. James Zazzali, PhD³, ¹Health Outcomes Solutions, ²Neuropsychiatric Research Institute, Fargo, ³Genentech, Inc., South San Francisco, CA
- 415 Treatment With Off-Label Omalizumab In Chronic Idiopathic Histaminergic Urticaria - Angioedema Resistant To Conventional Treatment**
Dr. Y. V. Rijo, MD¹, Dr. P. Palao, MD¹, Dr. N. Prior, MD², Dr. A. Fiandor, MD¹, Dr. M.C. Lopez-serrano, MD, PhD¹, Dr. S. Olalde, MD¹, Mrs. M.C. Torres¹, Dr. S. Quirce, MD, PhD¹ and Dr. T. Caballero, MD, PhD¹, ¹Hospital La Paz Institute for Health Research (IdiPaz), Allergy department., Madrid, Spain, ²Hospital Severo Ochoa, Madrid, Spain
- 416 Real-Life Experiences With Omalizumab For The Treatment Of Severe Refractory Chronic Urticaria (SRCIU)**
Carly Barron¹, Dr. Gordon L. Sussman, FAAAAI^{1,2}, Dr. Jacques Hébert, MD^{3,4}, Jiayi Bian¹, Rose-Marie Caron-Guay⁴, Stephanie Laflamme⁴ and Simon Stern¹, ¹Gordon Sussman Clinical Research Inc., Toronto, ON, Canada, ²University of Toronto, Faculty of Medicine, Toronto, ON, Canada, ³University Laval Center Hospital, Quebec City, QC, Canada, ⁴Centre de Recherche Appliquée en Allergie de Québec, Québec City, QC, Canada
- 417 Outcomes Of Chronic Urticaria Patients Treated With Hydroxychloroquine**
Dr. Jacqueline Eastman, Dr. Nicole Wilde and Dr. Maya R. Jerath, MD, PhD, University of North Carolina, Chapel Hill, NC
- 418 Polymorphisms Of Genes Encoding Interleukin-4 and Its Receptor Are Associated With Chronic Idiopathic Urticaria**
Ms. Zahra Aryan^{1,2}, Dr. Marzieh Tavakol^{3,4}, Prof. Ali Akbar Amirzargar, PhD¹, Prof. Masoud Movahedi³, Dr. Alireza Zare bidoki³, Dr. Mohammad Gharagozlou, MD³, Prof. Asghar Aghamohammadi⁵, Dr. Mohammad Nabavi⁶, Mr. Alireza Ahmadvand³, Dr. Nasrin Behniafard, MD³, Ms. Kimia Heidari³, Ms. Samaneh Soltani³ and Dr. Nima Rezaei, MD, PhD¹, ¹Molecular Immunology Research Center; and Department of Immunology, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, ²National elites foundation, Iran., ³Molecular Immunology Research Center; and Department of Immunology, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, Iran, ⁴Student Scientific Research Center (SSRC), School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, ⁵Research Center for Immunodeficiencies, Children's Medical Center, Tehran University of Medical Sciences, Tehran, Iran, ⁶Department of Allergy and Immunology, Rasool-e-Akram Hospital, Tehran University of Medical Sciences, Tehran, Iran, Iran
- 419 Chronic Idiopathic Urticaria Index (CIUI) As a Tool For Predicting Response To Cyclosporine In Pediatric Patients With Refractory Autoimmune Urticaria**
Dr. Moira E. Breslin, MD, MSc, Pediatrics, UCLA Medical Center, Los Angeles, CA, Dr. Bob Geng, MD, UCLA, Los Angeles, CA and Dr. Robert Roberts, MD, PhD, UCLA
- 420 Cholinergic Urticaria: Case Report Of Urticaria Induced By Acquired Seasonal Hypohidrosis**
Dr. Yuriy Zgherea, MD, Dr. Muhammad Imran, MD, Dr. Jaron T. Abbott, MD, Dr. Aaron K. Pinion, DO, Dr. Selina Gierer, DO and Dr. John D. Martinez, MD, University of Kansas Medical Center
- 421 Relation Between Environmental Allergen Exposure and Chronic Urticaria**
Dr. Denisa Ferastraoar, MD, MSc, Allergy - Immunology, Albert Einstein College of Medicine / Montefiore Medical Center, Bronx, NY, Dr. Sunit Jariwala, MD, Albert Einstein/Montefiore Medical Center, New York, NY, Dr. Golda Hudes, MD, PhD, Albert Einstein/ Montefiore Medical Center, New York, NY and Dr. David L. Rosenstreich, MD, FAAAAI, Albert Einstein/Montefiore Medical Center, Bronx, NY
- 422 Relationship Of Clinical Characteristics Of Chronic Urticaria In Children To Treatment Outcome**
Lisa Neverman, B.S. and Prof. Miles M. Weinberger, MD, FAAAAI, University of Iowa, Iowa City, IA

- 423 Clinical Characteristics Of Elderly Chronic Urticaria**
Dr. Ga Young Ban, MD¹, Ji Hye Kim, MD², Mi-Yea Kim, MD¹, Dr. Hye-Soo Yoo, MD¹, Dong-Ho Nahm, MD, PhD¹, Dr. Young Min Min Ye, MD¹, Yoo Seob Shin, MD, PhD¹ and Prof. Hae-Sim Park, MD, PhD¹, ¹Department of Allergy & Clinical Immunology, Ajou University School of Medicine, Suwon, South Korea, ²Department of Internal medicine, Konyang University College of Medicine, Daejeon, South Korea
- 424 Decreased Serum Vitamin D Level In Patients With Chronic Spontaneous Urticaria**
Dr. Tadech Boonpiyathad, MD, Dr. Panitan Pradapongsa and Dr. Atik Sangasapaviriya, Phramonkulkao Hospital, Bangkok, Thailand
- 425 Supplementation With Vitamin D In a Cohort Of Patients With Chronic Urticaria Results In Clinical Improvement**
Dr. Anastasiya Kleva, MD, Dr. Sherry Farzan, MD and Dr. Blanka M. Kaplan, MD, FAAAAI, Department of Pediatrics, Division of Allergy & Immunology, Hofstra-North Shore-LIJ School of Medicine, Great Neck, NY
- 426 Clinical and Laboratory Features Of Chronic Urticaria**
Dr. Koji Masuda, Kyoto Prefectural University of Medicine, Kyoto, Japan
- 427 Serum Specific IgE Response To Thyroid Autoantigens In Aspirin Intolerant Urticaria Patients**
Dr. Yoo Seob Seob Shin, MD, PhD, Dr. Hye-Soo Yoo, MD, Dr. Ga Young Ban, MD, Dr. Young Min Min Ye, MD and Prof. Hae-Sim Park, MD, PhD, Department of Allergy & Clinical Immunology, Ajou University School of Medicine, Suwon, South Korea
- 428 Basophil Receptor Profiles In Chronic Idiopathic Urticaria**
Dr. Eric Oliver, MD, Ms. Patricia M. Sterba, MS and Dr. Sarbjit S. Saini, MD, FAAAAI, Department of Medicine, Division of Allergy and Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD
- 429 Altered Systemic Adipokine Levels In Patients With Chronic Idiopathic Urticaria**
Dr. Young Min Ye, MD, Dr. Ga Young Ban, MD, Eun-Mi Yang, Dr. Hye-Soo Yoo, MD, Yoo Seob Shin, MD, PhD and Prof. Hae-Sim Park, MD, PhD, Department of Allergy & Clinical Immunology, Ajou University School of Medicine, Suwon, South Korea
- 430 Predicting Clinical Responsiveness To Dapsone In The Treatment Of Chronic Idiopathic Urticaria (CIU)**
Dr. Ryan A. Steele, DO, MS¹, Dr. Janelle Sher, MD², Dr. Mark Davis-Lorton, MD, FAAAAI², Dr. Marcella R. Aquino, MD, FAAAAI² and Dr. Luz S. Fonacier, MD, FAAAAI³, ¹Allergy & Immunology, Winthrop University Hospital, Mineola, NY, ²Winthrop University Hospital, Allergy & Immunology, Mineola, NY, ³Section of Allergy and Clinical Immunology, Department of Medicine, Winthrop University Hospital, Mineola, NY
- 431 Chronic Urticaria/Angioedema and Auto-Immunity: Diagnostic Profile Among Patients Attending a Reference Clinic In Brazil**
Dr. Daniel L. Cordeiro, MD¹, Dr. Janaina Fernandes de Melo Sousa, MD¹, Dr. Karine Bouffleur, MD¹, Dr. Priscila Botelho Palhas, MD¹, Dr. Thaís Mendonça, MD¹, Dr. Janaina Michele de Lima Melo, MD¹ and Dr. Luisa Karla P. Arruda, MD, PhD, FAAAAI², ¹Ribeirao Preto Medical School, University of Sao Paulo, Ribeirao Preto, Brazil, ²School of Medicine of Ribeirao Preto, Ribeirao Preto, Brazil
- 432 Chronic Spontaneous Urticaria-The Saskatchewan Experience and Questionnaire Survey**
Ms. Natasha Gattley, University of Saskatchewan, Saskatoon, SK, Canada
- 433 A Case Of Incontinentia Pigmenti Masquerading As Urticaria Pigmentosa**
Dr. Erin C. Donahue, MD and Dr. Sonal R. Patel, MD, White Memorial Medical Center, Los Angeles, CA
- 434 Acute Urticaria Caused By Infection In 72 Chinese Patients**
Prof. Ting Xiao, The First Affiliated Hospital, China Medical University, Shenyang, China and Dr. Lin Zhu, The First Affiliated Hospital, China Medical University
- 435 Assessment Of Acute Urticaria In Pediatric Emergency Department**
Dr. Raquel Reis Pitchon, Clinical Research¹, Mr. Daniel Reis, Medical Student², Ms. Adriana Reis, Medical Student³, Mr. André Chuster, Medical Student³, Prof. Teresa Mohallen, Professor², Dr. José Ribeiro, Pediatrician⁴, Dr. Nívea Claret, Pediatrician⁴, Dr. Giane Chaves, Pediatrician⁴, Dr. Virgilio Aleixo, Pediatrician⁴, Dr. Maria do Socorro Fernandes, Pediatrician⁴ and Dr. Fausto Pacheco, Pediatrician⁴, ¹Mater Dei Hospital, BELO HORIZONTE, Brazil, ²Universidade Federal de Minas Gerais, BELO HORIZONTE, Brazil, ³Faculdade de Ciências Médicas, BELO HORIZONTE, Brazil, ⁴Hospital Mater Dei, BELO HORIZONTE, Brazil
- 436 OTC Pills and Severe Urticaria**
Ivan Cherrez¹, Enrique Loayza², Leonardo Greiding³, Jose M. Vilema⁴, Juan Calderon⁴, Erick Calero⁴ and Gabriela Martinetti⁴, ¹Respiralab - Hospital Kennedy, Guayaquil, Ecuador, ²Respiralab - Hospital Luis Vernaza, Guayaquil, Ecuador, ³Instituto Argentino de Alergia e Immunologia, Buenos Aires, Argentina, ⁴Respiralab, Guayaquil, Ecuador
- 437 Hypocomplementemic Urticarial Vasculitis With Elevated Immune Complexes and Nasal Polyposis**
Dr. Khrystyna Lishchuk-Yakymovych, MD, Medical University, Lviv, Ukraine, Dr. Roman Pukalyak, Danylo Halytskyy Lviv National Medical University, Ukraine and Prof. Lawrence M. Dubuske, MD, FAAAAI, George Washington University School of Medicine, DC

Pediatric Population Health

3209

Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 438 Nannies Knowledge, Attitude and Management Of Food Allergies In Children; An Online Survey**
Dr. Justin C. Greiwe, MD¹, Dr. Lisanne P. Newton, MD², Dr. Fouseena Pazheri, MD³ and Dr. Brian C. Schroer, MD², ¹Cleveland Clinic, Cleveland, OH, ²Cleveland Clinic Foundation, Cleveland, OH, ³Cleveland Clinic
- 439 Does Omega-3 Fatty Acid Supplementation During Pregnancy Prevent Childhood Atopic Disease?**
Dr. Manika Girdhar, DO, Children's Mercy Hospital & Clinics, Kansas City, MO and Dr. Christina E. Ciaccio, MD, FAAAAI, Children's Mercy Hospital, Kansas City, MO
- 440 Helping Children Cope With Discomfort Associated With Skin Prick Testing In a Pediatric Setting: A Quality Improvement Report**
Ms. Amanda Troger, BSN, RN¹, Ms. Humaira Robinson, BSN RN¹, Ms. Sonia C. Mancia, RN², Dr. Hemant P. Sharma, MD MHS FAAAAI³ and Dr. Katherine Kelly, PhD, RN¹, ¹Children's National Medical Center, Washington, DC, ²Children's National Medical Center, Fairfax, VA, ³Children's National Medical Center
- 441 Are Total Serum IgE Levels Good Predictors Of Allergies In Children?**
Dr. Stephanie Barnes-Mercado¹, Dr. Vylma Velazquez, MD² and Dr. Annette Pietri-Ramirez¹, ¹Hospital Episcopal San Lucas-Ponce, ²Hospital Episcopal San Lucas, Ponce, PR
- 442 Relationship Between Maternal Fat During Pregnancy and Risks Of Allergic and Respiratory Diseases In Early Childhood: The Mothers and Children's Environmental Health Study**
Prof. Ja Hyeon Kim, MD¹, Prof. Eun-Hee Ha, MD², Prof. Hye-sook Park, MD³, Prof. Mina Ha, MD³, Prof. Yun-Chul Hong,

MD⁴, Prof. Yangho Kim, MD⁵, Mr. Min-ho Kim, PhD⁶, Prof. Jin-A Jung, MD⁷ and Prof. NamSoo Chang, PhD⁸, ¹Ulsan University Hospital, Ulsan, South Korea, ²Department of Preventive Medicine, School of Medicine, Ewha Womans University, South Korea, ³Department of Preventive Medicine, Dankook University College of Medicine, ⁴Department of Preventive Medicine, Seoul National University College of Medicine, South Korea, ⁵Department of Occupational and Environmental Medicine, University of Ulsan, College of Medicine, Ulsan University Hospital, South Korea, ⁶Ulsan University Hospital, South Korea, ⁷Dong-A University College of Medicine, Busan, ⁸Department of Nutritional Science and Food Management, Ewha Womans University, Seoul, Korea, South Korea

443 The Efficacy Of Training School and Nursery Personnel On Epinephrine Autoinjector Use

Dr. Mari Sasaki, MD, Dr. Mayumi Furukawa, MD, Dr. Koichi Yoshida, MD and Dr. Akira Akasawa, MD, PhD, Division of Allergy, Tokyo Metropolitan Children's Medical Center, Tokyo, Japan

444 Referral Patterns To An Outpatient Allergy/Immunology Clinic At a Tertiary Care Pediatric Academic Center

Kasey Strothman, MD^{1,2}, David R. Stukus, MD, FAAAAI¹ and Rebecca Scherzer, MD, FAAAAI¹, ¹Nationwide Children's Hospital, Columbus, OH, ²Wexner Medical Center at The Ohio State University, Columbus, OH

445 Food Allergy Education Significantly Improves School Personnel Food Allergy Knowledge and Bullying Attitudes

Niti Y. Chokshi, MD¹, Kristin H. Dillard, MD¹, Danielle Guffey, MS², Charles Minard, PhD² and Carla M. Davis, MD¹, ¹Baylor College of Medicine and Texas Children's Hospital, Section of Immunology, Allergy and Rheumatology, Houston, TX, ²Baylor College of Medicine, Houston, TX

Health Information Technology

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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

446 How Patients Rate Their Allergists Online: Analysis Of Physician-Review Websites

Xiao C. Wan, M.D., University of Chicago, Department of Internal Medicine, Chicago, IL and Ves Dimov, MD, Section of Allergy, Asthma and Immunology, Department of Pediatrics, Department of Medicine, University of Chicago, Chicago, IL

447 Improving Allergy and Immunology Education For The Internal Medicine Resident Through Internet-Based Learning Modules

Dr. Michelle C. Fox, MD^{1,2}, Dr. Paige G. Wickner, MD³ and Dr. Mariana C. Castells, MD, PhD, FAAAAI⁴, ¹Brigham and Women's Hospital, ²Harvard Medical School, ³Brigham & Women's Hospital, Chestnut Hill, MA, ⁴Division of Rheumatology, Allergy and Immunology, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA

448 Electronic Patient Data Acquisition Tablet (ePDAT) Provides Customized, Flexible Scheduling For Collecting Patient Reported Outcomes (ePRO) With High Usability and Compliance Ideal For Use In Single and Multicenter Environmental Exposure Chamber Studies

Mr. Dan Wilson, Dr. Piyush Patel, MD, FRCP, Konrad Boczula and Dr. AnneMarie Salapatek, PhD, Inflamax Research, Mississauga, ON, Canada

449 Feasibility and Acceptability Of a Novel Asthma Self-Management Smartphone Application For Children and Adolescents

Nabeel Farooqui, MD^{1,2}, Gary Phillips, M.A.S.² and David R. Stukus, MD, FAAAAI^{1,2}, ¹Nationwide Children's Hospital, Columbus, OH, ²Wexner Medical Center at The Ohio State University, Columbus, OH

450 Experience In The Development Of a Mobile Diagnosis Support System For Asthma: Intelimed

Prof. Silvia Wanick Sarinho Sr., Prof.Dr.¹, Prof. Júlio Venâncio Menezes Júnior¹, Prof. Cristine Gusmão¹ and Nilza R S Lyra, MD², ¹Universidade Federal de Pernambuco, ²Universidade Federal de Pernambuco, Recife PE, Brazil

451 An Assessment Of Food Allergy Knowledge Among Parents Of Children With Food Allergy and The Role Of An Educational Website

Jamee Castillo, MD¹, Neha Mehrotra, MD¹, Raoul L. Wolf, MD, FAAAAI² and Ves Dimov, MD³, ¹Internal Medicine Residency Program, Department of Medicine, University of Chicago, Chicago, IL, ²Section of Allergy, Asthma and Immunology, Department of Pediatrics, Department of Medicine, University of Chicago, Chicago, IL, ³University of Chicago Medicine, Chicago, IL

Chronic Rhinosinusitis and Polyps

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452 The Differences Of TNF- α , Rantes, Interleukin-5 Levels In Nasal Polyps With Allergic, Local Allergic, and Non-Allergic Rhinitis

Prof. Jae-Won Oh, MD, PhD, FAAAAI, Hanyang University Guri Hospital, Seoul, Dr. Joo-Hwa Kim, MD, Hanyang University Guri Hospital, Seoul, South Korea and Dr. JIn-Hyuk Cheong, Hanyang University Guri Hospital, Guri, South Korea

453 Cigarette Smoke Promotes Eosinophilic Inflammation, Airway Remodeling and Nasal Polyps In a Murine Polyp Model

Dr. Ji-Hun Mo, Department of Otorhinolaryngology, Dankook University College of Medicine, Cheonan, South Korea and Ki-Il Lee, Dankook university, South Korea

454 Evaluation Of Oral Antibiotics Versus Placebo For The Treatment Of Rhinosinusitis With Neutrophilia On Nasal Cytology

Manar Abdalgani, MD¹, Dr. Joud Hajjar, MD², Krista Edelman, MD¹ and Dr. Lawrence B. Schwartz, MD, PhD, FAAAAI¹, ¹Virginia Commonwealth University, Richmond, VA, ²Baylor College of Medicine, Houston, TX

455 Pediatric Allergic Fungal Otomastoiditis Improved With Anti-IgE Therapy

Dr. Diana K. Bayer, DO¹, Dr. Anki Dutta, MD, MPH^{2,3}, Dr. Robert Williamson, MD⁴, Dr. Andrew deJong, MD^{3,5}, Dr. Keith Paull, MD^{3,6}, Dr. I. Celine Hanson, MD, FAAAAI¹ and Dr. Lisa R. Forbes, MD¹, ¹Baylor College of Medicine-Texas Children's Hospital, Section of Immunology, Allergy, and Rheumatology, Houston, TX, ²Health Point ABC Clinic, College Station, TX, ³Texas A&M Health Science Center, Bryan, TX, ⁴Texas Children's Hospital-Baylor College of Medicine, Department of Surgery, Otolaryngology, Houston, TX, ⁵Texas ENT and Allergy, Bryan, TX, ⁶The Paull Allergy and Asthma Clinic, Bryan, TX

456 Measurement Of Nasal and Exhaled Nitric Oxide In Chronic Rhinosinusitis and Its Comparison According To The Presence Of Nasal Polyps

Dr. Woo Yong Bae, MD, Department of Otorhinolaryngology, College of Medicine, Dong-A University, Busan, South Korea, Prof. Jin-A Jung, MD, Dong-A University College of Medicine, Busan and Dr. Young-Hee Nam, MD, Department of Internal Medicine, College of Medicine, Dong-A University, Busan, South Korea

457 Post-Translational Modification By Serine Proteases Controls The CCL23 Activity In Nasal Polyps Of Chronic Rhinosinusitis

Dr. Atsushi Kato, PhD¹, Dr. Anjeni Keswani, MD¹, Dr. Julie Kim, M.D.¹, Ms. Julie Popski, MS¹, Dr. Sarah Peterson, MD¹, Ms. Lydia Suh, BSc¹, Mr. James Norton, MS¹, Dr. Anju T. Peters, MD, FAAAAI¹, Dr. Kathryn E. Hulse, PhD², Dr. Leslie C. Grammer,

- MD, FAAAAI¹, Dr. Bruce K. Tan, MD³, Dr. Rakesh Chandra, MD², Dr. David Conley, MD³, Dr. Juan Jaen, PhD⁴, Dr. Thomas Schall, PhD⁴, Dr. Robert C. Kern, MD^{1,3} and Dr. Robert P. Schleimer, PhD FAAAAI⁵, ¹Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Northwestern University, Chicago, IL, ³Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁴Chemocentryx Inc, Mountain View, CA, ⁵Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL
- 458 Sinusitis In Latino Children Is Associated With Allergic Respiratory Diseases and Inversely Related To Native American Ancestry (GALA II Study)**
Dr. Jennifer A. Regan, MD, PhD¹, Dr. Joy Hsu, MD, MSCI², Ms. Elizabeth Nguyen, BS³, Ms. Lindsey Roth, MA⁴, Dr. Joshua Galanter, MD⁴, Dr. Sam Oh, PhD, MPH⁴, Ms. Celeste Eng, BS⁴, Mr. Fred Lurmann, MS⁵, Dr. Rajesh Kumar, MD, MS, FAAAAI⁶, Dr. Harold J. Farber, MD, MSPH⁷, Dr. Denise Serebrisky, MD⁸, Dr. Luisa Borrell, DDS, PhD⁹, Dr. Saunak Sen, PhD¹⁰, Dr. William Rodriguez-Cintrón, MD¹¹, Dr. Jose Rodriguez-Santana, MD¹², Dr. Esteban Gonza Burchard, MD, MPH⁴ and Prof. Pedro C. Avila, MD, FAAAAI¹, ¹Feinberg School of Medicine, Northwestern University, Chicago, IL, ²Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Department of Medicine, University of California, San Francisco, California, San Francisco, CA, ⁴Department of Medicine, University of California, San Francisco, San Francisco, CA, ⁵Sonoma Technology, Inc., Petaluma, CA, ⁶Pediatric allergy, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ⁷Baylor College of Medicine and Texas Children's Hospital, Houston, TX, ⁸Pediatric Pulmonary Division, Jacobi Medical Center, Bronx, NY, ⁹Department of Health Sciences, Graduate Program in Public Health, Lehman College, City University of New York, Bronx, NY, ¹⁰Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA, ¹¹Veterans Caribbean Health Care System, San Juan, PR, ¹²Centro de Neumología Pediátrica, San Juan, PR
- 459 Evaluation Of Olfactory Function In Patients With Chronic Rhinitis**
Dr. Idalia V. Yanez-Perez, MD, Dr. Sandra N. Gonzalez-Diaz, MD, PhD, FAAAAI, Dr. Alejandra Macias-Weinmann, Dr. Alfredo Arias-Cruz, Dr. Lorena Rangel-Garza, Dr. Hilda Hernandez-Sanchez, MD, Dr. Rafael Perez-Vanzzini and Dr. Karla Mejia-Salas, Regional Center of Allergy and Clinical Immunology, University Hospital "Dr. Jose Eleuterio Gonzalez", Monterrey, Mexico
- 460 A Method For Assessing Regional Determinants Of Eosinophilia In Chronic Rhinosinusitis**
Dr. Bruce K. Tan, MD¹, Ms. Erin Rocci, BS², Dr. Kent Lam, MD¹, Ms. He Huang, MS¹, Ms. Lydia Suh, BSc³, Mr. Avesh Thuluvath, BA⁴, Ms. Alcina K. Lidder, BA¹, Dr. Rakesh Chandra, MD⁵, Dr. David Conley, MD¹, Dr. Stephanie Shintani-Smith, MD¹, Dr. Kathryn E. Hulse, PhD⁵, Dr. Atsushi Kato, PhD³, Dr. Anju T. Peters, MD, FAAAAI³, Dr. Leslie C. Grammer, MD, FAAAAI³, Dr. Robert C. Kern, MD¹ and Dr. Robert P. Schleimer, PhD FAAAAI⁶, ¹Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Loyola University Stritch School of Medicine, Chicago, IL, ³Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁴Northwestern University- Feinberg School of Medicine, Chicago, IL, ⁵Northwestern University, Chicago, IL, ⁶Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL
- 461 The Prevalence Of AERD In a Tertiary Care Center**
Dr. Whitney Wyatt Stevens, MD, PhD¹, Dr. Anju T. Peters, MD, FAAAAI¹, Dr. Kathryn E. Hulse, PhD², Dr. Leslie C. Grammer, MD, FAAAAI¹, Dr. Joy Hsu, MD, MSCI¹, Prof. Pedro C. Avila, MD, FAAAAI¹, Mr. James Norton, MS¹, Ms. Lydia Suh, BSc¹, Dr. Rakesh Chandra, MD², Dr. David Conley, MD³, Dr. Robert C. Kern, MD³, Dr. Bruce K. Tan, MD³ and Dr. Robert P. Schleimer, PhD FAAAAI⁴, ¹Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Northwestern University, Chicago, IL, ³Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁴Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL
- 462 Expression Of Hypoxia-Inducible Factor 1alpha In Regulatory T Cells Is Associated With Nasal Polyposis**
Prof. Yong Min Kim¹, Dr. Jun Jin², Dr. Dong-Yeop Chang³, Sung Ha Kim⁴ and Ki-Sang Rha⁴, ¹Chungnam National University School of Medicine, Daejeon, South Korea, ²Chungnam National University School of Medicine, ³Laboratory of Immunology and Infectious Diseases, Graduate School of Medical Science and Engineering, KAIST, Daejeon, South Korea, ⁴Chungnam National University School of Medicine, South Korea
- 463 Prognostic Factors For Olfaction After Endoscopic Sinus Surgery In Chronic Sinusitis With Or Without Allergy**
Dr. Byung Guk KIM¹, Jihyun SHIN², Chan Soon PARK², Dr. Soo Whan Kim³, JUN Myung Kang² and So Young PARK², ¹The Catholic University Of Korea, Seoul, Korea, South Korea, ²The Catholic University Of Korea, Seoul, Korea, ³The Catholic University of Korea

Rhinitis

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- 464 The Association Between Two SNPs GATA3 (rs1269486, rs2229360) Gene and Allergic Rhinitis**
Prof. Reza Farid, MD, FAAAAI, Allergy Research Center, Mashhad University of Medical Sciences, Iran, Prof. mohammad Raza Abbaszadegan, 1. Genetic Research Center, Mashhad University of Medical Science, mashhad, Iran, Prof. Farahzad Jabbari, Allergy research center, Mashhad University of Medical Science, Mashhad, Iran, Prof. Mehran Gholamin, Immunology Research Center, 1. Mashhad University of Medical Science, mashhad, Iran, Dr. Afshin Shirvani, MD, Bushehr University of Medical Science, Mashhad, Iran, Mrs. Hadis Yousefzadeh, allergy Research Center, Mashhad University of Medical Science, mashhad, Iran and Ms. Atena Mansouri, buoshar university, Iran
- 465 Impacts Of Adolescents' Allergic Rhinitis On School Achievement and Quality Of Life**
Prof. Sun-Hee Choi, MD, PhD¹, Dr. Kyung Suk Lee, MD, PhD² and Prof. Yeong-Ho Rha, MD, PhD², ¹Gangdong Kyung Hee University Hospital, Seoul, South Korea, ²Kyung Hee University Hospital
- 466 Allergic Rhinitis (AR) Is Sub-Optimally Controlled: The Need For a More Effective Treatment Option**
Dr. Phillip L. Lieberman, MD, FAAAAI, Allergy and Asthma Associates, Germantown, TN and Prof. David Price, FRCGP, MRCGP, DRCOG, Research In Real Life, Cambridge, United Kingdom
- 467 Short and Long-Term Safety Of MP29-02 In The Treatment Of Allergic Rhinitis**
Dr. William Berger, MD, Allergy & Asthma Associates of Southern California, Mission Viejo, CA, Dr. Jonathan A. Bernstein, MD, FAAAAI, Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, Dr. Nancy Ruiz, MD, MEDA Pharmaceuticals, Somerset, NJ and Dr. Warner W. Carr, MD, FAAAAI, Allergy and Asthma Associates of SCs, Mission Viejo, CA

- 468 Anti-Allergic Effect Of Intranasal 1,25-Dihydroxyvitamin D3 Treatment In Allergic Rhinitis Mouse Model**
Dr. Dong-Young Kim, Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL; Department of otorhinolaryngology, Seoul national university college of medicine, Seoul, Korea and Dr. Jae-Min Shin, Department of Otorhinolaryngology-Head and Neck Surgery, Soon Chun Hyang University Hospital, Seoul, South Korea
- 469 B-Cells In Allergic Airways Disease: Inhibition Of Epsilon Transcription By Omalizumab**
Dr. Marylin Desjardins, MD^{1,2}, Dr. Jean-Philippe Drolet, MD³, Ms. Marianne Beland², Dr. Sam Daniel, MD¹ and Dr. Bruce D. Mazer, MD, FAAAAI^{1,4}, ¹Montreal Children's Hospital, Montreal, QC, Canada, ²Meakins-Christie Laboratories, Montreal, QC, Canada, ³Centre Hospitalier Universitaire de Quebec, Quebec, QC, Canada, ⁴Meakins-Christie Laboratories, Research Institute - McGill University Health Centre, Montreal, QC, Canada
- 470 Early Childhood Allergic Phenotypes Are Associated With Internalizing Disorders**
Maya Nanda, MD¹, Linda Levin, PhD², Grace K. LeMasters, PhD², Amal H. Assa'ad, MD, FAAAAI¹, Nicholas Newman, DO, MS¹ and Patrick Ryan, PhD¹, ¹Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²University of Cincinnati, Cincinnati, OH
- 471 Allergic Rhinitis In Puerto Rican Children: Under-Diagnosis and Risk Factors**
Dr. Tammy S. Jacobs, MD, MA, Dr. Erick Forno, MD, MPH, Dr. John M. Brehm, MD, MPH, Dr. Yueh-Ying Han, PhD, MS and Dr. Juan C. Celedon, MD, DrPH, FAAAAI, Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA
- 472 Hematopoietic Prostaglandin D Synthase Is a Useful Target For Treating Nasal Obstruction In Guinea Pigs With Allergic Rhinitis**
Daisuke Kajiwara, Hiroki Aoyagi, Kazuhiko Shigeno, Katsunao Tanaka, Eiji Sasaki and Teruhiro Utsugi, Tsukuba Research Center, TAIHO PHARMACEUTICAL CO.,LTD.
- 473 Efficacy Of MP29-02 In The Treatment Of Nasal and Ocular Symptoms Of Seasonal Allergic Rhinitis (SAR)**
Dr. Paul H. Ratner, MD, FAAAAI, Sylvana Research, San Antonio, TX, Dr. Frank Hampel, MD, Central Texas Health Research, Dr. Julius Van Bavel, MD, Allergy and Asthma Research Associates, Austin, TX and Dr. Nancy Ruiz, MD, MEDA Pharmaceuticals, Somerset, NJ
- 474 Atypical Symptoms Of Chronic Rhinitis and The Impact On Quality Of Life**
Jettanong Klaewsongkram, Chulalongkorn University, Bangkok, Thailand and Pungjai Mongkolpathumrat, King Chulalongkorn Memorial Hospital, Bangkok, Thailand
- 475 Clinical Characteristics Of Allergic and Nonallergic Rhinitis In Children**
Dr. Yong Ju Lee, MD¹, Prof. Kyung Won Kim, MD, PhD², Prof. Myung Hyun Sohn, MD, PhD², Prof. Kyu-Earn Kim, MD, PhD² and Prof. Hae-Ran Lee, MD, PhD³, ¹Hallym University Kangnam Sacred Heart Hospital, Seoul, South Korea, ²Department of Pediatrics, Severance Children's Hospital, College of Medicine, Yonsei University, Seoul, Korea, Seoul, South Korea, ³Hallym University Sacred Heart Hospital, Anyang-si, Gyeonggi-do, South Korea
- MD⁴, Dr. Kelly Bethel⁵, Ms. Rachel Baum, B.S.⁴, Mr. Sean Lund, B.S.⁶, Naseem Khorrani, M.S.⁶, Dr. David R. Scott, M.D.⁷, Dr. David H. Broide, MB ChB FAAAAI⁸ and Dr. Taylor A. Doherty, MD, FAAAAI⁹, ¹University of California, San Diego, San Diego, CA, ²Scripps Clinic Medical Group, San Diego, CA, ³Scripps Clinic, San Diego, CA, ⁴University of California, San Diego, ⁵Scripps Green Hospital, ⁶University of California, San Diego, La Jolla, CA, ⁷Allergy and Asthma Center of Western Colorado, ⁸Department of Medicine, San Diego, CA, ⁹Medicine, University of California, San Diego, San Diego, CA
- 477 Innate and Adaptive Lymphocyte Responses In a Mouse Model Of Rhinovirus-Induced Asthma Exacerbation**
Dr. Annabelle Jayaraman, PhD, Dr. Nathan Bartlett, PhD and Prof. Sebastian L. Johnston, MD, PhD, Imperial College London, London, United Kingdom
- 478 Aspergillus Fumigatus May Promote Th2 Activation By Suppression Of Interferon Signaling**
Dr. Tetsuya Homma, MD^{1,2}, Mr. Bharat Bhushan^{1,3}, Dr. Atsushi Kato, PhD¹, Mr. James Norton, MS¹, Ms. Lydia Suh, BSc¹, Dr. Quan Sha, MD, PhD⁴, Dr. Dave S. Gupta, MD⁵ and Dr. Robert P. Schleimer, PhD FAAAAI⁶, ¹Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Department of Internal Medicine, Division of Respiratory Medicine and Allergology, Showa University School of Medicine, Tokyo, Japan, ³Division of Otolaryngology-Head and Neck Surgery, Ann & Robert H. Lurie Children's Hospital of Chicago, ⁴Allergy and Immunology research center, Anhui Medical University, China, ⁵Department of Allergy Immunology, National Jewish Health, Denver, CO, ⁶Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL
- 479 Heterogeneity Of Specific CD4+ T Cell Responses To Peanut Allergic Components: Prospects For Specific Immunotherapy**
Dr. Erik R. Wambre, PhD, Benaroya Research Institute, Seattle, WA, William W. Kwok, PhD, Benaroya Research Institute at Virginia Mason, Seattle, WA and Dr. David Robinson, Virginia Mason Medical Center
- 480 Vitamin D Supplementation Reduces Th17 Cells In The Lung and Spleen Of CRA-Sensitized and Challenged Mice**
Ankita Aggarwal¹, Greg Perry¹, Vikash Kansal², Min-Jung Kim¹ and Devendra K. Agrawal¹, ¹Department of Medical Microbiology & Immunology and Center for Clinical & Translational Science, Creighton University School of Medicine, Omaha, NE, ²Center for Clinical and Translational Science and Department of Biomedical Sciences, Creighton University School of Medicine, Omaha, NE
- 481 Distinct Patterns and Magnitude Of T Cell Responses Are Associated With Seasonal Exposure To Timothy Grass Allergens**
Dr. Pearl Bakhru¹, Carla Oseroff¹, Dr. Veronique M. Schulten¹, Dr. Denise Hinz¹, Victoria Triplett¹, Rafeul Alam, MD, PhD, FAAAAI², Dr. David H. Broide, MB ChB FAAAAI³, Dr. April Frazier¹, John Sidney¹, Dr. Bjoern Peters¹, Dr. Howard Grey¹ and Dr. Alessandro Sette, Dr. Biol. Sci.¹, ¹La Jolla Institute for Allergy and Immunology, La Jolla, CA, ²National Jewish Health, Denver, CO, ³Department of Medicine, San Diego, CA
- 482 IgE Production In B Cells Through Up-Regulating CD40L Expression and Mediator Release Via CD1d Expressed In Surface Of Mast Cells Related To Allergic Asthma In Mice**
Jai Youl Ro¹, Gwan Ui Hong¹, Nam Goo Kim¹ and Young Min Ahn², ¹Sungkyunkwan University School of Medicine, ²Eulji University School of Medicine
- 483 FOXP3 Epigenetic Signature To Distinguish Between Thymic- and Peripherally-Derived Regulatory T Cells During In Vivo Induction Of Immune Tolerance**
Dr. Philippe Bégin, MD, MSc FRCPC^{1,2}, Dr. Udo Baron, PhD³, Dr. Sven Olek, PhD³, Dr. Rosa Bacchetta, MD, PhD^{1,4} and Dr. Kari C. Nadeau, MD, PhD, FAAAAI⁵, ¹Stanford University,

Mechanisms of Lymphocyte Function

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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

- 476 GATA3-Expressing ILC2 Are Selectively Enriched In Allergic Eosinophilic Nasal Polyposis**
Dr. Hannah H. Walford, MD¹, Dr. Andrew A. White, MD, FAAAAI², Dr. Christopher Bergeron, MD³, Dr. Jacob Husseman,

Pediatric Allergy and Immunology, ²Centre Hospitalier Universitaire Ste-Justine, Montreal, QC, Canada, ³Epiontis GmbH, Berlin, Germany, ⁴San Raffaele Telethon Institute for Gene Therapy (HSR-TIGET), Milan, Italy, ⁵Pediatric Allergy Immunology, Stanford University, Stanford, CA

484 CD4+ and CD8+ T Cells Of Allergic Humans Express Increased Phosphorylated p38 MAP Kinase (p38MAPK), Substance P Suppresses T Cell Expression Of p38MAPK and Memory IgE Responses

Bryan McCarthy, BS¹, Jonathan I Silverberg, MD, PhD, MPH¹, Seto MChice, MS¹, Ankuri Desai, BS¹, Dr. Tamar A. Smith-Norowitz, PhD¹, Mark Stewart, MD, PhD¹, Dr. Rauno Joks, MD² and Helen G Durkin, PhD¹, ¹Center for Allergy and Asthma Research at SUNY Downstate, Brooklyn, NY, ²Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY

485 Novel Mechanisms Of Immune Modulation By Alpha-1-Antitrypsin

Louise V. Rice¹, Sarah Dimele¹, Mun Peak Nyon², Imran Haq³, James Irving³, James McDonnell⁴, Bibek Gooptu^{2,5}, Claudia Kemper⁶ and Catherine M. Hawrylowicz⁴, ¹MRC and Asthma UK Centre for Allergic Mechanisms of Asthma, King's College London, London, United Kingdom, ²Institute of Structural and Molecular Biology/Crystallography, London, United Kingdom, ³Cambridge Institute for Medical Research, University of Cambridge, Cambridge, United Kingdom, ⁴MRC and Asthma UK Centre for Allergic Mechanisms of Asthma, King's College London, London, United Kingdom, ⁵Division of Asthma, Allergy and Lung Biology, King's College London, London, United Kingdom, ⁶MRC Centre for Transplantation, Division of Transplantation Immunology and Mucosal Biology, King's College London, London, United Kingdom

486 Prevalence Of Allergic Diseases and/Or Allergic Sensitization In Children and Adolescents With Type 1 Diabetes Mellitus

Dr. Hadley Vila-Nova, MD¹, Prof. Angela Spinola-Castro, MD, PhD¹, Dr. Fabíola E. Garcia, MD² and Prof. Dirceu Sole, MD, PhD³, ¹Federal University of São Paulo, São Paulo, Brazil, ²Federal University of São Paulo, São Paulo, Brazil, ³Federal University of São Paulo, São Paulo, Brazil

487 Microcytosis: A Risk Factor For Asthma and Pulmonary Inflammation?

Dr. Emily Brigham, MD, Dr. Meredith C. McCormack, MD, Dr. Clifford Takemoto, MD and Dr. Elizabeth Matsui, MD, The Johns Hopkins University School of Medicine, Baltimore, MD

488 Identification and Cloning Of Active CLC3 Promoter

Rohit Gaurav and Devendra K. Agrawal, Department of Biomedical Sciences and Center for Clinical and Translational Science, Creighton University School of Medicine, Omaha, NE

Role of Structural Cells in Mechanisms in Health and Disease

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489 Airway Epithelial Cells Exposed To Alternaria Release IL-18 Independent Of NALP3/Caspase-1 Pathway By Inducing Autophagy and Nf-Kb Activation

Hiroki Murai, MD, PhD¹, Shintaro Okazaki, MD¹, Hisako Hayaishi, MD¹, Akiko Kawakita, MD¹, Motoko Yasutomi, MD, PhD¹, Mitsufumi Mayumi, MD, PhD¹, Prof. Sanjiv Sur, MD² and Yusei Ohshima, MD, PhD¹, ¹University of Fukui, Fukui, Japan, ²University of Texas Medical Branch, Galveston, TX

490 Generation Of Human Hybridomas Secreting Naturally-Occurring IgE MAbs Using Memory B-Cells From Atopic and Asthmatic Patients

Dr. Scott A. Smith, MD, PhD¹, Dr. Dennis Horvath, PhD¹, Dr. Charles Steven Smith, MD, FAAAAI², Dr. Dawn C. Newcomb

Baker, PhD³ and Dr. Ray Peebles, MD⁴, ¹Infectious Diseases; Department of Medicine; Vanderbilt University School of Medicine, Nashville, TN, ²Accredited Asthma and Allergy Care, PCS, Louisville, KY, ³Division of Allergy, Pulmonary and Critical Care Medicine, Vanderbilt University School of Medicine, Nashville, TN, Nashville, TN, ⁴Allergy, Pulmonary, and Critical Care Medicine; Department of Medicine; Vanderbilt University School of Medicine, Nashville, TN

491 Anti-Viral Innate Immunity Varies Across Different Asthma Inflammatory Phenotypes

Prof. John W. Upham, MD, PhD, FAAAAI¹, Mrs. Melanie Carroll, BSc¹, Prof. Peter Gibson, MD/PhD^{2,3}, Prof. Ian A. Yang, MBBS (Hons) PhD⁴ and Dr. Jodie Simpson, PhD², ¹University of Queensland, Brisbane, Australia, ²University of Newcastle, Newcastle, Australia, ³John Hunter Hospital, Newcastle, Australia, ⁴The University of Queensland

492 Effect Of siRNA Inhibition Of Sialyltransferases and Fucosyltransferases On Siglec-F Ligand Expression By Epithelial Cells In Vitro

Dr. Maho Suzukawa, MD, National Hospital Organization, Tokyo Hospital, Dr. Ken Ohta, National Hospital Organization Tokyo National Hospital, Tokyo, Japan and David Broide, MB ChB, University of California San Diego, Department of Medicine, Division of Allergy and Immunology

493 Allergic Airway Inflammation Can Be Regulated By Semaphorin 4C Through Controlling B-Cell Migration

Ms. Di Xue, McGill university, Montreal, QC, Canada, Dr. Marylin Desjardins, MD, Division of Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, Dr. Bruce D. Mazer, MD, FAAAAI, Montreal Children's Hospital, Montreal, QC, Canada, Dr. Amir Hossein Massoud, PhD, McGill University Health Centre, Montreal, QC, Canada and Ms. Marianne Beland, MUHC, Montreal, QC, Canada

494 Mouse Bone Marrow Derived Mesenchymal Stem Cells Suppress Airway Inflammation In Both Chronic and Acute Murine Asthma Model

Dr. Tunc Akkoc, PhD¹, Mr. Ismail Ogulur, MSc¹, Ms. Gulben Gurhan¹, Ms. Ayca Aksoy, MSc², Dr. Gokhan Duruksu, PhD², Dr. Deniz Filinte, MD³, Dr. Erdem Kombak³, Prof. Isil B. Barlan, MD¹ and Prof. Erdal Karaoz, PhD², ¹Marmara University Division of Pediatric Allergy-Immunology, ²Kocaeli University Center for Stem Cell and Gene Therapies Research and Practise, ³Marmara University Department of Pathology

495 Profiling Eicosanoids In Breath Condensates Of Asthmatic and Healthy Children

Dr. Li-chen Chen^{1,2}, Prof. Jing-Long Huang^{1,2}, Mrs. Al-Hsuan Wu¹, Prof. Ming-ling Kuo³ and Prof. Shau-ku Huang^{4,5}, ¹Chang-Gung Memorial Hospital, Taoyuan, Taiwan, ²Chang-Gung University, Taoyuan, Taiwan, ³Department of Microbiology and Immunology, Institute of Basic Medical Science, Taoyuan, Taiwan, ⁴Division of Environmental Health and Occupational Medicine, National Health Research Institutes, Miaoli, Taiwan, ⁵Johns Hopkins Asthma and Allergy Center, Baltimore, MD

496 Increased IP-10 Expressions In Nasal Fibroblasts From Patients With Refractory Chronic Rhinosinusitis and Asthma

Dr. Mamoru Yoshikawa, MD¹, Dr. Kota Wada, MD¹, Dr. Tsuyoshi Yoshimura, MD², Dr. Daiya Asaka, MD² and Prof. Hiroshi Moriyama, MD², ¹Department of Otorhinolaryngology, Toho University School of Medicine, Tokyo, Japan, ²Department of Otorhinolaryngology, Jikei University School of Medicine, Tokyo, Japan

497 Vitamin D Regulating TGF-β Induced Epithelial-Mesenchymal Transition

Ms. Kimberly Fischer, Creighton University, Omaha and Devendra K. Agrawal, Department of Biomedical Sciences and Center for Clinical and Translational Science, Creighton University School of Medicine, Omaha, NE

SUNDAY

- 498 Macrophage-Derived Chemokine In Nasal Washes Is Associated With Asthma Exacerbations and Infections With Rhinovirus In Children**
Carolyn R. Word, MD¹, Holliday T. Carper, BS¹, Patricia Jorge, MD¹, Joshua L. Kennedy, MD², Deborah D. Murphy, RN¹, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI³ and Peter W. Heymann, MD¹, ¹University of Virginia, Charlottesville, VA, ²Arkansas Children's Hospital Research Institute, Little Rock, AR, ³Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA
- 499 Application Of Isorafft Single Cell Isolation For Analysis Of Pediatric Bal Macrophages**
Dr. Neil Alexis, PhD¹, Ms. Heather Wells², Dr. Yogesh Saini, PhD³, Ms. Louisa Brighton², Dr. Nancy Allbritton, MD, PhD⁴ and Dr. Marianne Muhlebach, MD², ¹Center Environmental Med. Asthma/Lung Biology, Chapel Hill, NC, ²Center for Environmental Medicine Asthma and Lung Biology, Chapel Hill, NC, ³CF Center UNC Chapel Hill, Chapel Hill, NC, ⁴Department of Chemistry UNC Chapel Hill, Chapel Hill, NC
- 500 7, 4'-Dihydroxyflavone Isolated From Glycyrrhiza Uralensis a Constituent Of ASHMI™ Prevents Dexamethasone Enhancement Of Eotaxin-1 Secretion By Human Lung Fibroblasts**
Dr. Changda Liu, PhD¹, Dr. Nan Yang, PhD, MS¹, Mr. Ryan P. Robalino², Dana Greene², Janaki Patel², Jiachen Zi³, Shuwei Zhang³, Dr. Joseph Goldfarb², Hugh A. Sampson, MD, FAAAAI¹, Dr. Jixun Zhan³ and Dr. Xiu-Min Li, MD¹, ¹Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ²Icahn School of Medicine at Mount Sinai, New York, NY, ³Utah State University
- 501 Allergen Sensitivities and Obstruction Indices Among Inner City Asthmatic Patients with High IgE (30-700 IU/ml) Vs Ultra-High IgE Levels (>700 IU/ml)**
Jamie Zacharias, MD¹, Dr. Edward S. Schulman, MD, FAAAAI², Rebanta Chakraborty, MD², Rozina Ali, DO¹ and Natasha Mehta, MD¹, ¹Division of Internal Medicine, Drexel University College of Medicine, Philadelphia, PA, ²Division of Pulmonary, Critical Care and Sleep Medicine, Drexel University College of Medicine, Philadelphia, PA
- 502 Alcohol Exposure and Airway Hyperresponsiveness**
Dr. Christina Cruz, MD¹, Dr. Thomas B. Casale, MD, FAAAAI² and Peter Oldenburg, PhD¹, ¹Creighton University School of Medicine, Omaha, NE, ²Univeristy Of South Florida Morsani College Of Medicine, Tampa, FL
- 503 Ragweed Or Dust Mite Antigen-Stimulated Human Primary Bronchial Epithelial Cells Differentially Express Cytokines In Response To Formoterol Or Mometasone Or Their Combination**
Dr. Anthony Szema, MD, FAAAAI, SUNY Stony Brook School of Medicine, East Setauket, NY; Stony Brook University, Stony Brook, NY, Dr. Sayyed Hamidi, Stony Brook University School of Medicine, Stony Brook, NY, Dr. Ken-Ichi Takemaru, State University of New York @ Stony Brook, Stony Brook, NY and Marianne Frieri, MD, PhD, FAAAAI, Medicine and Pediatrics, Nassau University Medical Center, East Meadow, NY; State University of NY @ Stony brook, Stony Brook, NY
- 504 Release Kinetics Of Soluble ST2 and Proinflammatory Cytokines In Allergic Rhinitis**
Mr. Igor Stenin¹, Mr. Ralf Baumann¹, Mr. Matthaues Rabaszowski¹, Dr. Kathrin I. M. Scheckenbach, MD¹, Mr. Pascal Werminghaus¹ and Dr. Martin Wagenmann, MD, FAAAAI², ¹Department of Otorhinolaryngology, Head and Neck Surgery, Heinrich-Heine-University Duesseldorf, Germany, ²Henrich Heine University, Düsseldorf, Germany
- 505 Interaction Between Dietary Antioxidants and Passive Smoking On The Risk Of Asthma Modified By GSTP1(rs1695) Polymorphism**
Dr. Young-Hwa Song, MD, MPH Candidate¹, Hye Lim Shin², Seo Ah Hong³, Sung-Ok Kwon⁴, Dr. Young Ho Jung, MD⁵, Dr. Eun Lee, MD⁶, Dr. Song I Yang, MD⁷, Dr. Ji-Won Kwon, MD⁸, Dr. Hyung Young Kim, MD⁹, Dr. Ju-Hee Seo, MD¹⁰, Dr. Byoung-Ju Kim, MD, PhD¹¹, Dr. Hyo-Bin Kim, MD, PhD¹², Se-Young Oh⁴, Dr. Soo-Jong Hong, MD, PhD⁷ and Dr. Bong-Seong Kim, MD¹³, ¹Johns Hopkins Bloomberg School of Public Health, ²Research Center for Standardization of Allergic Diseases, Asan Institute for Life Sciences, University of ulsan College of Medicine, ³Research Center for Standardization of Allergic Diseases, Asan Institute for Life Sciences, University of ulsan College of Medicine, South Korea, ⁴Department of Food and Nutrition, College of Human Ecology, Kyung Hee University, ⁵Childhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, South Korea, ⁶Department of Pediatrics, Childhood Asthma Atopy Center, Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea, ⁷Department of Pediatrics, Childhood Asthma Atopy Center, Research Center for Standization of Allergic Diseases, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, ⁸Department of Pediatrics, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, South Korea, ⁹Department of Pediatrics, Kosin University Gospel Hospital, Kosin University College of Medicine, Seoul, South Korea, ¹⁰Department of Pediatrics, Korea Cancer Center Hospital, ¹¹Department of Pediatrics, Hae-undae Paik Hospital, Inje University College of Medicine, Busan, South Korea, ¹²Department of Pediatrics, Inje University Sanggye Paik Hospital, Seoul, South Korea, ¹³Department of Pediatrics, Gangneung Asan Hospital, University of Ulsan College of Medicine
- 506 Longitudinal Trends Of Food and Environmental Allergen-Specific IgE In Asthmatic Inner-City Children < 4 Years Of Age**
Dr. Keshav Achar, M.B.B.S¹, Yikania Pichardo², Margaret A. Chin, NP³, Dr. Ramin Nazari, MD⁴, Dr. Andrew A. Wiznia, MD⁴ and Dr. Gabriele De Vos, MD⁵, ¹Albert Einstein College of Medicine, NY, ²Jacobi Medical Center, New York, NY, ³Jacobi Medical Center, NY, ⁴Albert Einstein College of Medicine, ⁵Albert Einstein College of Medicine, Bronx, NY
- 507 The Effect Of Human Placental Extract In a Mouse Model Of Allergic Rhinitis**
Dr. Soo Whan Kim and Dr. Suk-Woo Yang, The Catholic University of Korea
- 508 Induced Long-Lived Mucosal Mast Cells In The Airways Arise From Circulating Mast Cell Progenitors**
Dr. Lora Georgieva Bankova, Rheumatology/Immunology/Allergy, Brigham and Women's Hospital, Boston, MA, Daniel Dwyer, Brigham and Women's Hospital, Dr. Anne Y. Liu, MD, Stanford University School of Medicine, Palo Alto, CA, Dr. Tatiana Jones, College of Health Science University of Massachusetts, Lowell, MA, Dr. K. Frank Austen, MD, FAAAAI, Brigham and Women's Hospital, Harvard Medical School, Boston, MA and Dr. Michael Gurish, Brigham and Women's Hospital/Harvard Medical School, Boston, MA
- 509 Despite Inflammation, No Structural Upper Airway Remodeling In Severe Allergic Rhinitis**
Dr. Aarif Eifan, MD¹, Dr. Nara Orban, MD², Dr. Mikila Jacobson, PhD² and Prof. Stephen R. Durham, MA MD FRCP², ¹Imperial College London, United Kingdom, ²Imperial College London, London, United Kingdom
- 510 Ozone Inhalation Induces Epithelial IL-33 and Thymic Stromal Lymphopoietin (TSLP) and Leads To Eosinophilic Airway Inflammation**
Stephanie Kubala^{1,2}, Moyer Q. Ge², Imre Redai², Monica Soni^{2,3}, Dr. Bei Chen, MD², Dr. Qi Yang, PhD², Dr. Avinash Bhandoola, MBBS PhD², Dr. Noam A. Cohen, MD, PhD² and Dr. Angela Haczk, MD, PhD, FAAAAI², ¹Temple University School of Medicine, Philadelphia, PA, ²University of Pennsylvania, Philadelphia, PA, ³Georgetown University

Allied Health Oral Abstract Luncheon

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Sunday, March 2nd, 2014, 12:15 PM - 1:30 PM

- 511 Clinical Efficacy Of Subcutaneous and Sublingual Immunotherapy In Asthma and Rhinitis Children Sensitized To House Dust Mite** **Min-Ju Kim**^{1,2}, Eun Lee^{1,3}, Keun-Mi Park¹, Keum-Hee Hwang¹, Young-Ho Jung^{1,3}, Song-Yi Yang^{1,4}, Jae-Eun Lee², Hee-Kyeong Kim², Hye-yeong Lee², Jin-ho Yu¹ and Prof. Soo-Jong Hong, MD, PhD^{1,3}, ¹Childhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, South Korea, ²Department of Children's Hospital Nursing, Asan Medical Center, South Korea, ³Research Center for Standardization of Allergic Disease, University of Ulsan College of Medicine, Seoul, Korea, ⁴Research Center for Standardization of Allergic Disease, University of Ulsan College of Medicine, Seoul, Korea, South Korea
- 512 A Patient-Reported Symptom-Based Predictor Of Objective Sinus Inflammation**
Ms. Alcina K. Lidder, BA¹, Dr. Rakesh Chandra, MD², Dr. David Conley, MD¹, Dr. Stephanie Shintani-Smith, MD¹, Dr. Anju T. Peters, MD, FAAAAI³, Dr. Leslie C. Grammer, MD, FAAAAI³, Dr. Robert C. Kern, MD¹, Dr. Brian Schwartz, MD^{4,5} and Dr. Bruce K. Tan, MD¹, ¹Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Northwestern University, Chicago, IL, ³Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁴Center for Health Research, Geisinger Clinic, Danville, PA, ⁵Johns Hopkins Bloomberg School of Public Health, Baltimore, MD
- 513 Healthcare Providers' Perception Versus Reality In Patient Concerns About Starting Subcutaneous Immunoglobulin**
Ms. Carla M. Duff, CPNP MSN¹, Ms. Annette R. Zampelli, NP² and Dr. Ann Bullinger, PharmD², ¹University of South Florida, Tampa, FL, ²CSL Behring, LLC, King of Prussia, PA
- 514 Anaphylaxis During Obstetric Surgery In Latex Allergic Patients**
Dr. Nana Jinjolava, MD¹, Dr. *Mili Shum, MD², Dr. Keshav Achar¹, Dr. Ren Zhen¹ and Dr. Elina Jerschow, MD, M.Sc.³, ¹Albert Einstein College of Medicine, ²Montefiore Medical Center, Bronx, NY, ³Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY
- 515 The Impact Of Legislation On Illinois School Nurses**
Ms. Christine Szychlinski, APN, CPNP¹, Mrs. Katherine A. Schmeissing, MS, R.N.², Dr. Jacqueline Pongracic, MD, FAAAAI² and Dr. Anne Marie Singh, MD³, ¹Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ²Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ³Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL

Biomarkers

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Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 516 Socio-Demographic and Environmental Correlates Of Exhaled Nitric Oxide Levels**
Dr. Lakiea S Wright, MD MAT, Brigham and Women's Hospital Division of Rheumatology, Immunology & Allergy, Boston, MA; Boston Children's Hospital Division of Allergy and Immunology, Boston, MA, Dr. Wanda Phipatanakul, MD, MS, FAAAAI, Boston Children's Hospital, Boston, MA and Jessica Rabe Savage, MD ,

Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA

- 517 Relationships Between The New Biomarkers Induced By Interleukin-13 and Bronchial Hyperresponsiveness In Asthmatic Children: Periostin and Squamous Cell Carcinoma-Related Antigens**
Prof. Heysung Baek, MD, PhD¹, Prof. Kenji Izuhara, MD, PhD² and Dr. Jeong-Sub Yoo¹, ¹Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, ²Saga Medical School, Saga, Japan
- 518 Exhaled Nitric Oxide Performance Compared To Methacholine Challenge In Asthma**
Andrew Nickels, MD, Dr. Kaiser G. Lim, MD, FAAAAI, Dr. Paul Scanlon, MD and Kenneth Parker, Mayo Clinic, Rochester, MN
- 519 Serum Interleukin 13 (IL-13) and Surfactant Protein D (SP-D) Expression Is Differentially Associated With Disease Status In Pediatric Asthma Patients**
Dr. Vasiliki Gemou-Engesaeth, MD, PhD¹, Dr. N Laliotou, MD¹, Prof. Chris J. Corrigan, MD, PhD, FAAAAI², Prof. George P. Chrousos, MD, PhD¹ and Dr. Angela Haczk, MD, PhD, FAAAAI³, ¹National & Kapodistrian University of Athens, Greece, ²King's College London School of Medicine, London, United Kingdom, ³University of Pennsylvania, Philadelphia, PA
- 520 Correlation Of Exhaled Breath Temperature With Age In Chronic Respiratory Diseases**
Dr. Radoslaw Gawlik, MD¹, Dr. Malgorzata Rajzer-Wrobel², Dr. Dariusz Ziora² and Prof. Lawrence M. DuBuske, MD, FAAAAI³, ¹Silesian Medical University, Katowice, Poland, ²Silesian Medical University, Poland, ³George Washington University School of Medicine, Washington, DC

Immune Mechanisms in Atopy

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Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 521 Peripherally Induced Foxp3+ Regulatory T Cells Mediates The Immunomodulatory Effect Of Intravenous Immunoglobulin In An Experimental Model Of Allergic Airway Disease**
Dr. Amir Hossein Massoud, PhD^{1,2}, Mr. Gabriel N. Kaufman, MSc^{1,2}, Dr. Ciriaco Piccirillo, PhD² and Dr. Bruce D. Mazer, MD, FAAAAI^{1,3}, ¹Meakins-Christie Laboratories, Research Institute - McGill University Health Centre, Montreal, QC, Canada, ²McGill University Health Centre, Montreal, QC, Canada, ³Montreal Children's Hospital, Montreal, QC, Canada
- 522 Differential DNA Methylation In Mothers Increases The Prevalence Of Atopic Dermatitis In Their Offspring**
Dr. Pia J. Hauk, MD¹, Mrs. Anna Forssen, MS¹, Dr. Brent Pederesen, PhD², Dr. Matthew Strand, PhD¹, Mrs. Lindsay Munoz, BA¹, Dr. Michaela Schedel, PhD¹, Dr. Anne Lynch, MD, MSPH², Dr. Virginia Winn, MD, PhD², David A. Schwartz, MD³ and Dr. Erwin W. Gelfand, MD, FAAAAI¹, ¹National Jewish Health, Denver, CO, ²University of Colorado Denver, Aurora, CO, ³University of Colorado Denver School of Medicine, Aurora, CO
- 523 Hypereosinophilia In Children and Adults: A Retrospective Comparison**
Kelli Williams, MD, M.P.H., JeanAnne Ware, CRNP, Annalise Abiodun, RN, Paneez Khoury, MD and Dr. Amy D. Klion, MD, National Institutes of Health, Bethesda, MD
- 524 Interleukin 35 Modulates TSLP, IL-25 and IL-33 Primed Dendritic Cells and Inhibits Naive T Cell Differentiation and Grass Pollen-Specific T Cell Proliferation**
Natalia C Couto-Francisco¹, Dr. Tomokazu Matsuoka^{2,3}, Ms. Rachel Yan, RN³, Prof. Stephen R. Durham, MA MD FRCP¹ and Dr. Mohamed H. Shamji, BSc MSc PhD⁴, ¹Imperial College London,

SUNDAY

London, United Kingdom, ²Medical Research Council and Asthma UK Centre for Allergic Mechanisms of Asthma, UK, United Kingdom, ³Imperial College London, United Kingdom, ⁴Imperial College London, South Kensington, United Kingdom

- 525 Fc-Gamma-Receptor-IIb Is Required For The Immunomodulatory Actions Of Intravenous Immune Globulin In An Antigen-Driven Murine Model Of Allergic Airways Disease**
Mr. Gabriel N. Kaufman, MSc¹, Dr. Amir Hossein Massoud, PhD¹, Dr. Ciriaco A. Piccirillo, PhD² and Dr. Bruce D. Mazer, MD, FAAAAI^{1,3}, ¹Meakins-Christie Laboratories, Research Institute - McGill University Health Centre, Montreal, QC, Canada, ²Centre for the Study of Host Resistance, Research Institute - McGill University Health Centre, Montreal, QC, Canada, ³Montreal Children's Hospital, Montreal, QC, Canada

Leonard Bernstein Session on Occupational Allergic Diseases

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Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 526 Endotoxin In Size-Specific Airborne Particles Induces Differential Nitritative Stress In Human Bronchoepithelial Cells**
Umesh Singh¹, Dr. Jonathan A. Bernstein, MD, FAAAAI¹, Kristin Luther², Lauren Haar² and Dr. W. Keith Jones, PhD², ¹Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, ²Department of Medicine and Pharmacology & Cell Biophysics, University of Cincinnati Medical Center, Cincinnati, OH
- 527 High Rates Of Sensitization To Selected Metals and Bone Cement In Joint Replacement Failure Patients and Preoperative Evaluations**
Dr. Karin A. Pacheco, MD, MSPH FAAAAI, Dr. Annyce Mayer, MD, MSPH, Ms. Samantha Erb, MS, Dr. Lata Shirname-More, PhD and Dr. Lisa A. Maier, MD, MSPH FCCP, National Jewish Health, Denver, CO
- 528 Component Resolved Diagnosis In Baker's Asthma**
Ms. Cristina Gómez-Casado¹, Dr. Paloma Campo, MD, PhD², Dr. Maria Garrido, PhD³, Ms. C Pereira⁴, Dr. Arantxa Palacin, PhD¹, Dr. La Rivas⁴, Dr. M Catarino⁵, Dr. Ana Aranda, PhD⁶, Maria Luisa Macias⁶, Dr. Alicia Armentia, MD, PhD⁷, Dr. S. Quirce, MD, PhD⁸, Dr. Miguel Blanca, MD, PhD² and Araceli Diaz Perales¹, ¹Centre for Plant Biotechnology and Genomics (UPM-INIA), Madrid, Spain, ²Allergy Service, Carlos Haya Hospital, Málaga, Spain, ³Plant Biotechnology Institute (UPM-INIA), Madrid, Spain, ⁴Molecular Evolution Laboratory, Astrobiology Centre (INTA-CSIC), Madrid, Spain, ⁵Faculty of Pharmacy, University of Lisbon, Lisbon, Portugal, ⁶Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain, ⁷Valladolid University, Valladolid, Spain, ⁸Hospital La Paz Institute for Health Research (IdiPaz), Allergy department., Madrid, Spain
- 529 Endotoxin Exposure May Protect Against The Development Of Rhinoconjunctivitis and Respiratory Symptoms In Non-Atopic Individuals With Occupational Exposure To Mice**
Dr. Sharon K. Ahluwalia, MD^{1,2}, Dr. Roger Peng, PhD³, Mr. Charles Aloe, MPH², Wayne G. Shreffler, MD, PhD, FAAAAI^{4,5}, Mary Krevans, RN⁶, Karol A. Hagberg, BSN FNP⁶, Dr. Peter S. Thorne, PhD⁷, Kenneth Walsh⁸ and Dr. Elizabeth Matsui, MD⁹, ¹Children's National Medical Center, Washington, DC, ²Johns Hopkins University School of Medicine, Baltimore, MD, ³Johns Hopkins School of Public Health, Baltimore, MD, ⁴Massachusetts General Hospital, Boston, MA, ⁵Harvard Medical School, Boston, MA, ⁶The Jackson Laboratory, Bar Harbor, ME, ⁷University of Iowa, Iowa City, IA, ⁸The Jackson Laboratories, ME, ⁹The Johns Hopkins University School of Medicine, Baltimore, MD

- 530 Sensitization To Occupational Allergens and Allergic Diseases In Workers Of 5 Havana Bakeries**
Dr. Mirta Alvarez, MD¹, Dr. Alexis Labrada, PhD², Raul Lazaro Castro Almarales, MD³, Mrs. Yaquelin Leyva¹, Mr. Victor R Meli⁴, Dr. Humberto Barata⁴ and Dr. Miguel Hinojosa⁵, ¹Calixto García University Hospital, Cuba, ²National Center of Bioproducts, Havana, Cuba, ³National Center of Bioproducts, Cuba, ⁴Diater Laboratories, Argentina, ⁵Ramon y Cajal Hospital, Spain

Drug Allergy

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Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 531 Safety Of Propofol Use In Patients With Food Allergies**
Dr. Harshna Mehta, MD, The Icahn School of Medicine at Mount Sinai, New York, NY and Dr. Mirna Chehade, MD, MPH, Icahn School of Medicine at Mount Sinai, New York, NY; Mount Sinai Center of Eosinophilic Disorders, Jaffe Food Allergy Institute, Mount Sinai School of Medicine, New York, NY
- 532 Risk Stratification Protocol For Carboplatin and Oxaliplatin Hypersensitivity Reactions With Repeat Skin Testing Improves Care**
Dr. Alberta L. Wang, MD¹, Dr. Sarita U. Patil, MD², Dr. Aidan Long, MD, FAAAAI² and Dr. Aleena Banerji, MD², ¹Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, ²Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
- 533 Added Value Of Skin Testing In Hypersensitivity Reactions To Taxanes**
Dr. Matthieu Picard, MD¹, Dr. Leyla Pur, MD¹, Dr. Joana Caiado, MD¹, Prof. Pedro Giavina-Bianchi, MD, PhD, FAAAAI², Dr. Violeta Galvão, MD¹ and Dr. Mariana C. Castells, MD, PhD, FAAAAI¹, ¹Division of Rheumatology, Allergy and Immunology, Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, ²Clinical Immunology and Allergy Division, University of Sao Paulo, Boston, MA
- 534 Risk Stratification For Paclitaxel-Induced Hypersensitivity Reactions Improves Quality Of Care**
Dr. Timothy P. Lax, MD, Dr. Aleena Banerji, MD, Dr. Johnson T. Wong, MD, FAAAAI, Dr. Michael T. Wilson, MD, PhD and Dr. Aidan Long, MD, FAAAAI, Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
- 535 Healthcare Utilization and Serious Infection Prevalence Associated With Penicillin "Allergy" In Hospitalized Patients: A Cohort Study**
Dr. Eric M. Macy, MD, FAAAAI, 5th Floor, SCPMG-Kaiser Permanente San Diego, San Diego, CA and Richard Contreras, MS, Kaiser Permanente Health Care Program, Department of Research and Evaluation, Pasadena, CA

Oral Immunotherapy for Food Allergy

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Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 536 Length Of Avoidance Period Following Peanut Oral Immunotherapy Influences Effector Cell Suppression and Clinical Outcomes**
Michael D. Kulis Jr., PhD, Dr. Rishu Guo, PhD, Brian P. Vickery, MD, FAAAAI, Pamela H. Steele, MSN CPNP AE-C, Edwin Kim, MD, MS and A. Wesley Burks, MD, FAAAAI, University of North Carolina at Chapel Hill, Chapel Hill, NC

- 537 Basophil Hyporesponsiveness To Peanut Following Immunotherapy May Be Transient and Correlates With Clinical Response**
Dr. Mark Gorelik, MD¹, Dr. Satya Narisety, MD¹, Kristin Chichester, MS¹, Anja Bieneman, BS¹, Corinne Keet, MD, MS², Robert A. Wood, MD, FAAAAI², Dr. John T. Schroeder, PhD¹ and Pamela Frischmeyer Guerrero¹, ¹Johns Hopkins University School of Medicine, ²Johns Hopkins University Medical Center, Baltimore, MD
- 538 Safety Of Pediatric Peanut Oral Immunotherapy Is Complicated By High Adverse Event Rates**
Yamini Virkud, MD, MA¹, Brian P. Vickery, MD, FAAAAI², Pamela H. Steele, MSN CPNP AE-C², Janet S. Kamilaris, RN³ and A. Wesley Burks, MD, FAAAAI², ¹Duke University, Durham, NC, ²University of North Carolina, Chapel Hill, NC, ³Carolinas Health Care System, Charlotte, NC
- 539 Course and Outcome Of Patients With Asthma During Oral Immunotherapy To Cow's Milk Protein**
Dr. Arnon Elizur, MD^{1,2}, Dr. Michael Goldberg, MD, PhD¹, Dr. Michael Levy, MD, FAAAAI¹, Dr. Liat Nachshon, MD¹ and Prof. Yitzhak Katz, MD, FAAAAI^{1,2}, ¹Assaf Harofeh, Zerifin, Israel, ²Tel Aviv University, Tel Aviv, Israel
- 540 B-Fahf-2 Pretreatment Reduces OIT Adverse Reactions and Improves Outcomes In a Murine Model Of Multiple Nut Allergy**
Dr. Xiu-Min Li, MD, Dr. Ying Song, MD, Dr. Changda Liu, PhD, Mr. Ilan Goldberg, Hugh A. Sampson, MD, FAAAAI and Dr. Kamal D. Srivastava, PhD, Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY

Adherence

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Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 541 Adherence Documentation During Asthma Encounters At a Pediatric Tertiary Care Referral Center**
Kara J. Wada, MD, Nationwide Children's Hospital and The Ohio State University, Columbus and David R. Stukus, MD, FAAAAI, Nationwide Children's Hospital, Columbus, OH
- 542 High-Risk Asthma Multidisciplinary Care Clinic Adherence Linked To Asthma Control Test (ACT) Score Improvement**
Dr. Bradley A. Locke, DO¹, Dr. Pippa Simpson, PhD¹, Mrs. Tina Bromberger, RN, BSN, AE-C², Mrs. Melodee Nugent, MA¹, Mrs. Sara A. Lowe, NP¹, Dr. Juan Ruiz, MD¹, Dr. Patricia Marik, PsyD², Dr. Jacquelyn Smith, PhD², Dr. Joshua A. Steinberg, MD¹ and Dr. Dorothy S. Cheung, MD, FAAAAI¹, ¹Medical College of Wisconsin, Milwaukee, WI, ²Children's Hospital of Wisconsin, Milwaukee, WI
- 543 Understanding Asthma Medical Nonadherence In Adult and Pediatric Populations**
Joyce Xiang Wu Lee, MD¹, Henry Wojtczak, MD², Allan M. Wachter, MD³, Martin Lee, PhD⁴, Lisa Burns, RN³, Diana Chen³ and Joseph S. Yusin, MD, FAAAAI⁵, ¹Allergy/Immunology, VA Greater Los Angeles Health Care System, Los Angeles, CA, ²Naval Medical Center San Diego, San Diego, CA, ³Foundation for Asthma Research and Intervention, Phoenix, AZ, ⁴UCLA School of Public Health, Los Angeles, CA, ⁵VA Greater Los Angeles Health Care System, Los Angeles, CA
- 544 Improved Education and Self-Management In Children and Adolescents With Asthma Using a Personalized Smartphone Application**
David R. Stukus, MD, FAAAAI^{1,2}, Gary Phillips, M.A.S.¹ and Nabeel Farooqui, MD^{1,2}, ¹Wexner Medical Center at The Ohio State University, Columbus, OH, ²Nationwide Children's Hospital, Columbus, OH

- 545 Misuse Of Medical Devices Among Patients In a Tertiary Care Allergy/Immunology Practice**
Dr. Rana S. Bonds, MD, FAAAAI, University of Texas Medical Branch, Galveston, TX and Dr. Aasia I. Ghazi, MD, Allergy and Asthma Specialists, Plano, TX

Mechanisms of Immunotherapy

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Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 546 B Cells and Plasma Cells Populations Suffer Changes Along The Time After Dermatophagoides Pteronyssinus Specific Immunotherapy**
Dr. Enrique Gómez, PhD¹, Dr. Tahía Fernández, PhD², Dr. Inmaculada Doña, MD, PhD³, Dr. Francisca Gómez, MD, PhD³, Mrs. Luisa Galindo, RN³, Ms. Lidia Melendez, Lab. Tech.⁴, Dr. Miguel Blanca, MD, PhD³, Dr. Cristobalina Mayorga, PhD⁵ and Dr. Maria José Jose Torres, MD, PhD³, ¹Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - IBIMA, Málaga, Spain, ²Research Laboratory - FIMABIS Foundation, Málaga, Spain, ³Allergy Service, Carlos Haya Hospital, Málaga, Spain, ⁴Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain, ⁵Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain
- 547 A Subset Of Novel Timothy Grass Antigens Is Associated With Marked Th1/Th2 Shifts Following Specific Immunotherapy**
Dr. Veronique M. Schulten¹, Victoria Tripple¹, John Sidney¹, Dr. Jason Greenbaum¹, Dr. April Frazier¹, Rafeul Alam, MD, PhD, FAAAAI², Dr. David H. Broide, MB ChB FAAAAI³, Dr. Howard Grey¹, Dr. Bjoern Peters¹ and Dr. Alessandro Sette, Dr. Biol. Sci.¹, ¹La Jolla Institute for Allergy and Immunology, La Jolla, CA, ²National Jewish Health, Denver, CO, ³Department of Medicine, San Diego, CA
- 548 Interleukin IL-27+ Dendritic Cells Modulate Ex-Vivo Th2 Responses In a Pdl-1-Dependent Manner and Increase In-Vivo Following Grass Pollen Immunotherapy**
Dr. Tomokazu Matsuoka¹, Ms. Rachel Yan, RN², Dr. Guy W Scadding, MD², Prof. Stephen R. Durham, MA MD FRCP³ and Dr. Mohamed H. Shamji, BSc MSc PhD⁴, ¹Medical Research Council and Asthma UK Centre for Allergic Mechanisms of Asthma, UK, United Kingdom, ²Imperial College London, United Kingdom, ³Imperial College London, London, United Kingdom, ⁴Imperial College London, South Kensington, United Kingdom
- 549 Local 'Protective' IgG4 Antibodies In Nasal Fluid Are Elevated Following Grass Pollen Immunotherapy**
Jinjin Zhang¹, Dr. Esther Steveling², Ms. Rachel Yan, RN², Dr. Aarif Eifan, MD², Rebecca Parkin³, Dr. Guy W Scadding, MD², Dr. Mohamed H. Shamji, BSc MSc PhD⁴ and Prof. Stephen R. Durham, MA MD FRCP¹, ¹Imperial College London, London, United Kingdom, ²Imperial College London, United Kingdom, ³Imperial College London, London, ⁴Imperial College London, South Kensington, United Kingdom
- 550 Grass Pollen Immunotherapy: Impaired Allergen-Induced Nasal and Cutaneous Responses Correlate With Overall Seasonal Symptom Scores and Are Associated With Suppressed Local Th2 Cytokines In Nasal Fluid**
Dr. Guy W Scadding, MD¹, Dr. Aarif Eifan, MD¹, Dr. Mongkol Lao-Araya, MD¹, Dr. Martin J. Penagos Paniagua, MD¹, Ms. Shun Yan Poon¹, Dr. Esther Steveling¹, Ms. Andrea Goldstone, RN¹, Ms. Rachel Yan, RN¹, Ms. Amy Switzer¹, Dr. Deborah Phippard², Dr. Mohamed H. Shamji, BSc MSc PhD³ and Prof. Stephen R. Durham, MA MD FRCP⁴, ¹Imperial College London, United Kingdom, ²Immune Tolerance Network, ³Imperial College London, South Kensington, United Kingdom, ⁴Imperial College London, London, United Kingdom

SUNDAY

Mechanisms of Eosinophil-Driven Disease

3608

Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

- 551 IL-4 and IL-13 Differentially Regulate TLR-Induced Eosinophil-Basophil Differentiation Of Cord Blood CD34+ Progenitor Cells**
Dr. Pia Reece, PhD¹, Dr. Roma Sehmi, PhD FAAAAI¹ and Judah Aryeh Denburg, MD, FRCPC, FAAAAI², ¹McMaster University, Hamilton, ON, Canada, ²Division of Clinical Immunology and Allergy, Department of Medicine, McMaster University, ON, Canada
- 552 Basophils Act As a Cellular Switch to Drive Eosinophilic Inflammation after IgE Activation**
Dr. Laurence E. Cheng, MD, PhD, University of California, San Francisco Medical Center, San Francisco, CA and Prof. Richard M. Locksley, MD, University of California, San Francisco, HHMI, San Francisco, CA
- 553 The SNARE VAMP-7 Contributes To Eosinophil Degranulation, In Vivo**
Dr. Paige Lacy, PhD FAAAAI¹, Dr. Lian Willetts, PhD¹, Dr. Elizabeth Jacobsen, PhD², Dr. Rachel Condjella, PhD², Ms. Katie Zellner², Dr. Sergei Ochkur, PhD², Mr. Hui Lou², Mr. Will LeSuer², Mr. John Kim, MSc¹, Ms. Cheryl Protheroe², Mr. Ralph Pero², Dr. James J. Lee, PhD³, Dr. Nancy A. Lee, PhD² and Dr. Redwan Moqbel, PhD FRCPath FAAAAI⁴, ¹University of Alberta, Edmonton, AB, Canada, ²Mayo Clinic Arizona, Scottsdale, AZ, ³Mayo Clinic of Arizona, Scottsdale, AZ, ⁴University of Manitoba, Winnipeg, MB, Canada
- 554 Microbiota Regulates Eosinophils In The Small Intestine**
Dr. Rodrigo Jimenez-Saiz, PhD¹, Mrs. Tina Walker-Fattouh¹, Mrs. Melissa E. Gordon, MSc¹, Mr. Waleed S. Ahmed¹, Ms. Breanne Dale¹, Mr. Talveer S. Mandur¹, Mr. Joshua Kong¹, Mr. Derek K. Chu¹, Dr. Roland Kolbeck, PhD², Dr. Alison A. Humbles, PhD², Dr. Elena F. Verdu, MD, PhD³ and Dr. Manel Jordana, MD, PhD¹, ¹McMaster Immunology Research Centre (MIRC), McMaster University, Hamilton, ON, Canada, ²Medimmune LCC, Gaithersburg, MD, ³Farcombe Family Digestive Health Research Institute, McMaster University, Hamilton, ON, Canada
- 555 The Airway Mucins Muc5b and Muc4 Are Endogenous Ligands For Siglec-F and Induce Mouse Eosinophil Death**
Takumi Kiwamoto, MD, PhD¹, Toshihiko Katoh, PhD², Christopher Evans, PhD³, Mary E. Brummet, MS¹, Sherry Hudson, MS¹, Zhou Zhu, MD, PhD¹, Michael Tiemeyer, PhD² and Bruce S. Bochner, MD, FAAAAI¹, ¹Division of Allergy and Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, ²Complex Carbohydrate Research Center, University of Georgia, Athens, GA, ³Division of Pulmonary Medicine, University of Colorado School of Medicine, Denver, CO

Featured Poster Session

Best of ADT

3801

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

- 556 Impact Of Asthma Exacerbations On Lung Function In a Large Cohort Of Patients With Severe Or Difficult-To-Treat Asthma**
Dr. Theodore A. Omachi¹, Dr. Tmirah Haselkorn¹, Dave P. Miller² and Dr. William J. Calhoun, MD, FAAAAI³, ¹Genentech, Inc., South San Francisco, CA, ²ICON Clinical Research, ³Allergy And Immunology, University of Texas Medical Branch, Galveston, TX

- 557 Analysis Of Severe Asthma Phenotypes By Using High-Resolution Computed Tomography: Relation To Clinical Assessment**
Sujeong Kim¹, Kwang-Nam Jin², Chang Hyun Lee², Prof. So-Hee Lee³, Jae-Won Jung⁴, Prof. Woo-Jung Song, M.D.¹, Prof. Hye-Ryun Kang¹, Kyung-Up Min¹ and Prof. Sang Heon Cho, MD, PhD³, ¹Department of Allergy and Clinical Immunology, Seoul National University College of Medicine, Seoul, South Korea, ²Department of Radiology, Seoul National University College of Medicine, Seoul, South Korea, ³Department of Internal Medicine, Seoul National University College of Medicine, Seoul, South Korea, ⁴Inje university ilsan paik hospital, Seoul, South Korea
- 558 Associations Between The Expression Of Corticosteroid Regulated Genes By Peripheral Blood Mononuclear Cells (PBMCs) In Children From The NIH/NIAID Sponsored Asthma Phenotypes In The Inner City (APIC) Study**
Dr. Elena Goleva, PhD¹, Leisa P. Jackson, BS¹, Baomei Shao, BS², Zheng Hu, BS², Dr. Michelle A. Gill, MD, PhD², Andrew H. Liu, MD¹ and Donald Y.M. Leung, MD, PhD, FAAAAI¹, ¹National Jewish Health, Denver, CO, ²UT Southwestern Medical Center, Dallas, TX
- 559 Bronchial Mast Cell Markers and Clinical Asthma Severity In Steroid Refractory Asthmatics**
Dr. Mandeep Hundal, M.D.¹, Dr. Katherine N. Cahill, MD², Robert Pedicini¹, Allison Crosby-Thompson¹, Stefanie Dutile¹, Usha Govindarajulu, PhD², Dr. Kartik Shenoy, M.D.³, Dr. Mark Dransfield⁴, Dr. Emily DiMango⁵, Dr. Serpil C. Erzurum, M.D.⁶, Dr. Mario Castro, MD, MPH⁷, Dr. Nizar N. Jarjour, MD⁸, Dr. Howard Katz, PhD², Dr. Joshua A. Boyce, MD, FAAAAI² and Dr. Elliot Israel, MD, FAAAAI¹, ¹Brigham and Women's Hospital, Boston, MA, ²Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA, ³Temple University School of Medicine, ⁴University of Alabama School of Medicine, AL, ⁵Columbia University, New York, NY, ⁶Department of Pathobiology, Cleveland Clinic, ⁷Washington University School of Medicine, St. Louis, MO, ⁸University of Wisconsin School of Medicine and Public Health, Madison, WI
- 560 Antagonistic Effects Of Ozone (O3) Exposure and Glucocorticoid Treatment On Airway Hyperresponsiveness (AHR) and Surfactant Protein D (SP-D) Production In Mice**
Moyar Q. Ge^{1,2}, Monica Soni¹, Imre Redai¹, Blerina Kokalari¹, Dr. Angela Haczku, MD, PhD, FAAAAI¹ and Zhilong Jiang¹, ¹University of Pennsylvania, Philadelphia, PA, ²National University of Singapore, Singapore, Singapore

Advances in Primary Immunodeficiencies

3802

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

- 561 Impaired Glycosylation Due To Autosomal Recessive PGM3 Mutations Results In Atopy, Immune Deficiency, Autoimmunity, and Neurocognitive Impairment**
Dr. Joshua D. Milner, MD¹, Dr. Jonathan J. Lyons, MD¹, Dr. Yu Zhang, PhD², Dr. Xiaomin Yu, PhD¹, Dr. Shrimati Datta, PhD¹, Ian T. Lamborn, BSc², Matthew R. Biancalana, BSc³, Lynne A. Wolfe, CRNP⁴, Thomas DiMaggio, BSN², Helen F. Matthews, BSN³, Dr. Sarah M. Kranick, MD⁵, Dr. Kelly D. Stone, MD, PhD, FAAAAI¹, Dr. Steven M. Holland, MD⁶, Dr. Daniel S. Reich, MD, PhD⁷, Dr. Jason D. Hughes, PhD⁸, Dr. Huseyin Mehmet, PhD⁹, Dr. Joshua McElwee, PhD⁸, Dr. Hudson H. Freeze, PhD⁹, Dr. Alexandra F. Freeman, MD⁶ and Dr. Helen C. Su, MD, PhD², ¹Laboratory of Allergic Diseases, NIAID/NIH, Bethesda, MD, ²Laboratory of Host Defenses, NIAID/NIH, Bethesda, MD, ³Laboratory of Immunology, NIAID/NIH, Bethesda, MD, ⁴Undiagnosed Diseases Program, NHGRI/NIH, Bethesda, MD, ⁵Medical

- Neurology Branch, NINDS/NIH, Bethesda, MD, ⁶Laboratory of Clinical Infectious Diseases, NIAID/NIH, Bethesda, MD, ⁷Neuroimmunology Branch, NINDS/NIH, Bethesda, MD, ⁸Merck Research Laboratories, Merck & Co. Inc., Boston, MA, ⁹Sanford Burnham Medical Research Institute, La Jolla, CA
- 562 Expansion Of Circulating T Follicular Helper Cells In CVID Patients With Autoimmune Cytopenias**
Dr. Neil D. Romberg, MD¹, Dr. Ida Hsu, MD¹, Dr. Christina C. Price, MD¹, Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI² and Dr. Eric Meffre, PhD¹, ¹Yale University School of Medicine, New Haven, CT, ²Mt. Sinai Medical Center, New York, NY
- 563 Treatment Of Murine Chronic Granulomatous Disease (CGD) With The PPAR γ Agonist Pioglitazone Enhances Phagocyte Mitochondrial Reactive Oxygen Species (ROS) Production and Antimicrobial Responses**
Dr. Donna Bratton, MD, Dr. S. Courtney Frasch, PhD, Dr. Kenneth Malcolm, PhD and Dr. Ruby Fernandez-Boyanapalli, PhD, National Jewish Health, Denver, CO
- 564 Patient Specific Targeted Gene Therapy In The Treatment Of X-Linked Hyper-IgM Syndrome**
Caroline Y. Kuo, M.D., Division of Allergy and Immunology, Department of Pediatrics, David Geffen School of Medicine at UCLA, Los Angeles, CA, Alok Joglekar, PhD, Department of Microbiology, Immunology, and Molecular Genetics, University of California, Los Angeles, Los Angeles, CA and Donald B. Kohn, MD, Department of Pediatrics and Department of Microbiology, Immunology, and Molecular Genetics University of California, Los Angeles, Los Angeles, CA
- 565 Digeorge Syndrome Found By SCID Newborn Screening In California**
Dr. Kiran P. Patel, MD, MS¹, Dr. Antonia Kwan, PhD, MRCPCH¹, Mica Muskat, MSN¹, Dr. Joseph A. Church, MD, FAAAAI², Dr. Morna J. Dorsey, MD MMSc FAAAAI¹ and Dr. Jennifer M. Puck, MD¹, ¹Department of Pediatrics, University of California San Francisco and UCSF Benioff Children's Hospital, San Francisco, CA, ²Department of Pediatrics, University of Southern California and Children's Hospital Los Angeles, Los Angeles, CA

Best of EORD

3803

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

- 566 Urinary Levels Of Phytoestrogens Are Inversely Associated With Wheezing, Asthma, and Atopy**
Juan-Carlos Cardet, MD, Rheumatology, Immunology, and Allergy, Brigham and Women's Hospital, Boston, MA, Christina Johns, BA, Brigham and Women's Hospital, Boston, MA and Jessica Rabe Savage, MD, Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA
- 567 Vitamin D Treatment Is Protective Of Inhalant Organic Dust-Induced Bone Loss**
Dr. Jill A. Poole, MD, FAAAAI¹, Anand Dusad¹, Dr. Todd Wyatt, PhD², Angela Gleason, MA¹, Michael Duryee¹, Elizabeth Klein¹, Christopher Bauer¹, Dr. Lynell Klassen, MD¹, Dr. Ted Mikuls, MD¹, Dr. William West, MD¹, Dr. Debra Romberger, MD² and Dr. Geoffrey Thiele, PhD¹, ¹University of Nebraska Medical Center, Omaha, NE, ²UNMC, Omaha, NE
- 568 Antigenic Determinants On Der p 1 Identified By Mutagenesis Analysis Based On The Structure Of Allergen-Antibody Complexes**
Dr. Anna Pomes, PhD FAAAAI¹, Ms. Jill Glesner¹, Ms. Lisa D. Vailles¹, Dr. Wladek Minor, PhD², Dr. Maksymilian Chruszcz, PhD³ and Dr. Martin D. Chapman, PhD FAAAAI¹, ¹Indoor

- Biotechnologies, Inc., Charlottesville, VA, ²University of Virginia, Charlottesville, VA, ³University of South Carolina, Columbia, SC
- 569 Development Of IgE Against a Cimex Lectularius Allergen After Being Bitten By Bed Bugs Was Common Among Children In NYC**
Adnan Divjan¹, Dr. Jason B. Price, MD², Dr. Luis M. Acosta, MD¹, Prof. Andrew Rundle, DrPH³, Prof. Inge Goldstein, DrPH⁴, Prof. Judith Jacobson, DrPH³, Prof. William R. Montfort, PhD⁵, Prof. Greg Freyer, PhD⁶ and Prof. Matthew S. Perzanowski, PhD¹, ¹Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, ²Division of Pediatrics, Department of Medicine, College of Physician & Surgeons, Columbia University, New York, NY, ³Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, ⁴Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, ⁵Department of Chemistry and Biochemistry, University of Arizona, Tucson, Arizona, ⁶Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, New York
- 570 Divergent Effects Of Endotoxin and Mold Exposure On Asthma Exacerbations In The Childhood Asthma Management Program (CAMP)**
Dr. Ronina A. Covar, MD¹, Mrs. Anna Forssen, MS¹, Dr. Stanley J. Szefer, MD, FAAAAI^{2,3}, David A. Schwartz, MD⁴ and Andrew H. Liu, MD¹, ¹National Jewish Health, Denver, CO, ²University of Colorado Denver School of Medicine, Denver, CO, ³Children's Hospital Colorado, Denver, CO, ⁴University of Colorado Denver School of Medicine, Aurora, CO

Best of FADDA

3804

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

- 571 Inhibition Of Epidermal Tight Junction Function By Histamine Is Mediated By H1 and H4 Receptors**
Lisa A. Beck, MD, FAAAAI¹, Takeshi Yoshida, PhD¹, Sade Fridy¹, I-Hsin Kuo, PhD¹, Donald Y.M. Leung, MD, PhD, FAAAAI² and Anna De Benedetto, MD, FAAAAI¹, ¹University of Rochester Medical Center, Rochester, NY, ²National Jewish Health, Denver, CO
- 572 The Natural History and Clinical Predictors Of Egg Allergy In The First 2 Years Of Life: A Prospective, Population-Based, Cohort Study**
Ms. Rachel Peters, MPH^{1,2}, Prof. Shyamali Dharmage, MD, PhD^{1,2}, Prof. Lyle Gurrin, PhD², Dr. Jennifer Koplin, PhD¹, Prof. Anne-Louise Ponsonby, PhD¹, Dr. Adrian Lowe, PhD², Prof. Mimi L. K. Tang, MD, PhD, FAAAAI³, Dr. Dean Tey, MD^{1,4}, Dr. David Hill, MBBB, FRACP¹, Dr. Marnie Robinson, MBBB, FRACP⁵, Ms. Helen Czech, B.Nurs¹, Ms. Leone Thiele, MNSc¹, Dr. Nicholas Osborne, PhD⁶ and Prof. Katrina Jane Allen, MD, PhD, FAAAAI^{1,4}, ¹Murdoch Childrens Research Institute, Victoria, Australia, ²University of Melbourne, Victoria, Australia, ³The University of Melbourne, Melbourne, Australia, ⁴Royal Children's Hospital, Victoria, Australia, ⁵Royal Children's Hospital, Parkville, Australia, ⁶Royal Cornwall Hospital, Truro, United Kingdom
- 573 Mendelian Inheritance Of Elevated Tryptase Associated With Atopy and Connective Tissue Abnormalities**
Dr. Jonathan J. Lyons, MD¹, Dr. Guangping Sun, MD¹, Dr. Kelly D. Stone, MD, PhD, FAAAAI¹, Celeste Nelson, NP¹, Laura Wisch, MSN¹, Michelle O'Brien, RN, BSN¹, Nina Jones, RN, BSN², Dr. Andrew W. Lindsley, MD, PhD³, Dr. Hirsh D. Komarow, MD¹, Yun Bai, MS¹, Linda M. Scott, MS, CRNP¹, Daly Cantave, MSN⁴, Dr. Irina Maric, MD⁵, Dr. J. Pablo Abonia, MD³, Dr. Marc E. Rothenberg, MD, PhD, FAAAAI³, Dr. Lawrence B.

Schwartz, MD, PhD, FAAAAI⁶, Dr. Todd M. Wilson, DO¹ and Dr. Joshua D. Milner, MD¹, ¹Laboratory of Allergic Diseases, NIAID/NIH, Bethesda, MD, ²Frederick National Laboratory for Clinical Research, Frederick, MD, ³Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁴Clinical Center, National Institutes of Health, Bethesda, MD, ⁵Department of Laboratory Medicine, National Institutes of Health, Bethesda, MD, ⁶Virginia Commonwealth University, Richmond, VA

574 Expression Of TSLP and TSLP-R In Chronic Idiopathic Urticaria

Ms. Patricia M. Sterba, MS¹, Allen Myers, Ph.D² and Dr. Sarbjit S. Saini, MD, FAAAAI¹, ¹Johns Hopkins University, Baltimore, MD, ²Division of Allergy & Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD

575 Preclinical Study Of Rapidly-Disintegrating Sublingual Tablets (RDST): Effect Of Epinephrine (E) Incorporated As Nano-Crystals

Dr. Keith Simons, PhD¹, Dr. Ousama Rachid, PhD¹, Dr. Mutasem Rawas-Qalaji, PhD², Dr. Belacryst Mendez, PhD³, Ms. Annette Losada³ and Dr. F. Estelle R. Simons, MD, FAAAAI¹, ¹University of Manitoba, Winnipeg, MB, Canada, ²Nova Southeastern University, Ft. Lauderdale, FL, ³Nova Southeastern University, Ft. Lauderdale, FL

Best of HEDQ

3805

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

576 A 24-Month Randomized, Controlled Trial Of An Automated Speech Recognition Program To Improve Adherence In Pediatric Asthma

Bruce G. Bender, PhD FAAAAI¹, Peter Cvietusa², Glenn Goodrich², C. Ryan Lowe², Heather Nuanes², Susan Shetterly², Cathy R. Tacinas², Nicole Wagner², Frederick S. Wamboldt¹, Stan Xu² and David Magid², ¹National Jewish Health, Denver, CO, ²Kaiser Permanente Colorado, Denver, CO

577 Asthma Carepartners: A Home-Based Asthma Intervention Embedded Within Medicaid Managed Care

Ms. Julie Kuhn, MSW¹, Ms. Helen Margellos-Anast, MPH¹, Ms. Tala Alhajib Schwindt, MPH¹, Ms. Lourdes Reyes², Ms. Barbara Hay, M.A.², Ms. Sheena Freeman, B.A.¹ and Ms. Gloria Seals¹, ¹Sinai Urban Health Institute, Chicago, IL, ²Family Health Network, Chicago, IL

578 The Osia Platform: An Extensible Tool For Improving Individual Allergy and Asthma Control and Understanding Environmental Drivers

Dr. Richard W Lucas, PhD¹, Mr. Josh Dees², Mr. Rob Reynolds², Mr. Bryn Rhodes³ and Dr. Richard W Hendershot, MD⁴, ¹Swedish University of Agricultural Sciences, Umeå, Sweden, ²OSIA Medical, Sandy, UT, ³Database Consulting Group, Orem, UT, ⁴Intermountain Health Care, Salt Lake City, UT

579 Allergy Immunotherapy Significantly Reduces Outpatient Services Use For Allergy and Respiratory Conditions In Patients With Newly-Diagnosed Allergic Rhinitis

Dr. Cheryl S. Hankin, PhD¹, Dr. Linda Cox, MD, FAAAAI², Dr. Amy Bronstone, PhD¹ and Ms. Zhaohui Wang, M.S.¹, ¹BioMedEcon, LLC, Moss Beach, CA, ²Allergy & Asthma Center, Fort Lauderdale, FL

580 Real-Time Asthma Outreach Reduces Excessive Short-Acting Beta-Agonist (SABA) Canister-Dispensing: A Randomized Study

Dr. Robert S. Zeiger, MD, PhD, FAAAAI¹, Dr. Michael Schatz, MD, MS, FAAAAI¹, Qiaowu Li, M.S.², Dr. James Zazzali, PhD³ and Wansu Chen, M.S.², ¹Kaiser Permanente Southern California, San Diego, CA, ²Kaiser Permanente Southern California, Pasadena, CA, ³Genentech, Inc., South San Francisco, CA

Chronic Rhinosinusitis and Polyps

3806

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

581 Activation Of TLR4 Induces VEGF Expression Via Akt Pathway In Nasal Polyps

Mrs. Jung-Sun Cho¹, Mr. Ju-Hyung Kang¹, Ms. In-Hye Han¹, Mrs. Ji-Young Um¹, Prof. Il-Ho Park² and Prof. Heung-Man Lee^{2,3}, ¹Department of Biomedical Sciences, Korea University Graduate School, Seoul, South Korea, ²Department of Otorhinolaryngology-Head and Neck Surgery, Korea University College of Medicine, Seoul, South Korea, ³Medical Devices Clinical Trial Center, Guro Hospital, Korea University, Seoul, South Korea

582 Non-Eosinophilic Nasal Polyps In Second-Generation Asian Patients In The U.S. With Chronic Rhinosinusitis; Evidence For Genetic Influence On Eosinophilia

Dr. Mahboobeh Mahdavinia, MD, PhD¹, Ms. Lydia Suh, BSc², Mr. James Norton, MS², Mr. Roderick Carter, BSc², Dr. Atsushi Kato, PhD², Dr. Anju T. Peters, MD, FAAAAI², Dr. Rakesh Chandra, MD³, Dr. Bruce K. Tan, MD⁴, Dr. David Conley, MD⁴, Dr. Robert C. Kern, MD⁴, Dr. Leslie C. Grammer, MD, FAAAAI² and Dr. Robert P. Schleimer, PhD FAAAAI², ¹Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Northwestern University, Chicago, IL, ⁴Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁵Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

583 Regulation Of Expression Of Pendrin Protein In CRS With Nasal Polyps and In Airway Epithelial Cells

Dr. Sudarshan Seshadri, PhD¹, Dr. Xiang Lu, MD, PhD¹, Mr. Matthew Purkey, BS¹, Dr. Tetsuya Homma, MD¹, Mr. Andrew Choi¹, Mr. Roderick Carter, BSc¹, Mr. James Norton, MS¹, Ms. Lydia Suh, BSc¹, Dr. Atsushi Kato, PhD¹, Prof. Pedro C. Avila, MD, FAAAAI¹, Dr. Anju T. Peters, MD, FAAAAI¹, Dr. David Conley, MD², Dr. Rakesh Chandra, MD³, Dr. Bruce K. Tan, MD², Dr. Leslie C. Grammer, MD, FAAAAI¹, Dr. Robert C. Kern, MD² and Dr. Robert P. Schleimer, PhD FAAAAI⁴, ¹Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Northwestern University, Chicago, IL, ⁴Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

584 Sex-Specific Differences In Disease Severity In Patients With Chronic Rhinosinusitis With Nasal Polyps

Dr. Kathryn E. Hulse, PhD¹, Dr. Whitney Wyatt Stevens, MD, PhD², Dr. Bruce K. Tan, MD³, Mr. James Norton, MS², Ms. Lydia Suh, BSc², Dr. Robert C. Kern, MD³, Dr. David Conley, MD³, Dr. Rakesh Chandra, MD¹, Dr. Anju T. Peters, MD, FAAAAI², Dr. Leslie C. Grammer, MD, FAAAAI², Ms. Kathleen E. Harris, BSc², Mr. Roderick Carter, BSc², Dr. Atsushi Kato, PhD², Dr. Margrit Urbanek, PhD⁴ and Dr. Robert P. Schleimer, PhD FAAAAI⁵, ¹Northwestern University, Chicago, IL, ²Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁴Division of Endocrinology, Metabolism and Molecular Medicine, Northwestern University Feinberg School of Medicine, ⁵Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

- 585 The Role Of Innate Cytokine In Non-Asthmatic, Non-Eosinophilic Nasal Polyps: IL-25, IL-33 and TSLP**
Dr. Dong-Kyu Kim¹, Dr. Hyun-Woo Shin², Dr. Jong-Wan Park², Dr. Min-Suk Yang³ and Dr. Dae Woo Kim³, ¹Chuncheon Sacred Heart Hospital, Hallym University College of Medicine, South Korea, ²Seoul National University College of Medicine, Pharmacology and Biomedical Science, Ischemic/Hypoxic Disease Institute, South Korea, ³Seoul National University Hospital and Boramae Medical Center, South Korea

The Redwan Moqbel Memorial MAAI Featured Poster Session

3807

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

- 586 IL33 and Type 2 Innate Lymphoid Cells (ILC2) But Not Th2 Cells Are Essential For Persistence Of Chronic Experimental Asthma**
Dr. Christina Christianson, PhD, Ms. Chaoyu Irvin, MS, Magdalena Gorska, MD, PhD and Rafeul Alam, MD, PhD, FAAAAI, National Jewish Health, Denver, CO
- 587 PGE2 Deficiency Causes a Phenotype Of Aspirin Sensitive Asthma That Depends On Platelets and Cysteinyl Leukotrienes**
Dr. Tao Liu, PhD^{1,2}, Dr. Joshua A. Boyce, MD, FAAAAI^{1,2}, Dr. Tanya M. Laidlaw, MD, FAAAAI^{1,2} and Dr. Howard Katz, PhD^{1,2}, ¹Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA, ²Harvard Medical School, Boston, MA
- 588 CCR8 Is a Receptor For CCL18 On Human Th2 Cells**
Dr. Morris Ling, MD¹, Dr. Sabina Islam, MD^{1,2}, Dr. John Leung, MD³, Wayne G. Shreffler, MD, PhD, FAAAAI^{1,2} and Dr. Andrew D. Luster, MD, PhD^{4,5}, ¹Massachusetts General Hospital, Boston, MA, ²Harvard Medical School, Boston, MA, ³Tufts Medical Center, Boston, MA, ⁴Massachusetts General Hospital, Charlestown, MA, ⁵Harvard Medical School, Charlestown, MA
- 589 Increased Frequency Of Dual Positive Th2/Th17 Cells In Bronchoalveolar Lavage Characterizes a Population Of Severe Asthmatic Patients**
Rafeul Alam, MD, PhD, FAAAAI, Ms. Chaoyu Irvin, MS, Dr. James Good, MD, Dr. Donald Rollins, MD, Dr. Christina Christianson, PhD, Ms. Iram Zafar, MS, Magdalena Gorska, MD, PhD and Dr. Richard J. Martin, MD, National Jewish Health, Denver, CO
- 590 Cmrp-35-Like Molecule 1 (CLM-1) Is Required For IL-4-Induced Cellular Responses and Development Of Allergic Airway Inflammation**
Mr. Itay Moshkovits¹, Mrs. Danielle Karo-Atar¹, Mrs. Dana Shik¹, Dr. Alon Hershko, MD, PhD² and Dr. Ariel Munitz, PhD¹, ¹Department of Clinical Microbiology and Immunology, The Sackler School of Medicine, Tel-Aviv University, Tel Aviv, Israel, ²Laboratory of Allergy and Clinical Immunology, Department of Medicine, The Herbert Center of Mast Cell Disorders, Meir Medical Center, Kfar Saba, Israel

Allied Health Featured Poster

3811

Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

- 591 Quality Of Life Improves In Children Undergoing Peanut Immunotherapy**
Ms. Shannon Seopaul, BS¹, Dr. Satya Narisety, MD², Corinne Keet, MD, MS³, Ms. Kim E. Mudd, RN MSN CCRP¹, Ms. Sarah D. Knorr, RN MPH CCRP⁴ and Robert A. Wood, MD, FAAAAI⁵,

¹Johns Hopkins University School of Medicine, Baltimore, MD, ²Johns Hopkins University School of Medicine, ³Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD, ⁴Geisinger Community Medical Center, Scranton, PA, ⁵Johns Hopkins University Medical Center, Baltimore, MD

Epidemiology: Asthma Control

4201

Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 592 Asthma In The Elderly: The Role Of Vitamin D**
Dr. Michele Columbo, MD, FAAAAI, Asthma, Allergy and Immunology Specialists, Bryn Mawr, PA, Dr. Reynold A. Panettieri Jr., MD, University of Pennsylvania, Philadelphia, PA and Dr. Albert S. Rohr, MD, FAAAAI, Rohr and Columbo Asthma, Allergy and Immunology Specialists, Bryn Mawr, PA
- 593 A Preliminary Randomized Controlled Trial: Educational Intervention For Treatment Of Hispanic and African American Adults With Asthma: Allergen Triggers, Peak Flow, and Spirometry**
Reenal Patel, MD, UMDNJ, Newark, NJ, Joshua Fogel, PhD, Nassau University Medical Center, East Meadow, NY and Marianne Frieri, MD, PhD, FAAAAI, State University of NY @ Stony Brook, Stony Brook, NY
- 594 Assessment Of Asthma Education and Teaching Practices Among Allergists**
Natalia Vernon, M.D., Penn State Hershey Medical Center, Hershey, PA and Dr. Timothy Craig, D.O., Penn State University, Hershey, PA
- 595 Comparison Of Asthma-Related ED Visits In Public Versus Private Hospitals In The Bronx**
Dr. Mili Shum, MD, Weill Cornell Medical College, New York, NY; Montefiore Medical Center, Bronx, NY, Dr. David L. Rosenstreich, MD, FAAAAI, Albert Einstein/Montefiore Medical Center, Bronx, NY and Dr. Sunit Jariwala, MD, Albert Einstein/Montefiore Medical Center, New York, NY
- 596 Comparison Of Pre- and Post-Pubertal Gender Differences In Markers Of Angiogenesis and Asthma Outcomes**
Dr. Amy Thomas, MD¹, Mark DeVries², Mr. Christopher J. Tisler, MT², Ms. Victoria Rajamanickam³, Dr. James E. Gern, MD, FAAAAI², Dr. Robert F. Lemanske Jr., MD, FAAAAI² and Dr. Daniel J. Jackson, MD⁴, ¹University of Wisconsin Hospitals and Clinics, Madison, WI, ²University of Wisconsin School of Medicine and Public Health, Madison, WI, ³University of Wisconsin Hospitals and Clinics, ⁴Pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, WI
- 597 Asthma Exacerbation In U.S. Adults: Who Are The Frequent Utilizers Of The Emergency Department?**
Dr. Kohei Hasegawa, MD, MPH^{1,2}, Ashley Sullivan, MPH, MS¹, Stuart Turner, BPharm, MPH³, Susan Massaro, PharmD, MPH⁴ and Dr. Carlos Camargo Jr., MD, DrPH^{1,2}, ¹Department of Emergency Medicine, Massachusetts General Hospital, Boston, MA, ²Harvard Medical School, Boston, MA, ³Novartis Pharmaceuticals Corporation, East Hanover, NJ, ⁴Novartis Pharmaceuticals
- 598 The Relationship Of The Serum Vitamin D Levels With Asthmatic Severity Responses In Asthmatic Children**
Dr. Julio Orellana¹, Dr. Telma Varela², Dr. Ana Romero Boni¹, Dr. Ofelia Miño¹, Dr. Estela Pautasso¹, Dr. Susana Rivolta¹, Dr. Ramón Pogonza³ and Dr. Juan Carlos Muino, MD, PhD, FAAAAI⁴, ¹Nuevo Hospital de Niños de la Santísima Trinidad Cordoba Argentina, Cordoba, Argentina, ²Nuevo Hospital de Niños de la Santísima Trinidad Cordoba Argentina, Córdoba, Argentina, ³Nuevo Hospital de Niños de la Santísima Trinidad Cordoba Argentina - CIU, Cordoba, Argentina, ⁴FAC CS MED UNC, Cordoba, Argentina

SUNDAY

- 599 Newly Diagnosed Asthma In The Elderly: Is It Really Different?**
Prof. Bilun Gemicioglu, MD, PhD, Istanbul Univ. Cerrahpasa Faculty of Medicine, Istanbul, Turkey, Prof. Oznur Abadoglu, MD, Cumhuriyet Univ. Faculty of Medicine, Sivas, Turkey, Dr. Levent Akyildiz, MD, Mardin Medical Park Hospital, Mardin, Turkey, Prof. Hasan Bayram, MD, PhD, University of Gaziantep, Gaziantep, Turkey, Prof. Aykut Cilli, MD, Akdeniz Univ. Faculty of Medicine, Antalya, Turkey, Prof. Arif Cimrin, MD, Dokuz Eylul Univ. Faculty of Medicine, Izmir, Turkey, Prof. Hakan Gunen, MD, Sureyyapasa Pulmonary Diseases Hospital and Research Center, Istanbul, Turkey, Prof. Zeynep Misirligil, MD, Ankara Univ. Faculty of Medicine, Ankara, Turkey, Prof. Tevfik Ozlu, MD, Karadeniz Teknik Univ. Faculty of Medicine, Trabzon, Turkey, Prof. Mecit Suerdem, MD, Selcuk Univ. Faculty of Medicine, Konya, Turkey and Prof. Esra Uzaslan, MD, Bursa Univ. Faculty of Medicine, Bursa, Turkey
- 600 Risk Factors For Acute Asthma In The City Of Esmeraldas, Ecuador**
Dr. Cristina Ardura-Garcia¹, Gisela Oviedo², Maritza Vaca², Carlos Sandoval², Stefanie Menzies², Lisa J. Workman, BA³, Prof. Matthew S. Perzanowski, PhD⁴, Maria Jose Rosa⁵, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI³ and Dr. Phil J. Cooper^{2,6}, ¹University of Liverpool, Wellcome Trust PhD Fellow, Liverpool, United Kingdom, ²Laboratorio de FEPIS, Quinindé, Esmeraldas Province, Ecuador, ³Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, ⁴Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, ⁵Columbia University, New York, NY, ⁶St. George's University, London, United Kingdom
- 601 Serum Vitamin D Levels and Clinical Features Of The Disease In Children With Asthma Aged 5 –To 18 Years Old**
Dr. Zeynep Tamay, MD, Associate Professor of Pediatrics, Istanbul University, Istanbul School of Medicine, Department of Pediatrics, Division of Pediatric Allergy, Istanbul, Turkey, Dr. Nurhan Ozcan, Ege Medical Faculty, Department of Pediatrics, Prof. Firdevs Bas, Istanbul University, Istanbul School of Medicine, Department of Pediatrics; Division of Pediatric Endocrinology, Prof. Umit Turkoglu, Istanbul University, Istanbul School of Medicine, Department of Pediatrics, Division of Biochemistry and Prof. Nermin Guler, MD, Istanbul University, Istanbul School of Medicine, Department of Pediatrics, Division of Pediatric Allergy, Turkey
- 602 Effectiveness Of Specific Immunotherapy Against Alternaria Alternata In Patients With Asthma and Or Allergic Rhinitis**
Dr. Silvia Martínez Blanco, MD¹, Dr. Ana Antón-Laiseca, MD¹, Dr. R. Mielgo Ballesteros, MD¹, Dr. Consuelo Fernández Rodríguez, MD, PhD¹, Dr. Ruth Barranco Jiménez, MD¹ and Dr. R. Vives Conesa, MD², ¹Hospital Universitario 12 de Octubre, Spain, ²Hospital Universitario 12 de Octubre, Madrid, Spain
- 603 Vitamin D Levels As Related To Severity and Ethnicity In Asthmatics**
Dr. Patricia H. Stewart, MD¹, Dr. Thomas Pressley, PharmD¹, Dr. Deborah Minor, PharmD¹ and Prof. Gailen D. Marshall Jr., MD, PhD, FAAAAI², ¹University of Mississippi Medical Center, ²University of Mississippi Medical Center, Jackson, MS
- 604 Real Life Study Of Safety and Efficacy Of Subcutaneous Immunotherapy With Cat and Dog Extracts**
Ms. Silvia Uriarte and Prof. Joaquin Sastre, MD, PhD, FAAAAI, Fundación Jiménez Díaz, Madrid, Spain
- 605 Improvement In Quality Of Life In Parents Of Asthmatic Children Aged < 4 Years Receiving Subcutaneous Allergy Immunotherapy**
Yurydia Jorge¹, Yikania Pichardo¹, Paola Polanco, MD², Xin Zheng, PhD³, Jose Adames, BS³, Dr. Andrew A. Wiznia, MD³, Dr. David L. Rosenstreich, MD, FAAAAI⁴ and Dr. Gabriele De Vos, MD⁵, ¹Jacobi Medical Center, New York, NY, ²Jacobi Medical Center, ³Albert Einstein College of Medicine, ⁴Albert Einstein/
- Montefiore Medical Center, Bronx, NY, ⁵Albert Einstein College of Medicine, Bronx, NY
- 606 Ashmi Suppresses Neutrophil Pulmonary Inflammation In a Ragweed Allergic Asthma Model That Is Associated With Modulation Of Innate and Adaptive Immune Responses**
Dr. Kamal D. Srivastava, PhD¹, Dr. David Dunkin, MD², Dr. Nan Yang, PhD, MS¹, Dr. Changda Liu, PhD¹, Dr. Rachel L. Miller, MD, FAAAAI³ and Dr. Xiu-Min Li, MD¹, ¹Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ²Icahn School of Medicine at Mount Sinai, New York, NY, ³Division of Pulmonary, Allergy and Critical Care Medicine, Columbia University, New York, NY
- 607 Longitudinal Characteristics Of Viral and Non-Viral Exacerbations Of Childhood Asthma**
Dr. Amaziah Coleman, MD¹, Dr. Daniel J. Jackson, MD², Dr. Ronald E. Gangnon, PhD¹, Mr. Michael D. Evans, MS¹, Dr. Robert F. Lemanske Jr., MD, FAAAAI¹ and Dr. James E. Gern, MD, FAAAAI¹, ¹University of Wisconsin School of Medicine and Public Health, Madison, WI, ²Pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, WI

Biomarkers and Asthma Control II

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 608 Bronchial Epithelial Cell Gene Expression In Relation To Exhaled Nitric Oxide Identifies New Molecular Asthma Phenotypes**
Dr. Brian D. Modena, MD¹, Dr. John Tedrow, MD¹, Dr. Jadranka Milosevic, PhD¹, Dr. Naftali Kaminski, MD² and Sally E. Wenzel, MD, FAAAAI¹, ¹University of Pittsburgh Medical Center NW, Pittsburgh, PA, ²Yale-New Haven Hospital, New Haven, CT
- 609 How Common Is The Phenotype Reflected By “The Atopic March”? Results At Two Years Of Age In a General Risk Multi-Racial Birth Cohort**
Dr. Christine Cole Johnson, PhD MPH FAAAAI¹, Ms. Suzanne Havstad, M.A.¹, Dr. Dennis Ownby, M.D. FAAAAI², Dr. Christine L.M. Joseph, PhD¹, Dr. Haejin Kim, MD³, Kimberley J. Woodcroft, PhD¹, Dr. Edward M. Zoratti, MD, FAAAAI⁴ and Ganesa Wegienka, PhD¹, ¹Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI, ²Department of Pediatrics Georgia Regents University, Augusta, GA, ³Division of Allergy and Clinical Immunology, Henry Ford Hospital, Detroit, MI, ⁴Henry Ford Health System, Detroit, MI
- 610 Is Asthma Predictive Index Feasible For A Retrospective Study?**
Dr. Chung I. Wi, MD¹, Dr. Miguel A. Park, MD² and Dr. Young J. Juhn, MD, MPH¹, ¹Dept of Pediatric and Adolescent Medicine, Mayo Clinic, Rochester, MN, ²Department of Internal Medicine: Division of Allergic Diseases, Mayo Clinic, Rochester, MN
- 611 Comparison Of Rates Of Prescribing Oral Corticosteroids For Asthma Exacerbations Between Step-Down Therapy Approaches Among Initiators Of Inhaled Corticosteroids and Long-Acting Beta-Agonist Combination Therapy**
Ayad K. Ali, PhD^{1,2}, Almut Winterstein, PhD², Leslie Hendeles, PharmD², Xiaomin Lu, PhD³, Richard Segal, PhD² and Abraham Hartzema, PhD², ¹Eli Lilly and Company, Indianapolis, IN, ²College of Pharmacy, University of Florida, Gainesville, FL, ³College of Public Health and Health Professions, College of Medicine, University of Florida, Gainesville, FL
- 612 The Good, The Bad and The Ugly Of The Naepf EPR3 Guidelines**
Dr. Priyanka Lall, MD, Emory University, Atlanta, Dr. Karen A. DeMuth, MD, FAAAAI, Emory University, Atlanta, GA and Dr. Morton Galina, Emory University

613 Fibrin Complexes From The Sputum Of Human Asthmatics Contain Viable Fungi

Dr. Rani Maskatia, MD¹, Cameron Landers, B.S.¹, Dr. Evan Li, M.D.¹, Dr. Roger Rossen, M.D.^{1,2}, Dr. Frank M. Orson, MD, FAAAAI^{1,2} and Dr. David B. Cory, MD¹, ¹Baylor College of Medicine, Houston, TX, ²Veterans Affairs Medical Center, Houston, TX

614 Proteomic Identification Of S100A8 As a Potential Effector Protein Of Acupuncture In Asthma Treatment

Yu-Dong Xu^{1,2}, Yu Wang¹, Ying Wei¹, Lei-Miao Yin¹, Jun Ran¹ and Yong-Qing Yang^{1,2}, ¹Molecular Biology Laboratory, Shanghai Research Institute of Acupuncture and Meridian, Shanghai University of Traditional Chinese Medicine, Shanghai, China, ²Yue Yang Hospital, Shanghai University of Traditional Chinese Medicine, Shanghai, China

615 Are Asthma Specialists and Non-Specialists Familiar With Inhaled Corticosteroid (ICS) Dosing Recommendations and Side Effects In Children With Asthma?

Dr. Jonathan Drori, West Penn Allegheny Health System, Pittsburgh, PA

616 Medication Remaining In Discarded Metered Dose Inhalers Of Asthmatic Children

Dr. Wantida Dampanrat, MD, Prince Of Songkla University, Hatyai, Thailand, Dr. Pasuree Sangsupawanich, MD, Prince Songkhanagarind hospital, Hadyai, Thailand and Dr. Araya Yuenyongviwat, MD, Prince of Songkla University, Songkhla, Thailand

617 Defining Severe Asthma In Childhood: A Descriptive Multicenter Study In Turkey

Bulent Enis Sekerel¹, Dr. Ozge Soyer², Fatih Celmeli³, Yakup Canitez³, Ozlem Keskin³, Demet Can³, Ferhat Catal³, Mehtap Kilic³, Burcin Nalbantoglu³, Nail Yologlu³, Suleyman T. Yavuz³, Belgin Guc³, Fadil Ozturk³, Gulbin Karakoc³, Suna Asilsoy³, Mehmet Kilic³, Cem Razi³, Dost Zeyrek³, Semanur Kuyucu³, Hasan Yuksel³, Omer Cevit³, Aysen Bingol³, Mehtap G. Yazicioglu³ and Ayse Yenigun³, ¹Hacettepe University, Pediatric Allergy Unit, Ankara, Turkey, ²Hacettepe University School of Medicine, Ankara, Turkey, ³TURPEDAS, Turkey

618 The Pediatric Diagnostic Conundrum Of Chronic Respiratory Symptoms

Zainab Kagen, MD, University of Tennessee College of Medicine-Chattanooga, TN, Joel Ledbetter, MD, University of Tennessee College of Medicine-Chattanooga, TN, Jennifer Hamm, MD, University of Tennessee College of Medicine-Chattanooga and Esther Wilson, MD, University of Tennessee College of Medicine-Chattanooga

IVIG and Other Therapeutics

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

619 Quantification Of The Wear-Off Effect Towards The End Of The Intravenous Immunoglobulin Infusion Interval: Pooled Data Analysis

Mr. John-Philip Lawo, CSL Behring GmbH, Marburg, Germany, Dr. Alphonse Hubsch, CSL Behring AG, Berne, Switzerland and Dr. Mikhail Rojavin, PhD, Clinical Research and Development, CSL Behring LLC, King of Prussia, PA

620 Safety and Efficacy Of Biweekly Hizentra® Administration In Patients With Primary Immunodeficiency Diseases: A Retrospective Single-Center Study

Clare Malcolmson and Dr. Alison Jones, Great Ormond Street Hospital, London, United Kingdom

621 Long-Term Tolerability and Safety Of Facilitated-Subcutaneous Infusion Of Human Immune Globulin G (IgG), 10%, and Recombinant Human Hyaluronidase (rHuPH20) (IGHy): A Phase 3 Extension Study In Patients With Primary Immunodeficiencies (PIs)

Dr. Isaac Reuven Melamed, MD¹, Dr. Richard L. Wasserman, MD, PhD, FAAAAI², Dr. Mark Stein, MD, FAAAAI³, Dr. Arye Rubinstein, MD, FAAAAI⁴, Dr. Jennifer M. Puck, MD⁵, Sudhir Gupta, MD, PhD, FAAAAI⁶, Werner Engl⁷, Dr. Heinz Leibl, PhD⁷, Dr. Leman Yel, MD, FAAAAI⁸ and Dr. Richard I. Schiff, MD, PhD⁸, ¹IMMUNOe Health Centers, Centennial, CO, ²DallasAllergyImmunology, Dallas, TX, ³Allergy Associates of the Palm Beaches, North Palm Beach, FL, ⁴Albert Einstein College of Medicine, Bronx, NY, ⁵Department of Pediatrics, University of California San Francisco and UCSF Benioff Children's Hospital, San Francisco, CA, ⁶University of California, Irvine, Irvine, CA, ⁷Baxter BioScience, Vienna, Austria, ⁸Baxter BioScience, Westlake Village, CA

622 Health-Related Quality Of Life Of Japanese Patients With Primary Immunodeficiency Diseases Receiving IgPro20, a 20% Liquid Subcutaneous Immunoglobulin (Hizentra®)

Prof. Hirokazu Kanegane, MD, PhD¹, Prof. Kohsuke Imai, MD, PhD², Prof. Masafumi Yamada, MD, PhD³, Prof. Hidetoshi Takada, MD, PhD⁴, Prof. Tadashi Ariga, MD, PhD³, Prof. Ataru Igarashi, PhD⁵, Prof. Kiichiro Tsutani, MD, PhD⁵, Dr. Martin Bexon, MD⁶, Dr. Mikhail Rojavin, PhD⁷, Ms. Midori Kobayashi, BPharm, MBA⁸, Dr. John-Philip Lawo, PhD⁹, Mr. Art Zbrozek, RPh, MSc, MBA¹⁰, Prof. Shigeaki Nonoyama, MD, PhD¹¹, Prof. Toshiro Hara, MD, PhD⁴ and Prof. Toshio Miyawaki, MD, PhD¹, ¹Department of Pediatrics, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, ²Department of Community Pediatrics, Perinatal and Maternal Medicine, Tokyo Medical and Dental University, Tokyo, Japan, ³Department of Pediatrics, Hokkaido University Graduate School of Medicine, Sapporo, Japan, ⁴Department of Pediatrics, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan, ⁵Department of Drug Policy and Management, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan, ⁶Clinical Research and Development, CSL Behring AG, Berne, Switzerland, ⁷Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, ⁸Research and Development, CSL Behring K.K., Tokyo, Japan, ⁹CSL Behring GmbH, Marburg, Germany, ¹⁰CSL Behring LLC, King of Prussia, PA, ¹¹Department of Pediatrics, National Defense Medical College, Tokorozawa, Japan

623 Efficacy and Tolerability Of Privigen® In Clinical Practice

Dr. Morna J. Dorsey, MD MMSc FAAAAI¹, Viet Ho², Dr. Mohsen I. Mabudian, MD³, Pere Soler-Palacin⁴, Nerea Domínguez-Pinilla⁵, Dr. Robert W. Hellmers, MD, FAAAAI⁶, Dr. Radha Gandhi Rishi, MD, FAAAAI⁶, Rahul Rishi⁷, Dr. Duane W. Wong, MD⁶, Dr. Mikhail Rojavin, PhD⁸, Dr. Alphonse Hubsch⁹ and Dr. Melvin Berger, MD, PhD, FAAAAI⁸, ¹Department of Pediatrics, University of California, San Francisco, San Francisco, CA, ²Moffitt Cancer Hospital, FL, ³Beaver Medical Group, Inc., Department of Allergy and Clinical Immunology, Redlands, CA, ⁴Pediatric Infectious Diseases and Immunodeficiencies Unit, Hospital Universitari Vall d'Hebron, Barcelona, Spain, ⁵Department of Pediatrics, Hospital 12 de Octubre, Madrid, Spain, ⁶Arizona Allergy Associates, Chandler, AZ, ⁷Arizona Allergy Associates, Phoenix, AZ, ⁸Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, ⁹CSL Behring AG, Berne, Switzerland

624 Safety and Tolerability Of An Intravenously Administered Alpha1-Proteinase Inhibitor (A1PI) At An Increased Infusion Rate: A Randomized, Rate Control, Placebo-Masked, Cross-over Study In Healthy Adults

Adam Haeberle¹, Leock Ngo¹, Neil Inhaber¹, David Gelmont¹ and Dr. Leman Yel, MD, FAAAAI², ¹Baxter BioScience, ²Baxter BioScience, Westlake Village, CA

625 Pharmacokinetic Modeling Predicts Different IgG Exposures Using Different IVIG-Scig Dose Conversion Factors In Patients With Primary Immune Deficiency

Dr. Jagdev S. Sidhu, PhD¹, Dr. Mikhail Rojavin, PhD², Dr. Melvin Berger, MD, PhD, FAAAAI², Dr. Martin Bexon³ and Dr. Jonathan M. Edelman, MD², ¹Clinical Pharmacology & Early Development,

MONDAY

- CSL Ltd, Parkville, Australia, ²Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, ³CSL Behring AG, Berne, Switzerland
- 626 Flexible Dosing For Hizentra®: Pharmacokinetic Simulations Of Various Subcutaneous Dosing Regimens and Compliance In Patients With Primary Immunodeficiency**
Dr. Mikhail Rojavin, PhD¹, Dr. Jagdev S. Sidhu, PhD², Dr. Martin Bexon, MD³ and Dr. Jonathan M. Edelman, MD¹, ¹Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, ²Clinical Pharmacology & Early Development, CSL Ltd, Parkville, Australia, ³Clinical Research and Development, CSL Behring AG, Berne, Switzerland
- 627 Effect Of Synthetic Steroids and Hydroxychloroquine On B-Cell IgE Production**
Dr. Ahila Subramanian, MD, MPH, Yingchun Han and Dr. Fred H. Hsieh, MD, Cleveland Clinic Foundation, Cleveland, OH
- 628 Safety, Tolerability, and Efficacy Of Hizentra® In Japanese Patients With Primary Immunodeficiency Over 48 Weeks**
Prof. Kohsuke Imai, MD, PhD¹, Prof. Hirokazu Kanegane, MD, PhD², Prof. Masafumi Yamada, MD, PhD³, Prof. Hidetoshi Takada, MD, PhD⁴, Prof. Tadashi Ariga, MD, PhD³, Ms. Midori Kobayashi, BSPHarm, MBA⁵, Dr. Mikhail Rojavin, PhD⁶, Dr. Martin Bexon, MD⁷, Prof. Shigeaki Nonoyama, MD, PhD⁸, Prof. Toshiro Hara, MD, PhD⁴ and Prof. Toshio Miyawaki, MD, PhD², ¹Department of Community Pediatrics, Perinatal and Maternal Medicine, Tokyo Medical and Dental University, Tokyo, Japan, ²Department of Pediatrics, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, ³Department of Pediatrics, Hokkaido University Graduate School of Medicine, Sapporo, Japan, ⁴Department of Pediatrics, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan, ⁵Research and Development, CSL Behring K.K., Tokyo, Japan, ⁶Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, ⁷Clinical Research and Development, CSL Behring AG, Berne, Switzerland, ⁸Department of Pediatrics, National Defense Medical College, Tokorozawa, Japan
- 629 In Vitro Effect Of Intravenous Immunoglobulin (IVIG) On Natural Antibody Producing Human B1 Cells**
Kevin A. Cook, MD¹, Sudhanshu Agrawal, MS¹ and Sudhir Gupta, MD, PhD, FAAAAI², ¹University of California, Irvine, CA, ²University of California, Irvine, Irvine, CA
- 630 Effect Of A Novel, Oral Histamine H4R Antagonist On Histamine-Induced Pruritus In Healthy Subjects**
Dr. Alexa P. Kollmeier, MD¹, Paul Dunford, MSc¹, Xie Xu, PhD¹, Andrew Greenspan, MD¹, Yichuan Xia, PhD², Bei Zhou, PhD², Klaus Francke, MD, PhD³ and Dr. Robin L. Thurmond, PhD¹, ¹Janssen Research & Development, LLC, La Jolla, CA, ²Janssen Research & Development, LLC, Spring House, PA, ³Parexel International, London, United Kingdom
- 631 Decreasing Risk Of Infection and Severity Of Infections Resulting In Hospitalizations In Patients With Primary Immunodeficiency Disease Changing From IVIG To Scig Therapy**
Mr. Art Zbrozek, RPh, MSc, MBA¹, Ms. Sonam Mehta², Dr. Dipen A. Patel² and Mr. Marc Botteman, MSc², ¹CSL Behring LLC, King of Prussia, PA, ²Pharmerit International, Bethesda, MD
- 632 A Multicenter Non-Interventional Study On The Efficacy and Tolerability Of The Polyvalent Intravenous Immunoglobulin Privigen®**
Dr. Rainer Hoffmann, MD¹, Dr. Peer Lotichius, PhD² and Dr. Dietmar Pfruender, MD², ¹Praxis für Neurologie und Psychiatrie, Berlin, Germany, ²CSL Behring, Hattersheim, Germany
- 633 The Immunoglobulin Diagnosis, Evaluation, and Key Learnings (IDEaL) Patient Registry: Analysis Of Ig Dosing, Infection Control, and Quality-Of-Life Assessments In Our Primary Immunodeficiency Population**
Sean Kearns, Ph.D¹, Keith Crawford¹, Loretta Kristofek, RN¹, Robbyn Kirylo¹ and Dr. Luqman Seidu, MD², ¹Coram Clinical Trials, Denver, CO, ²Allergy and Asthma of Atlanta, LLC, Atlanta, GA
- 634 Retrospective Analysis Of The Clinical Utility Of Biweekly Dosing With High-Concentration Subcutaneous Immunoglobulin In 10 Patients With Primary Immunodeficiency**
Dr. Richard L. Wasserman, MD, PhD, FAAAAI¹, Dr. Shahnaz Fatteh², Dr. Javaid M. Khan, DO² and Dr. Elie Haddad, MD³, ¹Medical City Children's Hospital, Dallas, TX, ²Larkin Community Hospital, South Miami, FL, ³CHU Sainte-Justine, Montreal, QC, Canada

Autoinflammatory Disorders

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 635 Concomitant FMF and TRAPS Mutation In a Periodic Fever Patient**
Dr. Adrienne C. Netterville, MD¹, Dr. Victoria Dimitriades, MD¹ and Dr. Paul D. Niolet, MD², ¹Louisiana State University Department of Pediatrics, New Orleans, LA, ²Allergy Asthma and Immunology, Ocean Springs, MS
- 636 Association Of Interleukin-23 Receptor Single Nucleotide Polymorphisms With Ulcerative Colitis**
Dr. Mona Hedayat, MD, Boston Children's Hospital, Boston, MA, Dr. Nasser Ebrahimi Daryani, Department of Gastroenterology and Hepatology, Tehran University of Medical Sciences, Dr. Farnaz Najmi Varzaneh, Molecular Immunology Research Center, Department of Immunology, Tehran University of Medical Sciences and Dr. Nima Rezaei, MD, PhD, Research Center for Immunodeficiencies, Children's Medical Center, Tehran University of Medical Sciences, Tehran, Tehran, Iran
- 637 A Novel Immunoablative Regimen Utilized In The Successful Remission Of Pulmonary Hemorrhage In An Adolescent Female With Systemic Lupus Erythematosus**
Ms. Vivian E. Cino, MSN ARNP-BC PNP¹, Alexander Constantinescu, MD², Kristina Deeter, MD², Faina Shenderov, PharmD², Joan Spiro, PharmD² and Dr. Gary I. Kleiner, MD, PhD, FAAAAI², ¹Joe Dimaggio Children's Hospital, Hollywood, FL, ²Joe Dimaggio Children's Hospital
- 638 Haptoglobin Deficiency and Autoimmune Manifestations; A Case Series**
Dr. Anna Kochin, MD¹, Dr. Jenny Shliozberg, MD, FAAAAI¹ and Dr. Arye Rubinstein, MD, FAAAAI², ¹Montefiore Medical Center, Bronx, NY, ²Albert Einstein College of Medicine, Bronx, NY
- 639 Immunogenicity Analysis Of Two Anti-TNF (Infliximab vs Etanercept) Therapies In Rheumatologic Patients**
Dr. Yvelise Barrios, MD, PhD¹, Dr. Victor Matheu, MD², Dr. Andres Franco, MD¹, Dr. Esmeralda Delgado, MD³ and Dr. Sagrario Bustabad, MD³, ¹Immunology, Hospital Universitario de Canarias, LA LAGUNA, Spain, ²Allergy Section, Hospital Ofrá, Tenerife, Spain, ³Rheumatology, Hospital Universitario de Canarias, LA LAGUNA, Spain
- 640 Circulating Endothelial and Platelet Microparticles For Diagnosis and Monitoring Vasculitis**
Prof. El-Desouki E. Fouda, MD, FAAAAI, Al-Azhar university Allergy & Immunology Cr., Cairo, Egypt, Dr. Marwa Ahmed, Al-Azhar Allergy&Immunology Cr., Cairo, Egypt and Prof. Mona Al-rayes, Al-Azhar Allergy& Immunology Cr., Cairo, Egypt
- 641 Mistaken Identity: Misdiagnosis Based On Auto-Antibodies In IVIG**
Dr. Kristyn E. Anthony, MD, Tulane University, New Orleans, LA and Dr. Jane M. El-Dahr, MD, Tulane University School of Medicine, New Orleans, LA
- 642 Th-17 Cytokines In Oral Lichen Planus**
Prof. G.N. Drannik¹, Prof. A.I. Kurchenko¹, Dr. R.A. Rehuretska¹, Dr. A.G. Drannik² and Prof. Lawrence M. DuBuske, MD,

FAAAAI³, ¹National Medical University, Kiev, Ukraine, ²National medical University, Kiev, Ukraine, ³George Washington University School of Medicine, DC

Airborne Allergen Exposures

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 643 A Study On Allergy Sensitization Of Dense Urban Dwellers To Dog and Cat Allergens Using The Skin Prick Test**
Dr. Racquel Joy Y. So, Dr. Florecita Padua and Dr. Shirley Kwong, Fe Del Mundo Medical Center, Quezon City
- 644 Rhinix™ Nasal Filters For The Treatment Of Allergic Rhinitis: A Randomized, Double-Blinded Placebo-Controlled Crossover Clinical Trial**
Peter Kenney, BSc¹, Ole Hilberg, MD, DMSc², Henrik Pedersen, PhD³, Ole Bækgaard Nielsen, PhD⁴ and Torben Sigsgaard, MD, PhD¹, ¹Department of Public Health, Aarhus University, Aarhus, Denmark, ²Department of Respiratory Diseases and Allergology, Aarhus University Hospital, Aarhus, Denmark, ³Department of Engineering - Signal Processing, Aarhus University, Aarhus, Denmark, ⁴Department of Biomedicine, Aarhus University, Aarhus
- 645 Airborne Allergen Exposure As a Quantum Phenomenon**
Dr. Gert Doekes, PhD, Institute for Risk Assessment Sciences, University Utrecht, NL, Utrecht, Netherlands, Dr. Peter S. Thorne, PhD, University of Iowa, Iowa City, IA, Dr. Ingrid Sander, PhD, Institute for Prevention and Occupational Medicine, Ruhr-University Bochum, Bochum, Germany, Dr. Inge Wouters, PhD, Institute for Risk Assessment Sciences, University Utrecht, Utrecht, Netherlands, Dr. Wijnand Eduard, PhD, National Institute of Occupational Health, Oslo, Norway and Dr. Dick Heederik, PhD, Institute for Risk Assessment Sciences, Utrecht, Netherlands
- 646 Computer-Aided Design Of An Allergen Challenge Theatre**
William H. Yang, MD, Jimmy Yang, MBA, Robert Perrins, P.Eng, Suzanne Kelly, PhD and Jacob Karsh, MD, Red Maple Trials Inc., Ottawa, ON, Canada
- 647 Evaluation Of a Compact Ionic Capture Device For Airborne Allergens In Inner City Schools**
Dr. Julian Gordon, PhD¹, Ms. Prasanthi Gandhi, MBA MPH¹, Dr. Gajendra Shekhawat, PhD², Ms. Ann Bailey, BA³ and Dr. Wanda Phipatanakul, MD, MS, FAAAAI⁴, ¹Inspirotec LLC, Chicago, IL, ²Northwestern University, Evanston, IL, ³Channing Laboratory, Boston, MA, ⁴Boston Children's Hospital, Boston, MA
- 648 Relevance Of Sensitization To Blomia Tropicalis, Dermatophagoides and Tropomyosin- Containing Antigens Among Atopics Living In a Tropical Region**
Dr. Beverly K. Di Giorgi, MD, Dr. Sylvette Nazario, MD, Dr. Fernando J. Lopez, MD and Dr. Javier A. Mendez, MD, University of Puerto Rico School of Medicine, San Juan, PR
- 649 Update In The Prevalence Of Atopic Conditions, IgE Levels and Skin Test Sensitization To Aeroallergens In Northern Puerto Rico**
Dr. Rafael H. Zaragoza, MD, PhD, Doral Bank Center, San Juan, PR; University of Puerto Rico School of Medicine, San Juan, PR
- 650 Stability Of Immunoassay Analytes and Test Kits Used For Monitoring Environmental Allergen Exposure**
Bryan Smith, Denise Block, Stephanie Filep, Dr. Martin D. Chapman, PhD FAAAAI and Dr. Eva-Maria King, PhD, Indoor Biotechnologies, Inc., Charlottesville, VA
- 651 Factors Affecting Pollen Rupture and Protein Release From Allergenic Pollens**
Ms. Umaporn Siri wattanakul, Master of Science Program in Plant Science, Department of Plant Science, Faculty of Science and Department of Pharmaceutical Botany, Faculty of Pharmacy, Mahidol

University, Bangkok, Thailand and Dr. Wisuwat Songnuan, Department of Plant Science, Faculty of Science, Mahidol University, Bangkok, Thailand

- 652 Attitudes and Behaviors Among Patients With Confirmed Pet Allergy**
Dr. Timothy J. Campbell, MD, Dr. Asaf Klein, MD, Xiaofeng Wang, PhD, Qi Zhang, M.S. and Dr. Roxana Siles, MD, Cleveland Clinic
- 653 Uniformed Distribution Of Aerosolized Dust Mite Allergen In The Allergen Biocube (ABC)**
Keith Lane, Ora Inc., MA, Paul Gomes, Ora Inc., Endri Angjeli, Ora, Inc, Andover, MA and Dr. Anne K. Ellis, MD, MSc FAAAAI, Allergy Research Unit, Kingston General Hospital, Kingston, ON, Canada; Departments of Medicine and Biomedical & Molecular Science, Queen's University, Kingston, ON, Canada

Infections, Asthma and Allergies

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 654 Cytokine Profiles In Bronchoalveolar Lavage In a Mouse Model Of Bronchial Asthma During A(H1N1)pdm09 and Seasonal H1N1 Infection**
Dr. Shunji Hasegawa¹, Dr. Seigo Okada², Dr. Hiroyuki Wakiguchi², Dr. Hideki Hasegawa³, Dr. Akira Aina⁴, Dr. Komei Shirabe⁵, Dr. Shoi-chi Toda⁵, Dr. Ryo Atsuta⁶, Dr. Akihiro Hasegawa⁷ and Dr. Takashi Ichiyama¹, ¹Department of Pediatrics, Yamaguchi University Graduate School of Medicine, Ube, Yamaguchi, Japan, ²Department of Pediatrics, Yamaguchi University Graduate School of Medicine, ³Department of Pathology, National Institute of Infectious Diseases, ⁴Influenza Virus Research Center, National Institute of Infectious Diseases, ⁵Yamaguchi Prefectural Institute of Public Health and Environment, ⁶Department of Respiratory Medicine, Juntendo University School of Medicine, ⁷Department of Microbiology and Immunology, Yamaguchi University Graduate School of Medicine
- 655 In Vitro Tumor Necrotic Factor Alpha Responses To Persistent Chlamydia Pneumoniae Infection From PBMC Of Asthmatic Children**
Dr. Kobkul Chotikanatis, MD¹, Dr. Diana Weaver, MD², Danielle Lent³, Eva Estrella³, Dr. Margaret R. Hammerschlag, MD³, Dr. Rauno O. Joks, MD, FAAAAI^{1,4} and Dr. Stephan Kohlhoff, MD^{5,6}, ¹SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY, ²Kings County Hospital Center, Brooklyn, NY, ³SUNY Downstate Medical Center, Brooklyn, NY, ⁴Department of Medicine, State University of New York Downstate Medical Center, Brooklyn, NY, ⁵Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY, ⁶Department of Pediatrics, State University of New York Downstate Medical Center, Brooklyn, NY
- 656 Human Rhinoviruses/Enteroviruses Associated Wheezing In Children**
Anyarat Wanitchakorn, MD¹, Dr. Wiparat Manuyakorn, MD¹, Wasu Kamchaisatian, MD¹, Dr. Wasun Chantratita², Kanjana Premchaisorn² and Suwat Benjaponpitak, MD¹, ¹Division of Pediatric Allergy/Immunology/Rheumatology, Department of Pediatrics, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, ²Department of Pathology, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand
- 657 Study Of Montelukast For The Treatment Of Acute and Post Viral-Induced Wheezing**
Sirirak Kanchanateeraphong, MD, Gun Phongsamart, MD, Tassalapa Dangsuan, MD and Mukda Vangveeravong, MD, Queen Sirikit National Institute of Child Health(Children Hospital), Bangkok, Thailand

MONDAY

- 658 Prevalence Of Toxocara Infection In Subjects With Suspected Allergies**
Dr. Rosanna M. Qualizza, Istituti Clinici di Perfezionamento, Milano, Italy, Dr. Cristoforo Incorvaia, Istituti Clinici di perfezionamento, Milano, Italy and Dr. Anna Maraschini, IRCCS Fondazione Ca'Granda Policlinico, Milano, Italy
- 659 The Effects Of Dexamethasone On Community-Acquired Pneumonia In Children**
Prof. Youn Ho Shin, Department of Pediatrics, CHA Medical Center, CHA University School of Medicine, Seoul, Korea, South Korea, Dr. Jun Hwan Kim, Department of Pediatrics, CHA University School of Medicine, South Korea, Dr. Jung Won Yoon, Department of Pediatrics, Myongji Hospital, Gyeonggi-do, South Korea, Prof. Sun-Hee Choi, MD, PhD, Gangdong Kyung Hee University Hospital, Seoul, South Korea, Dr. Hyeung Yoon Kim, Department of Pediatrics, Bundang Jaesaeng Hospital, Seongnam, South Korea, Hye Mi Jee, MD, Department of Pediatrics, CHA University School of Medicine, Seongnam, Korea, South Korea, Prof. Man-Yong Han, MD, PhD, Department of Pediatrics, CHA University School of Medicine, Seongnam, South Korea and Dr. Jin-Tack Kim, MD, PhD, Department of Pediatrics, Uijeongbu St. Mary's Hospital, The Catholic University of Korea, College of Medicine, Uijeongbu, Gyeonggi-Do, South Korea
- 660 The Association Between Strongyloides Stercoralis Infection and Allergic Skin Diseases**
Dr. Lahari Rampur, MD, Albert Einstein/Jacobi medical centre, Bronx, NY, Dr. Gabriele De Vos, MD, Albert Einstein College of Medicine, Bronx, NY, Dr. Golda Hudes, MD, PhD, Albert Einstein/Montefiore Medical Center, New York, NY and Dr. Sunit Jariwala, MD, Albert Einstein/Montefiore Medical Center, New York, NY
- 661 Effects Of Human Rhinovirus Species On Cytokine Production and Cellular Cytotoxicity In Differentiated Sinus Epithelial Cells**
Dr. Kazuyuki Nakagome, MD^{1,2}, Dr. Yury Bochkov, PhD¹, Dr. Shamaila Ashraf, PhD¹, Ms. Rebecca Brockman-Schneider, MS¹ and Dr. James E. Gern, MD, FAAAAI¹, ¹University of Wisconsin School of Medicine and Public Health, Madison, WI, ²Saitama Medical University, Saitama, Japan
- 662 Human Rhinovirus Bronchiolitis Predominant In Very Low Birthweight Infants In Argentina**
Dr. Jodell E Linder-Jackson, PhD¹, Tatyana E Plachco², Lucrecia Bossi³, Gabriela Bauer², Fernando P Polack⁴, Romina P Libster⁵ and Eva K Kathryn Miller, MD, MPH⁶, ¹Vanderbilt, TN, ²Hospital de Pediatría Garrahan, Argentina, ³Maternidad Sarda, Argentina, ⁴Fundación Infant, Vanderbilt University, Argentina, ⁵Fundación Infant, Argentina, ⁶Vanderbilt University Medical Center, Nashville, TN
- 663 Association Of Vitamin D Status With Recurrent Wheezers and Lower Respiratory Infection In Pre-School Children**
Prof. Jin-A Jung, MD, Dong-A University College of Medicine, Busan, Prof. Ja Hyeong Kim, MD, Ulsan University Hospital, Ulsan, South Korea and Prof. Ju-Suk Lee, MD, PhD, Sungkyunkwan university, Changwon, South Korea
- MD⁴, Dr. Gianluca Pirozzi, MD, PhD⁵, Warren Brooks, PhD⁴ and Dr. Marius Ardeleanu, MD⁴, ¹Universität zu Lübeck, Lübeck, Germany, ²Charite - Universitätsmedizin Berlin, Berlin, Germany, ³Regeneron Pharmaceuticals, Inc., Basking Ridge, NJ, ⁴Regeneron Pharmaceuticals, Inc., Tarrytown, NY, ⁵Sanofi, Bridgewater, NJ**
- 665 A Lipid Plant Extract From Chamaecyparis Obtusa Induces Filaggrin and Human Beta-Defensin -3**
Mr. Byung Eui Kim, MD, PhD¹, Mr. Gwui Cheol Kim, PhD², Ms. Hee Jin Kim² and Donald Y.M. Leung, MD, PhD, FAAAAI¹, ¹National Jewish Health, Denver, CO, ²Jeonnam Nano Bio Research Center
- 666 Identification Of Novel Gene Signatures In Atopic Dermatitis Complicated By Eczema Herpeticum**
Dr. Lianghua Bin, MD, PhD¹, Dr. Michael G Edwards², Dr. Ryan Heiser, PhD¹, Mrs. Joanne Streib, BA¹, Ms. Brittany Richers¹ and Donald Y.M. Leung, MD, PhD, FAAAAI¹, ¹National Jewish Health, Denver, CO, ²University of Colorado at Denver
- 667 Topical Application Of Rapamycin Ointment Inhibits Dermatophagoides Farinae Body (Dfb) Extract Antigen-Induced Dermatitis In NC/Nga Mice**
Mr. Fei Yang¹, Dr. Lingli Yang¹, Dr. Mari Tanaka¹, Dr. Mari Wataya-Kaneda¹, Ayumi Nakamura², Shoji Matsumoto², Dr. Mostafa Attia³, Dr. Hiroyuki Murota¹ and Prof. Ichiro Katayama¹, ¹Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan, Osaka, Japan, ²Osaka University Hospital, Department of Pharmacy, Osaka, Japan, ³Dermatology, Cairo University, Cairo, Egypt, Cairo, Egypt
- 668 Therapeutic Effects Of Recombinant Salmonella Typhimurium Expressing TLR8 miRNA On Atopic Dermatitis**
Dr. Wonsuck Yoon, Department of Life Science and Biotechnology, Seoul, South Korea, Prof. Ji Tae Choung, MD, Korea Univ. Medical Center, Seoul and Dr. Young Yoo, MD, PhD, Department of Pediatrics, College of Medicine, Korea University, Seoul, South Korea
- 669 Correlation Between Serum 25-Hydroxyvitamin D Levels and Severity Of Allergic Atopic Dermatitis In Children**
Dr. Sung Soon, BUSAN MARY, BUSAN, South Korea
- 670 Association Between Prenatal and Early Life Vitamin D Levels and Allergic Outcome At Age 2 Years**
Ganesa Wegienka, PhD¹, Ms. Suzanne Havstad, M.A.¹, Kimberley J. Woodcroft, PhD¹, Dr. Dennis Ownby, M.D. FAAAAI², Dr. Edward M. Zoratti, MD, FAAAAI³ and Dr. Christine Cole Johnson, PhD MPH FAAAAI¹, ¹Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI, ²Department of Pediatrics Georgia Regents University, Augusta, GA, ³Henry Ford Health System, Detroit, MI
- 671 Association Between Sun Exposure During The First 6 Months Of Life and The Cumulative Incidence Of Atopic Dermatitis In Infants**
Dr. Miwa Shinohara, MD, PhD, Department of Pediatric Allergy and Clinical Research, Shimoshizu National Hospital, Yotsukaido, Japan and Dr. Kenji Matsumoto, MD, PhD, Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan
- 672 Dampness In The Water-Damaged Homes Affects The Severity Of Atopic Dermatitis In Children**
Prof. Sunghul Seo, The Environmental Health Center for Asthma, Korea University, Seoul, Prof. Ji Tae Choung, MD, Korea Univ. Medical Center, Seoul, Dr. Young Yoo, MD, PhD, Department of Pediatrics, College of Medicine, Korea University, Seoul, South Korea, Dr. Wonsuck Yoon, Department of Life Science and Biotechnology, Seoul, South Korea, Prof. Kangmo Ahn, MD, PhD, Department of Pediatrics, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, South Korea and Dr. Jihyun Kim, MD, Samsung Medical Center, Seoul

Immune Mediated Skin Diseases

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 664 Safety and Efficacy Of Dupilumab Versus Placebo For Moderate-To-Severe Atopic Dermatitis In Patients Using Topical Corticosteroids (TCS): Greater Efficacy Observed With Concomitant Therapy Compared To TCS Alone**
Dr. Diamant Thaci, MD¹, Dr. Margitta Worm, MD², Dr. Haobo Ren, PhD³, Dr. Steven Weinstein, MD, PhD⁴, Dr. Neil Graham,

- 673 Mycotoxin Aggravates Atopic Dermatitis Via TSLP Induced Th2 Inflammation**
Ms. Seung-Hwa Lee¹, Ms. Ha-Jung Kim¹ and Prof. Soo-Jong Hong, MD, PhD^{2,3}, ¹Asan Institute for Life Sciences, University of Ulsan College of Medicine, ²Department of Pediatrics, Asan Medical Center, Childhood Asthma Atopy Center, South Korea, ³Research Center for Standardization of Allergic Disease, University of Ulsan College of Medicine, Seoul, Korea
- 674 Early Skin Care By “Experienced Mothers” May Prevent Sensitization In Infants With Atopic Dermatitis**
Dr. Atsushi Yamashita, Dr. Mizuho Nagao, MD, Ms. Kanae Furuya, Dr. Junya Hirayama, Dr. Keigo Kainuma, MD and Dr. Takao Fujisawa, MD, FAAAAI, Institute for Clinical Research, Mie National Hospital
- 675 Association Of Bathing Habits To Pruritus and Allergic Disease**
Dr. Kanwaljit K. Brar, MD¹, Dr. Rauno O. Joks, MD, FAAAAI² and Dr. Hamid Moallem, MD¹, ¹SUNY Downstate Medical Center, Brooklyn, NY, ²Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY
- 676 A Molecular Mechanism Underlying Atopic Dermatitis In Hyper-IgE Syndrome**
Masako Saito, PhD, Division of Molecular Medicine, Institute for Genome Research, The University of Tokushima, Tokushima, Japan, Dr. Hajime Karasuyama, MD, PhD, Tokyo Medical and Dentistry Graduate School, Tokyo, Japan and Dr. Yoshiyuki Minegishi, MD and PhD, Division of Molecular Medicine, Institute for Genome Research, The University of Tokushima
- 677 Racial Differences In The Relationship Of Total and Food-Specific IgE To Atopic Dermatitis In Childhood**
Dr. Gillian Bassirpour, MD¹, Dr. Edward M. Zoratti, MD, FAAAAI², Ganesa Wegienka, PhD³, Ms. Suzanne Havstad, M.A.³, Alexandra Sitarik, M.S.³, Dr. Haejin Kim, MD¹, Dr. Dennis Ownby, M.D. FAAAAI⁴ and Dr. Christine Cole Johnson, PhD MPH FAAAAI³, ¹Division of Allergy and Clinical Immunology, Henry Ford Hospital, Detroit, MI, ²Henry Ford Health System, Detroit, MI, ³Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI, ⁴Department of Pediatrics Georgia Regents University, Augusta, GA
- 678 Major Culprit Allergen Sensitization Patterns According To Age In Korean Atopic Dermatitis Patients**
Hye Jung Park¹, Jae-Hyun Lee^{1,2}, Kyung-Yong Jeong², Kyung-Hee Park^{1,2}, Yoon-Ju Kim² and Jung-Won Park^{1,2}, ¹Division of Allergy and Clinical Immunology, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, South Korea, ²Institute of Allergy, Yonsei University College of Medicine, Seoul, South Korea
- 679 Protein Microarray: IgE-Profilng Of Brazilians With Atopic Dermatitis**
Lucila Camargo Lopes de Oliveira¹, Roberta Faria Camilo-Araújo¹, Isabel Ruge Genov¹, Dr. Renata R. Cocco², Dr. Marcia Mallozi, MD³, Prof. Nelson A. Rosario, MD, PhD, FAAAAI⁴ and Prof. Dirceu Sole, MD, PhD⁵, ¹UNIFESP, ²Federal University of São Paulo, ³Federal University of São Paulo, Brazil, ⁴Federal University of Parana, Curitiba, Brazil, ⁵Federal University of Sao Paulo, Sao Paulo, Brazil
- 680 Relationship Between Dietary Food and Nutrient Intakes and Bone Mineral Density In Childhood Eczema**
Dr. Ting Fan Leung, MD FRCPC FAAAAI, Ms. Flora Yin-ying Kwok, MPhil, Dr. Yvonne Yi-fong Ho, MPhil, Dr. Susan Shuxin Wang, PhD, Ms. Patty Pui-pui Tse, MSc, Prof. Gary Wing-kin Wong, MD, FRCPC and Dr. Kam Lun Ellis Hon, MD, FAAP, Department of Paediatrics, The Chinese University of Hong Kong, Hong Kong
- 681 Change Of Caregiver’s Perception Regarding Atopic Dermatitis From 2006 To 2013**
Dr. Kyung Suk Lee, MD, PhD¹, Prof. Yeong-Ho Rha, MD, PhD¹ and Prof. Sun-Hee Choi, MD, PhD², ¹Kyung Hee University

Hospital, ²Gangdong Kyung Hee University Hospital, Seoul, South Korea

- 682 Excellent Agreement Between Dermatology and Pediatric Researchers In Severity Scoring Of Atopic Dermatitis (SCORAD) Index In Children**
Dr. Rodrigo Hoyos Bachilloglu, MD¹, Dr. Cristian Navarrete, MD², Dr. Cristian Vera, MD², Dr. Sergio Silva, MD², Dr. Lorena Cifuentes, MD¹, Mrs. Carolina Iturriaga, RN¹, Ms. Francisca Cristi, MSc¹ and Dr. Arturo Borzutzky, MD¹, ¹Division of Pediatrics, School of Medicine, Pontificia Universidad Catolica de Chile, Santiago, Chile, ²Department of Dermatology, School of Medicine, Pontificia Universidad Catolica de Chile, Santiago, Chile
- 683 A Case Of Recurrent Severe Poison Ivy Contact Dermatitis, Treated Successfully With Seasonal Cyclosporine**
Dr. Jaron T. Abbott, MD, Dr. Yuriy Zgherea, MD and Dr. Selina Gierer, DO, University of Kansas Medical Center
- 684 Allergic Contact Stomatitis From Orthodontic Adhesives**
Dr. Priscilla H. Wong, MD¹, Dr. Scott D. Dickson, DO² and Dr. Christopher A. Coop, MD¹, ¹Wilford Hall Ambulatory Surgical Center, Lackland AFB, TX, ²56th Medical Group, Luke AFB, AZ
- 685 Contact Dermatitis Due To Topical Amorolfine**
Dr. Ruperto Gonzalez Perez, Mrs. Paloma Poza-Guedes, Mrs. Inmaculada Sánchez Machín and Dr. Victor Matheu, MD, Hospital del Tórax-Ofra, Sta Cruz de Tenerife, Spain
- 686 Sweet’s Syndrome By A Show Of Hands**
Dr. Syeda Hamadani, Dr. Anita Ravi, Dr. Seth Politano, Dr. Eric Hsieh and Dr. Gina Rossetti, USC, Los Angeles, CA
- 687 Mango, Pulp Fiction?**
Dr. Alexander S. Kim, MD, University of California San Diego, La Jolla, CA and Dr. Sandra C. Christiansen, MD, FAAAAI, Southern CA Permanente Med Grp, San Diego, CA
- 688 Preoperative Patch Testing In Patients Undergoing Pectus Excavatum Repair**
Dr. Laura Helfner, MD¹, Dr. David Rosenthal, DO¹, Dr. Blanka M. Kaplan, MD, FAAAAI² and Dr. Punita Ponda, MD, FAAAAI³, ¹Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY, ²Department of Pediatrics, Division of Allergy & Immunology, Hofstra-North Shore-LIJ School of Medicine, Great Neck, NY, ³Allergy and Immunology, North Shore LIJ Health System, Great Neck, NY

Food Allergy II

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 689 Oral Allergy Syndrome - a Spectrum Of Presentations**
Dr. Parwinder Gill¹, Dr. Gordon L. Sussman, FAAAAI², Jiayi Bian¹ and Ms. Carly Barron³, ¹University of Toronto, Toronto, ON, Canada, ²University of Toronto, Faculty of Medicine, Toronto, ON, Canada, ³Gordon Sussman Clinical Research Inc., Toronto, ON, Canada
- 690 Allergy To Sheep Milk With Or Without Allergy To Cow Milk**
Dr. Fouseena Pazheri¹, Dr. Alton Lee Melton Jr., MD², Dr. Earl Poptic¹ and Dr. Belinda Willard¹, ¹Cleveland CLinic, Cleveland, OH, ²Cleveland Clinic, Cleveland, OH
- 691 Genome-Wide Study Of Interaction Between Season Of Birth and Peanut Allergy Identifies a Region On Chromosome 3 As a Genetic Risk Factor**
Corinne Keet, MD, MS¹, Xiumei Hong, PhD², Dr. Ingo Ruczinski, PhD², Dr. Terri H Beaty, PhD², Dr. Jacqueline Pongracic, MD, FAAAAI³ and Dr. Xiaobin Wang, MD, MPH ScD⁴, ¹Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD, ²Johns Hopkins University School of Public Health, Baltimore,

MONDAY

- MD, ³Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ⁴Center on Early Life Origins of Disease, Department of Population, Family and Reproductive Health, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD
- 692 Orofecal Infections and Risk Of Food Allergy In Children**
Dr. Gary Wong, MD¹, Dr. Jing Li, MD, MSc², Dr. Ting Fan Leung, MD FRCPCH FAAAAI³ and Prof. Nanshan Zhong^{2, 1}Chinese University of Hong Kong, Shatin, Hong Kong, ²The First Affiliated Hospital of Guangzhou Medical College, State Key Laboratory of Respiratory Disease, Guangzhou Institute of Respiratory Disease, Guangzhou, China, ³Department of Paediatrics, The Chinese University of Hong Kong, Hong Kong
- 693 Peanut, Milk, and Wheat Intake During Pregnancy Is Associated With Reduced Allergy and Asthma In Children**
Dr. Supinda Bunyavanich, MD, MPH¹, Ms. Sheryl Rifas-Shiman, MPH², Thomas A.E. Platts-Mills, MD, PhD, FAAAAI³, Lisa J. Workman, BA³, Dr. Joanne Sordillo, ScD⁴, Dr. Carlos Camargo Jr., MD, DrPH⁵, Dr. Matthew Gillman, MD, SM², Dr. Diane R. Gold, MD, MPH⁶ and Dr. Augusto A. Litonjua, MD, MPH⁴, ¹Division of Pediatric Allergy & Immunology, Department of Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ²Department of Population Medicine, Harvard Pilgrim Health Care Institute, Harvard Medical School, Boston, MA, ³Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, ⁴Channing Division of Network Medicine, Brigham & Women's Hospital, Harvard Medical School, Boston, MA, ⁵Department of Emergency Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, ⁶Channing Laboratory, Brigham and Women's Hospital, Boston, MA
- 694 The Prevalence Of Food Sensitization and Food Allergy In An Inner City Birth Cohort**
Robert A. Wood, MD, FAAAAI, Johns Hopkins University Medical Center, Baltimore, MD, Dr. Emily C. McGowan, MD, Johns Hopkins University School of Medicine, Baltimore, MD, Dr. Gordon R. Bloomberg, MD, FAAAAI, Campus Box 8116, St. Louis Children's Hospital, Saint Louis, MO, Dr. Peter J. Gergen, MD, MPH, AAIB\DAIT\NIH, Bethesda, MD, Dr. Cynthia Vissnes, PhD, Rho Federal Systems Division, Inc., Chapel Hill, NC, Katy Jaffee, MS, Rho, Inc., Chapel Hill, NC, Dr. George T. O'Connor, MD, Boston University School of Medicine, Boston, MA, Dr. Meyer Kattan, MD, NewYork-Presbyterian/Columbia, New York, NY and Dr. James E. Gern, MD, FAAAAI, University of Wisconsin School of Medicine and Public Health, Madison, WI
- 695 Food Allergy Prevalence In Parents Of Food-Allergic Children Based On Self-Report, Serologic Testing and Physician Diagnosis**
Melanie M. Makhija, MD^{1,2}, Dr. Rachel Glick Robison^{2,3}, Deanna Caruso, MS⁴, Miao Cai, MS⁵, Dr. Xiaobin Wang, MD, MPH ScD⁴ and Dr. Jacqueline Pongracic, MD, FAAAAI^{3,6}, ¹Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ²Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ⁴Johns Hopkins University School of Public Health, Baltimore, MD, ⁵Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ⁶Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine
- 696 The Effect Of Neighborhood Level Poverty and Urbanization On The Prevalence Of Food Allergy In The National Health Interview Survey (NHIS)**
Dr. Emily C. McGowan, MD¹, Dr. Meredith C. McCormack, MD², Dr. Roger Peng, PhD³, Dr. Elizabeth Matsui, MD² and Corinne Keet, MD, MS⁴, ¹Johns Hopkins University School of Medicine, Baltimore, MD, ²The Johns Hopkins University School of Medicine, Baltimore, MD, ³Johns Hopkins School of Public Health,
- Baltimore, MD, ⁴Johns Hopkins University Medical Center, Baltimore, MD
- 697 Prevalence Of IgE-Mediated Food Sensitisation and Food Allergy In Unselected 12-36 Month Old South African Children**
Dr. Maresa Botha, MBChB, FCPaed¹ and Prof. Michael E. Levin, MBChB, FCPaed, Dip Allergology, MMed(Paed), PhD, EAACI allergy exam (UEMS), Certificate Allergology, FAAAAI^{1,2}, ¹University of Cape Town, Cape Town, South Africa, ²Red Cross War Memorial Children's Hospital, Cape Town, South Africa
- 698 Evaluation Of Peanut Allergy In a Birth Cohort**
Dr. Hiba Bashir, MD¹, Mr. Christopher J. Tisler, MT¹, Dr. Elizabeth L. Anderson¹, Dr. Theresa Kang, PhD¹, Lisa Salazar, BS¹, Mr. Michael D. Evans, MS¹, Dr. Ronald E. Gangnon, PhD¹, Dr. Daniel J. Jackson, MD², Dr. Robert F. Lemanske Jr., MD, FAAAAI¹ and Dr. James E. Gern, MD, FAAAAI¹, ¹University of Wisconsin School of Medicine and Public Health, Madison, WI, ²Pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, WI
- 699 Prevalence Of Peanut Allergy: A Systematic Review**
Dr. Heather Mackenzie¹, Dr. Carina Venter, PhD RD², Dr. Sally Kilburn¹, Ms. Harriet R. Moonesinghe¹, Ms. Kellyn Lee¹ and Prof. Taraneh Dean^{1,3}, ¹University of Portsmouth, School of Health Sci, Portsmouth, United Kingdom, ²The David Hide Asthma and Allergy Research Center, Isle of Wight, United Kingdom, ³The David Hide Asthma and Allergy Centre, Newport
- 700 Prevalence Of Fish and Shellfish Allergy- A Systematic Review**
Ms. Harriet R. Moonesinghe¹, Dr. Sally Kilburn¹, Dr. Heather Mackenzie¹, Dr. Paul J. Turner, FRACP PhD², Dr. Carina Venter, PhD RD³, Ms. Kellyn Lee¹ and Prof. Taraneh Dean¹, ¹University of Portsmouth, School of Health Sci, Portsmouth, United Kingdom, ²Imperial College London, United Kingdom, ³The David Hide Asthma and Allergy Research Center, Isle of Wight, United Kingdom
- 701 Prevalence Of Food Allergy To Uncommon Foods Based On Oral Food Challenges**
Dr. Gita Ram¹, Christina Gustafson¹, Dr. Jonathan M. Spergel, MD, PhD, FAAAAI² and Dr. Antonella Cianferoni, MD, PhD³, ¹Children's Hospital of Philadelphia, Philadelphia, PA, ²The Children's Hospital of Philadelphia, Philadelphia, PA, ³3615 Civic Center Boulevard, The Children's Hospital of Philadelphia, Philadelphia, PA
- 702 Prevalence Of Food Allergy In Patients With Irritable Bowel Syndrome**
Erin L. Reigh, MD, MS¹, Dr. Javed Sheikh, MD, FAAAAI² and Anna Kovalszki, MD¹, ¹Beth Israel Deaconess Medical Center, Boston, MA, ²Kaiser Permanente Los Angeles Medical Center, Los Angeles, CA
- 703 Clinical Characteristics Of Seafood Allergy In Canadian Children**
Dr. Victoria Cook, Department of Pediatrics, University of British Columbia, BC Children's Hospital, Vancouver, BC, Canada, Dr. Edmond S. Chan, MD, FAAAAI, Department of Pediatrics, Faculty of Medicine, University of British Columbia, Dr. Ann Elaine Clarke, MD, MSc, Division of Allergy and Clinical Immunology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada; Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, Mr. Greg Shand, Department of Medicine, Division of Clinical Epidemiology, McGill University Health Center, Montreal, QC, Canada and Dr. Moshe Ben-Shoshan, MD, MSc, Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada
- 704 Changes In Total IgE Levels To Predic Food Challenge Test Outcomes**
Dr. Kenta Horimukai, Jikei University Katsushika Medical Center, Tokyo, Japan, Dr. Masami Narita, MD, PhD, National Center for Child Health and Development, Tokyo, Japan, Dr. Ichiro

- Nomura, MD, PhD, National Center for Child Health and Development, Setagayaku, Japan, Dr. Kenji Matsumoto, MD, PhD, Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan and Dr. Yukihiro Ohya, MD, PhD, Division of Allergy, National Center for Child Health and Development, Tokyo, Japan
- 705 Situational and Environmental Factors Associated With a Child's Willingness To Use An Epinephrine Auto-Injector**
Amanda Tantleff, Byram Hills High School and Dr. Anna H. Nowak-Wegrzyn, MD, FAACAAI, Icahn School of Medicine at Mount Sinai, New York, NY
- 706 Possession Of Epinephrine Auto-Injectors (EAI) In a Vulnerable Canadian Population With Food Allergies**
Dr. Sabrina Cherkaoui, M.D¹, Ms. Lianne Soller, MSc², Dr. Moshe Ben-Shoshan, MD, MSc³, Daniel Harrington, MA, PhD⁴, Dr. Sebastien La Vieille, MD⁵, Dr. Joseph Fragapane, MD⁶, Dr. Lawrence Joseph, PhD⁷, Mr. Yvan St-Pierre, MSc⁸, Prof. Susan Elliott, PhD⁹ and Dr. Ann Elaine Clarke, MD, MSc^{7,10}, ¹Division of Internal Medicine, Department of Medicine, University of Montreal, Montreal, QC, Canada, ²Division of Clinical Epidemiology, Department of Medicine, McGill University Health Center, Montreal, QC, Canada, ³Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, ⁴McMaster University - School of Geography, Hamilton, ON, Canada, ⁵Food Directorate, Health Canada, Ottawa, ON, Canada, ⁶McGill University, Dorval, QC, Canada, ⁷Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁸Division of Clinical Epidemiology, Department of Medicine, McGill University Health Center, Montreal, QC, Canada, ⁹Applied Health Sciences, University of Waterloo, ON, Canada, ¹⁰Division of Allergy and Clinical Immunology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada
- 707 Food Allergy In Daycare Centers: Prevalence, Management, and Knowledge Of Directors**
Dr. Lisanne Newton, M.D. and Dr. Brian Schroer, MD, Cleveland Clinic, Cleveland, OH
- 708 Assessment Of Food Insecurity and Health Literacy In a Tertiary Care Pediatric Allergy Population**
Dr. Meredith A. Dille, MD^{1,2}, Ms. G. Lynn Christie, MS RD², Ms. Mary Price², Ms. Connelly Weeks², Mallikarjuna Rettiganti, PhD^{1,2}, Maria Melguizo Castro^{1,2}, Dr. Amy M. Scurlock, MD^{3,4}, Dr. Tamara T. Perry, MD^{1,2}, Dr. Robbie D. Pesek^{1,2}, Dr. Matthew C. Bell, MD^{1,2}, Joshua L. Kennedy, MD⁵, Ms. Erin O'Brien^{1,2}, Ms. Sklar McGrath², Mr. Jared Hogan², Megan Patterson¹, Julia Aronson¹, Dr. Patrick Casey, MD^{1,2} and Stacie M. Jones, MD^{3,5}, ¹University of Arkansas for Medical Sciences, Little Rock, AR, ²Arkansas Children's Hospital, Little Rock, AR, ³University of Arkansas for Medical Sciences and Arkansas Children's Hospital, Little Rock, AR, ⁴University of Arkansas for Medical Sciences/Arkansas Children's Hospital, Little Rock, AR, ⁵Arkansas Children's Hospital Research Institute, Little Rock, AR
- 709 Environmental and Sociodemographic Factors Associated With Food Allergy: A Nested Case-Control Study**
Dr. Moshe Ben-Shoshan, MD, MSc^{1,2}, Ms. Lianne Soller, MSc³, Daniel Harrington, MA, PhD⁴, Ms. Megan Knoll, MSc⁵, Dr. Sebastien La Vieille, MD⁶, Dr. Joseph Fragapane, MD⁷, Dr. Lawrence Joseph, PhD^{8,9}, Mr. Yvan St. Pierre, MSc¹⁰, Dr. Kathi Wilson¹¹, Prof. Susan Elliott, PhD¹² and Dr. Ann Elaine Clarke, MD, MSc^{8,13}, ¹Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, ²Montreal Children's Hospital, Montreal, Canada, ³Division of Clinical Epidemiology, Department of Medicine, McGill University Health Center, Montreal, QC, Canada, ⁴McMaster University - School of Geography, Hamilton, ON, Canada, ⁵Division of Clinical Epidemiology, Department of Medicine, McGill University Health Center, Canada, ⁶Food Directorate, Health Canada, Ottawa, ON, Canada, ⁷McGill University, Dorval, QC, Canada, ⁸Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ⁹McGill University, Montreal, QC, Canada, ¹⁰Division of Clinical Epidemiology, Department of Medicine, McGill University Health Center, Montreal, QC, Canada, ¹¹Department of Geography, University of Toronto, Toronto, ON, Canada, ¹²Applied Health Sciences, University of Waterloo, ON, Canada, ¹³McGill University Health Centre, Montreal, Canada
- 710 Differences In Empowerment and Quality Of Life Among Mothers and Fathers Of Children With Food Allergy**
Mr. Christopher Warren, BA¹, Dr. Ruchi Gupta, MD, MPH², Mr. Namit Lal³, Dr. Min-Woong Sohn, PhD⁴, Dr. Craig Garfield, MD⁴, Dr. Jacqueline Pongracic, MD, FAACAAI² and Dr. Xiaobin Wang, MD, MPH ScD⁵, ¹University of Southern California, Los Angeles, CA, ²Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ³University of Michigan, Ann Arbor, MI, ⁴Northwestern University, Chicago, IL, ⁵Johns Hopkins, Chicago, IL
- 711 Prevalence Of Misconceptions Regarding Egg Allergy and Measles Mumps and Rubella Vaccine Contraindications**
Dr. Vylma Velazquez, MD, Dr. Carmen Rivera and Dr. Monique Adorno, Hospital Episcopal San Lucas, Ponce, PR
- 712 Prenatal and Postnatal Factors Associated With IgE-Mediated Wheat Allergy In Infants: A Study In Asian Population**
Dr. Suparat Sirivimonpan, MD, Chulalongkorn University, Bangkok, Thailand
- 713 Maternal Healthy Diet and Development Of Allergic Disease**
Dr. Carina Venter, PhD RD¹, Ms. Harriet R. Moonesinghe², Prof. Hasan Arshad^{3,4}, Prof. Taraneh Dean^{2,5}, Mrs. Jane Grundy³, Mrs. Gill Glasbey³ and Dr. Veeresh Patil^{3,4}, ¹The David Hide Asthma and Allergy Research Center, Isle of Wight, United Kingdom, ²University of Portsmouth, School of Health Sci, Portsmouth, United Kingdom, ³The David Hide Asthma and Allergy Centre, Newport, United Kingdom, ⁴University of Southampton, Southampton, United Kingdom, ⁵The David Hide Asthma and Allergy Centre, Newport
- 714 Effect Of Annual Income On Parental/Family Burden Of Food Allergy**
Dr. David A. Petty, DO, University of Tennessee Allergy fellowship program, Memphis, TN, Jay A. Lieberman, MD, University of Tennessee, Memphis, TN and Nhu Quynh Tran, PhD, University of Tennessee Department of Preventative Medicine
- 715 Food Allergy and Anaphylaxis Educational Needs Assessment, Training Curriculum and Assessment Of Knowledge Of Urban Child Care Center Workers**
Dr. Bruce J. Lanser, MD¹, Dr. Ronina A. Covar, MD¹, David Mark Fleischer, MD, FAACAAI¹ and Dr. J. Andrew Bird, MD, FAACAAI², ¹National Jewish Health, Denver, CO, ²UT Southwestern Medical Center, Dallas, TX
- 716 Food Allergy Survey Among Food Service Workers**
Bruce M. Prenner, MD¹, John Hollingsworth, PA², Ron Oliver³ and Linnet Brew, LVN¹, ¹Allergy Partners of San Diego, San Diego, CA, ²Scripps Clinic, ³The Marine Room, La Jolla, CA
- 717 Bullying and Food Allergy – Longitudinal Follow-Up**
Scott H. Sicherer, MD, FAACAAI¹, Melissa Rubes², Chloe Mullarkey², Mordechai Ambrose³, Noga Ravid², Kelley Chuang³, Rachel Annunziato² and Eyal Shemesh³, ¹Mount Sinai School of Medicine, New York, NY, ²Fordham University, NY, ³Icahn School of Medicine at Mount Sinai, NY
- 718 Prevalence and Characteristics of Consumer-Reported Food Allergic and Anaphylactic Events in CAERS, 2007-2011**
Ms. Taiye M Oladipo, MPH and Dr. Stefano Luccioli, MD, FAACAAI, Center for Food Safety and Applied Nutrition, Food and Drug Administration, College Park, MD
- 719 Impact Of School Peanut-Free Guidelines On Epinephrine Administration**
Dr. Lisa M. Bartnikas, MD^{1,2}, Dr. Michelle F. Huffaker, MD^{1,3}, Dr. William J. Sheehan, MD^{1,2}, Dr. Watcharoot Kanchongkittiphon,

- MD, PhD^{1,2}, Mr. Carter Petty, MA², Ms. Anne Sheetz, RN, BSN, MPH⁴, Dr. Robert Leibowitz, PhD⁴, Dr. Michael C. Young, MD, FAAAAI^{1,2} and Dr. Wanda Phipatanakul, MD, MS, FAAAAI^{1,2}, ¹Harvard Medical School, Boston, MA, ²Boston Children's Hospital, Boston, MA, ³Brigham and Women's Hospital, Boston, MA, ⁴Massachusetts Department of Public Health, Boston, MA
- 720 Comparison Of Germfree and Conventional Mice For Evaluating The Potential Allergenicity Of Dietary Proteins Using Model Allergenic and Non-Allergenic Proteins**
Nathan L. Marsteller^{1,2}, Mr. Kwame Andoh-Kumi¹, Daniel A. Peterson³, Richard E. Goodman¹ and Joe L. Baumert¹, ¹Food Allergy Research and Resource Program, University of Nebraska-Lincoln, Lincoln, NE, ²School of Biological Sciences, University of Nebraska-Lincoln, ³Johns Hopkins School of Medicine, Baltimore, MD
- 721 The Role Of Lipopolysaccharide In Skewing The Sensitization Potential Of Purified β -Lactoglobulin In A Mouse Model**
Mr. Kwame Andoh-Kumi¹, Richard E. Goodman¹, Daniel A. Peterson², Joe L. Baumert¹ and Nathan L. Marsteller^{1,3}, ¹Food Allergy Research and Resource Program, University of Nebraska-Lincoln, Lincoln, NE, ²Johns Hopkins School of Medicine, Baltimore, MD, ³School of Biological Sciences, University of Nebraska-Lincoln
- 722 Oral Co-Administration Of Peanut and Cholera Toxin Subunit B During Pregnancy and Lactation Blocks Anaphylaxis and Induces Epigenetic Modifications In Peanut Allergic Murine Mothers**
Dr. Ying Song, MD¹, Dr. ChangDa Liu¹, Dr. Kamal D. Srivastava, PhD¹, Dr. Jia Chen, ScD^{1,2}, Dr. Rachel L. Miller, MD, FAAAAI³ and Dr. Xiu-Min Li, MD¹, ¹Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ²Prevention, Icahn School of Medicine at Mount Sinai, NY, ³Division of Pulmonary, Allergy and Critical Care Medicine, Columbia University, New York, NY
- 723 Worsened Reaction Severity In Oral Food Challenges Confirms Need For In-Office Procedure**
Dr. Annie Esquivel, Dr. Girish V. Vitalpur, MD, FAAAAI, Dr. Kirsten Kloepfer, MD and Dr. Frederick E. Leickly, MD, MPH FAAAAI, Riley Hospital for Children at Indiana University Health, Indianapolis, IN
- 724 Oral Food Challenge Outcome Among Children With a Negative Skin Prick Test Result**
Dr. Wipa Jessadapakorn, MD, Division of Allergy and Immunology, Department of Pediatrics, Faculty of Medicine, Prince of Songkla University, Hat-Yai, Songkhla, Thailand, Dr. Prapasri Kulalert, MD, Prince of Songkla University, Songkla, Thailand, Dr. Araya Yuenyongviwat, MD, Prince of Songkla University, Songkhla, Thailand and Dr. Pasuree Sangsupawanich, MD, Prince Songkhanagarind hospital, Hadyai, Thailand
- 725 Abbreviated Oral Food Challenge As a Safe and Effective Alternative For Diagnosing Food Allergy In a Pediatric Clinic**
April L. Goolsby, BS¹, Heather Minto, MD^{1,2}, Amy Perkins, MS^{1,2} and Kelly M. Maples, MD^{1,2}, ¹Eastern Virginia Medical School, Norfolk, VA, ²Children's Hospital of The King's Daughters, Norfolk, VA
- 726 Safety Of Ungraded Oral Food Challenges In Ruling Out Peanut Allergy In Children**
Dr. Darlene Kassab Mansoor, MD, MS¹, Amit Singal, BS², Shweta Bansil, BS² and Dr. Hemant P. Sharma, MD MHS FAAAAI¹, ¹Children's National Medical Center, ²George Washington University School of Medicine
- 727 Safety Of Oral Food Challenges To Extensively Heated Egg In Children**
Dr. Cindy Nguyen, MD¹, Shweta Bansil, BS², Amit Singal, BS² and Dr. Hemant P. Sharma, MD MHS FAAAAI³, ¹Children's National Medical Center, Division of Allergy and Immunology, Washington, DC, ²George Washington University School of Medicine, ³Children's National Medical Center, Division of Allergy and Immunology, DC
- 728 Banana Allergy In Children Evaluated Using Double Blind Placebo Controlled Food Challenge**
Aysen Bingol, TURPEDAS, Turkey, Dilara Kocacik Uygun, AKDENIZ UNIVERSITY MEDICAL FACULTY DEPT OF PEDIATRIC ALLERGY IMMUNOLOGY, Dr. Serkan Filiz, AKDENIZ UNIVERSITY MEDICAL FACULTY DEPT OF PEDIATRIC ALLERGY IMMUNOLOGY, ANTALYA, Turkey and Olcay Yegin, AKDENIZ UNIVERSITY MEDICAL FACULTY DEPT OF PEDIATRIC ALLERGY IMMUNOLOGY, Antalya, Turkey
- 729 Risk Of Oral Food Challenges In Children - a Prospective Multicenter Study -**
Dr. Toshiko Itazawa, MD, PhD¹, Dr. Motokazu Nakabayashi, MD, PhD¹, Dr. Yasunori Ito, MD, PhD¹, Dr. Yoshie Okabe, MD, PhD¹, Dr. Yoko S Adachi, MD, PhD¹, Dr. Yuichi Adachi, MD, PhD¹, Dr. Komei Ito, MD, PhD² and Motohiro Ebisawa, MD, PhD, FAAAAI³, ¹Department of Pediatrics, University of Toyama, Toyama, Japan, ²Aichi Children's Health and Medical Center, Obu, Aichi, Japan, ³Clinical Research Center for Allergy and Rheumatology, Sagami-hara National Hospital, Kanagawa, Japan
- 730 A Double-Blind Randomized Controlled Trial Of A Thickened Amino-Acid-Based Formula In Children Allergic To Cow's Milk and To Protein Hydrolyzates**
Prof. Nicolas Kalach, MD, Ph D¹, Dr. Elena Bradatan², Prof. Alain Lachaux³, Dr. Francois Payot³, Prof. Frederic de BLAY⁴, Dr. Lydie Guénard-Bilbault^{5,6}, Dr. Riad Hatahet⁷, Dr. Sandra Mullier⁸ and Prof. Christophe Dupont, MD, PhD⁹, ¹Hôpital Saint Vincent de Paul, Groupement des Hospitaux de l'Institut Catholique de Lille (GH-ICL), Lille, France, ²Department of Pediatrics, Regional Hospital, Namur, Belgium, ³Gastroenterology, Hepatology and Nutrition Unit, University and Pediatric Hospital of Lyon, France, ⁴CHRU Strasbourg, France, ⁵Regional University Hospital, Strasbourg, Strasbourg, France, ⁶Allergologist, Illkirch-Graffenstaden, France, ⁷Pediatrician Allergologist, Forbach, France, ⁸Queen Fabiola Children's, University Hospital, Brussels, Brussels, Belgium, ⁹Hopital Necker Enfants Malades, Paris, France
- 731 Impact Of Formula Containing Docosahexaenoic Acid, Prebiotics, and Beta-Glucan On Allergic Manifestations In Young Children**
Dr. Deolinda Scalabrin, MD, PhD¹, Suzanne Stolz¹, Weihong Zhuang¹, Mariana Pontes², Angela de Mattos², Indhira Almeida², Carolina Godoy², Sara Gatto², Vivian Leal², Gabriela Cabral², Tereza Ribeiro² and Hugo Ribeiro², ¹Mead Johnson Nutrition, Evansville, IN, ²Federal University of Bahia, Brazil
- 732 Parents' Perception Of The Likelihood Of Future Life-Threatening Events In Their Children With Food Allergies**
Dr. Peter Arkwright, MD, PhD, FAAAAI¹, Ms. Jennifer Ogg¹, Dr. Naomi Davis² and Dr. Ming Wan¹, ¹University of Manchester, Manchester, United Kingdom, ²Royal Manchester Children's Hospital, United Kingdom
- 733 Can Training Improve Allergists' Ability To Accurately Identify Anxiety In Children With Food Allergy?**
Melissa Rubes¹, Anna Podolsky², Nicole Caso¹, Rachel Annunziato¹, Dr. Amanda L. Cox, MD², Dr. Jennifer S. Kim, MD, FAAAAI², Dr. Anna H. Nowak-Wegrzyn, MD, FAAAAI², Dr. Julie Wang, MD, FAAAAI², Scott H. Sicherer, MD, FAAAAI³ and Eyal Shemesh², ¹Fordham University, NY, ²Icahn School of Medicine at Mount Sinai, NY, ³Mount Sinai School of Medicine, New York, NY
- 734 Nutritional Status Impairment In Patients With Food Allergies**
Dr. Gesmar Segundo, Mrs. Larissa Costa and Mrs. Erica Rezende, Universidade Federal de Uberlandia, Uberlandia, Brazil
- 735 Everyday Life Impact On Food Allergy Spanish Children. Caregivers Perception**
Dr. Elena Alonso-Lebrero, PhD, Hospital Materno Infantil Gregorio Marañón Pediatric Allergy Section, Madrid, Spain, Mr. Julio Monleon, MS, Santa Barbara, Madrid, Spain and Alberto Alvarez-Perea, MD, Hospital Materno Infantil Gregorio Marañón, Pediatric Allergy Department, Madrid, Spain

- 736 The First 4 Central American Cases Of Delayed Meat Allergy With Galactose-Alpha-1,3-Galactose Positivity Clustered Among Field Biologists In Panama**
Dr. Paige G. Wickner, MD, Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Chesnut Hill, MA and Scott P. Commins, MD, PhD, University of Virginia Health System, Charlottesville, VA
- 737 Incidence Of New Onset Food Allergy In Renal, Cardiac, and Hepatic Transplant Recipients and Correlation With Immunosuppression Protocol**
François Graham, MD, MSc¹, Frédéric Racicot², Luminita Iuliana Jamali, MD², Marie-Jeanne Lebel, MD², Hugo Chapdelaine, MD², Fernando Alvarez, MD², Véronique Phan Cong, MD², Marie-Josée Raboisson, MD², Louis P. Paradis, MD FRCPC FAAAAI² and Anne M. Des Roches, MD FRCPC FAAAAI², ¹CHUM, Hôpital Notre-Dame, Montreal, QC, Canada, ²Centre Hospitalier Universitaire Sainte-Justine, Montreal, QC, Canada
- 738 Late and Secondary Onset Food Allergy**
Dr. Liat Nachshon, MD¹, Dr. Michael Goldberg, MD, PhD¹, Dr. Arnon Elizur, MD^{1,2}, Dr. Michael B. Levy, MD, FAAAAI¹ and Prof. Yitzhak Katz, MD, FAAAAI^{1,2}, ¹Assaf Harofeh, Zerifin, Israel, ²Tel Aviv University, Tel Aviv, Israel
- 739 Food Allergy Testing Practices Of Primary Care Pediatricians In Illinois**
Hector Rodriguez, MD^{1,2}, Ms. Claudia Lau¹, Dr. Ruchi Gupta, MD, MPH^{1,2} and Melanie M. Makhija, MD^{1,3}, ¹Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, ²Northwestern University Feinberg School of Medicine, Chicago, IL, ³Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL
- 740 Understanding The Role Of Online Resources For Childhood Food Allergies**
David Goese, University of Chicago Pritzker School of Medicine, Chicago, IL and Ves Dimov, MD, University of Chicago Medicine, Chicago, IL; Section of Allergy, Asthma and Immunology, Department of Pediatrics, Department of Medicine, University of Chicago, Chicago, IL
- 741 Clinical Features, Diagnosis, Management and Natural History Of Food Protein-Induced Enterocolitis Syndrome In a National Cohort**
Dr. Todd David Green, MD, FAAAAI¹, Dr. Matthew J. Greenhawt, MD, MBA, MSc², Dr. Tammy S. Jacobs, MD, MA¹ and Fallon Schultz³, ¹Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA, ²Department of Internal Medicine, The University of Michigan Medical School, Division of Allergy and Clinical Immunology, Ann Arbor, MI, ³International Association for Food Protein Enterocolitis (IAFFPE)
- 743 Variability In Measurement Of Allergen Skin Testing Results Among Allergy-Immunology Specialists**
Dr. Tiffany Jean¹, Dr. Kenny Y. Kwong¹ and Dr. Nasser Redjal, MD, FAAAAI², ¹Harbor-UCLA Medical Center, ²Harbor-UCLA Medical Center, Torrance, CA
- 744 Serologic Specific IgE (sIgE) Testing In a Closed Healthcare System**
Dr. Daniel A. Steigelman, MD and Dr. Tonya S. Rans, MD, Wilford Hall Ambulatory Surgical Center, Joint Base San Antonio - Lackland AFB, TX
- 745 Outcomes After Implementation Of An Inpatient Antibiotic Prescribing Pathway For Patients With Penicillin Or Cephalosporin Allergy**
Dr. Kimberly Blumenthal, MD, Allergy and Immunology, Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, Dr. Erica Shenoy, MD, PhD, Division of Infectious Disease and Infection Control Unit, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, Ms. Christy Varughese, Pharm.D., Department of Pharmacy, Infection Control Unit, Massachusetts General Hospital, Boston, MA, Dr. David Hooper, MD, PhD, Division of Infectious Disease and Infection Control Unit, Department of Medicine, Massachusetts General Hospital, Boston, MA and Dr. Aleena Banerji, MD, Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA
- 746 The Effect Of Panel Ordering On Utilization Of In Vitro Specific IgE Testing By Primary Care Physicians In a Large HMO**
Dr. Bruce J. Goldberg, MD, PhD, FAAAAI, Kaiser Permanente, Los Angeles, CA and Dr. John S. Kaptein, PhD, Southern California Permanente Medical Group, Los Angeles, CA
- 747 Premature Discontinuation Of Allergy Immunotherapy-Inadequate Reimbursement By Health Insurers A Major Factor**
Dr. Surender K. Vaswani, MD, FAAAAI, Allergy & Asthma Clinical Center, Columbia, MD, Ravi Vaswani, New York University School of Medicine, Dr. Njideka Udochi, Howard County General Hospital/Johns Hopkins, Rajiv Karani, University of Cincinnati School of Medicine and Dr. Leena Parikh, St. Agnes Hospital
- 748 Adherence To Labeling Guidelines Of Inhalant Allergen Immunotherapy Practice Parameter 2011 At The University Of Michigan Health Service**
Dr. Marilyn Karam, MD¹, Kiela Samuels², Cynthia Hernandez, RN², Dr. Christine L. Holland, MD¹ and Dr. Matthew J. Greenhawt, MD, MBA, MSc³, ¹The University of Michigan, Division of Allergy and Clinical Immunology, Ann Arbor, MI, ²University of Michigan Health System, Ann Arbor, MI, ³Department of Internal Medicine, The University of Michigan Medical School, Division of Allergy and Clinical Immunology, Ann Arbor, MI
- 749 The Prevalence Of Allergic Rhinitis Among High- School Male Military Recruits In Jordan**
Dr. Mansour Fuad Karadsheh, MD and Dr. Suleiman Souidi, Royal Medical Services, Madaba, Jordan
- 750 Allergen Sensitivity Patterns Among Atopic Individuals At A Tertiary Allergy Center**
Dr. Lukena U. Karkhanis, MD, Dr. Sarena Sawlani, MD and Dr. Andrew Kau, MD, PhD, Washington University School of Medicine, St. Louis, MO
- 751 Assessing Quality Of Life In Patients With AERD After Aspirin Desensitization**
Dr. Melissa Iammatteo, MD¹, Dr. Autumn Chandler Guyer, MD², Dr. Rebecca Saff, MD, PhD³, Dr. Eric Holbrook, MD⁴, Dr. Stacey Gray, MD⁴, Dr. Aidan Long, MD, FAAAAI⁵ and Dr. Aleena Banerji, MD⁵, ¹Massachusetts General Hospital, Boston, MA, ²Massachusetts General Hospital, Harvard Medical School, Boston, MA, ³Allergy and Clinical Immunology, Massachusetts General Hospital, Boston, MA, ⁴Massachusetts Eye and Ear Infirmary, Boston,

Health Care Delivery

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 742 Health Literacy Is Associated With Medication Adherence In Adolescents and Young Adults With HIV-1 Infection**
Dr. Amrita Khokhar, MD, Department of Medicine, Hofstra North Shore-LIJ School of Medicine, Dr. Robert Sporter, MD, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Kathryn Kilkenny, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine and Dr. David Rosenthal, DO, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY

MONDAY

MA, ⁵Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA

752 Published Findings On Dust Allergens May Be Inaccurate Due To Improper Handling Of Values Below The Lower Limit Of Detection

Henry Lynn, Mr. Agustin Calatroni, MA MS, Katy Jaffee, MS, Rebecca A. Zabel and Samuel J. Arbes Jr., Rho, Inc., Chapel Hill, NC

753 Patient-Reported Factors That Influence Diphenhydramine Use In Children and Adults In An Allergy Specialty Practice

Dr. Prakash Navaratnam¹, Dr. Robert Anolik, MD, FAAAAI², Dr. Howard Friedman, MS, PhD¹ and Dr. Eduardo Urdaneta, MD³, ¹DataMed Solutions LLC, New York, NY, ²Allergy and Asthma Specialists, PC, Blue Bell, PA, ³McNeil Consumer Healthcare, Fort Washington, PA

Allergen Extracts and Immunotherapy

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

754 The Efficacy and Safety Of The Short Ragweed Sublingual Immunotherapy Tablet MK-3641 Is Similar In Asthmatic and Nonasthmatic Subjects Treated For Allergic Rhinitis Without Conjunctivitis (AR/C)

Dr. Jennifer Maloney, MD¹, Dr. David I. Bernstein, MD, FAAAAI², Dr. Jacques Hébert, MD³, Dr. Martha White, MD⁴, Dr. Robert Fisher, MD⁵, Dr. Thomas B. Casale, MD, FAAAAI⁶, Dr. Amarjot Kaur, PhD¹ and Dr. Hendrik Nolte, MD, PhD¹, ¹Merck, Whitehouse Station, NJ, ²Bernstein Allergy Group, Cincinnati, OH, ³Centre de Recherche Appliquée en Allergie de Québec, Québec City, QC, Canada, ⁴Institute for Asthma & Allergy, Wheaton, MD, ⁵Allergy Research & Care, Milwaukee, WI, ⁶University Of South Florida Morsani College Of Medicine, Tampa, FL

755 Compliance With Guidelines In The Use Of Allergen Immunotherapy

Dr. Pudupakkam K Vedanthan, MD¹, Ms. Christina Cutter, MSc, BA², Ms. Phuong Dinh, BS² and Mr. Peter DeWitt, MS², ¹University of Colorado, Lakewood, CO, ²University of Colorado - Anschutz Medical Campus, Aurora, CO

756 Efficacy Of Short Ragweed Sublingual Immunotherapy Tablet (SLIT-T) In Mono-Sensitized and Poly-Sensitized Subjects

Dr. David I. Bernstein, MD, FAAAAI¹, Kevin R. Murphy, MD², Dr. Hendrik Nolte, MD, PhD³, Dr. Amarjot Kaur, PhD³ and Dr. Jennifer Maloney, MD³, ¹Bernstein Allergy Group, Cincinnati, OH, ²Boys Town National Research Hospital, Boys Town, NE, ³Merck, Whitehouse Station, NJ

757 Trends In Prescribing Of Specific Immunotherapy For Grass Pollen Allergy In Germany: 2005-2012

Prof. Ulrich Wahn, Prof Dr Med¹, Amanda McDonnell², Catrina Richards², Dr. Felicia C. Allen-Ramey, PhD³, Mr. Jakob N. Andreasen⁴, Charles Hawes² and Dirk Demuth², ¹Charite, Berlin, Germany, ²IMSHealth, United Kingdom, ³Merck & Co, Inc, West Point, PA, ⁴ALK, Denmark

758 Efficacy Of 300IR 5-Grass Pollen Sublingual Tablets In The Treatment Of Rhinitis Symptoms In Patients With Grass Pollen-Induced Allergic Rhinoconjunctivitis

Prof. Claus Bachert, MD, PhD¹, Prof. Alain Didier, MD, PhD², Ms. Laurence Ambroisine, MSc³, Dr. Kathy Abiteboul, PharmD³ and Dr. Robert K. Zeldin, MD³, ¹Universitair Ziekenhuis Gent, Ghent, Belgium, ²Larrey Hospital, CHU, Toulouse, France, ³Stallergenes S.A., Antony, France

759 Allergen Immunotherapy Safety While Using "High Risk" Medication: A Survey Of AAAAI Members

Dr. Matthew A. Rank, MD, FAAAAI, Mayo Clinic, Scottsdale,

AZ, Dr. David W. Hauswirth, MD, FAAAAI, Nationwide Children's Hospital, Columbus, OH, Dr. Christopher W. Calabria, MD, Dilley Allergy and Asthma Specialists, San Antonio, TX, Dr. Lawrence D. Sher, MD, FAAAAI, Peninsula Research Associates, Rolling Hills Estates, CA and Dr. Désirée E.S. Larenas Linnemann, MD, FAAAAI, Hospital Medica Sur, Mexico D.F., Mexico

760 Venom Immunotherapy Use With Contraindicated Medication: A Survey Of AAAAI Member's Experience

Dr. David W. Hauswirth, MD, FAAAAI, Buckeye Allergy, Columbus, OH; Nationwide Children's Hospital, Columbus, OH, Dr. Matthew A. Rank, MD, FAAAAI, Mayo Clinic, Scottsdale, AZ, Dr. Désirée E.S. Larenas Linnemann, MD, FAAAAI, Hospital Medica Sur, Mexico D.F., Mexico, Dr. Lawrence D. Sher, MD, FAAAAI, Peninsula Research Associates, Rolling Hills Estates, CA and Dr. Christopher W. Calabria, MD, Dilley Allergy and Asthma Specialists, San Antonio, TX

761 Simultaneous Measurement Of Multiple Proteins In Blattella Germanica Extract Using Antibody-Based Multiplex Assay

Dr. Taruna Khurana, PhD¹, Ms. Maggie Collison¹ and Dr. Jay E. Slater, MD², ¹CBER FDA, ²FDA/CBER/OVRR/DBPAP, Rockville, MD

762 Characterization and Protein Composition Of Food Allergen Extracts

Dr. Greg A. Plunkett, PhD and Dr. Tricia Moore, PhD, ALK-Abelló, Inc, Round Rock, TX

763 Stability and Compatibility Of Cat, Dog, Dust Mite, and Cockroach Extracts In Indoor Allergen Mixtures and Dilutions For Immunotherapy

Dr. Silvia Huebner, MD¹, Dr. Satyen Manilal Gada, MD², Dawn Hall, BS³ and Dr. Thomas Grier, MD³, ¹Evans Army Community Hospital, Fort Carson, CO, ²Walter Reed National Military Medical Center, Bethesda, MD, ³Greer Labs

764 Interest Of Mass Spectrometry-Based Quantification Of Relevant Allergens To Improve The Standardization Of Allergen Extracts

Thierry Batard, PhD¹, Emmanuel Nony², Christel Dayang, PhD², Julien Bouley, PhD², Maxime Le Mignon, PhD², Christelle Berrouet², Aurélie Lautrette, PhD², Marie Naveau, PhD², Henri Chabre, PhD² and Dr. Philippe Moingeon, PhD³, ¹Stallergenes, Antony, France, ²Stallergenes, France, ³Stallergenes SA, Antony, France

Outcome Measures and Challenge Testing with Immunotherapy

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

765 Baseline Predictors Of Symptom Severity Following Exposure To House Dust Mite In An Antigen Challenge Chamber (ACC)

Daniel Ramirez, MD¹, Robert L. Jacobs, MD¹, Cynthia Rather, CCRC¹, Andrew Carrillo, BS^{2,3}, Weijing He, MD^{2,3}, Nathan Harper, BS^{2,3}, Charles Andrews, MD¹ and Sunil K. Ahuja, MD^{2,3}, ¹Biogenics Research Chamber, San Antonio, TX, ²Department of Medicine, University of Texas Health Science Center, San Antonio, TX, ³Veterans Administration Center for Personalized Medicine, South Texas Veterans Health Care System, San Antonio, TX

766 Validation Of Biogenics Research Chamber For Elicitation Of Symptoms To Dust Mite Antigen (Der p1)

Robert L. Jacobs, MD¹, Cynthia Rather, CCRC¹, Fabio Jimenez, BS^{2,3}, Hernan Martinez, MD^{2,3}, Weijing He, MD^{2,3}, Daniel Ramirez, MD¹, Charles Andrews, MD¹ and Sunil K. Ahuja, MD^{2,3}, ¹Biogenics Research Chamber, San Antonio, TX, ²Department of Medicine, University of Texas Health Science Center, San Antonio,

- TX, ³Veterans Administration Center for Personalized Medicine, South Texas Veterans Health Care System, San Antonio, TX
- 767 Magnitude Of Changes In Patient Symptom and Medication Scores In Grass Allergy Immunotherapy Trials: Dependency On Levels Of Pollen Exposure**
Dr. Hendrik Nolte, MD, PhD¹, Prof. Stephen R. Durham, MA MD FRCP², Dr. Harold S. Nelson, MD, FAAAAI³, Dr. David I. Bernstein, MD, FAAAAI⁴, Dr. Peter S. Creticos, MD, FAAAAI⁵, Dr. Ziliang Li, PhD¹ and Dr. Jens Andersen, PhD⁶, ¹Merck, Whitehouse Station, NJ, ²Imperial College London, London, United Kingdom, ³National Jewish Health, Denver, CO, ⁴Bernstein Allergy Group, Cincinnati, OH, ⁵Johns Hopkins Division of Allergy & Clinical Immunology, ⁶ALK-Abelló, Hørsholm, Denmark
- 768 Evaluation Of Acoustic Rhinometry In Histamine Nasal Provocation Test In Children and Adolescents**
Dr. Fausto Y. Matsumoto, Federal University of São Paulo, São Paulo, Brazil, Dr. Gustavo Wandalsen, MD, UNIFESP, Sao Paulo, Brazil, Dr. Aline Mendes, Federal University of São Paulo, Brazil, and Prof. Dirceu Sole, MD, PhD, Federal University of Sao Paulo, Sao Paulo, Brazil
- 769 EQ-5D Health Utility Values In The Treatment Of Seasonal Grass Pollen Induced Rhinoconjunctivitis**
Mr. Jakob N. Andreassen¹, Dr. Chris Poole², Dr. Christian Bannister³, Dr. Jens Andersen, PhD⁴ and Mr. Niels Serup-Hansen¹, ¹ALK, Denmark, ²Cardiff University, Cardiff, Wales, ³Cardiff University, ⁴ALK-Abelló, Hørsholm, Denmark
- 770 Ex-Vivo Allergen Stimulation In Whole Blood: A Novel Approach For Evaluating Mechanisms Of Action Of Synthetic Peptide Immuno-Regulatory Epitopes**
Dr. Pascal LC Hickey, BPharm PhD¹, Dr. Mark Larché, PhD², Dr. Rod Hafner, PhD³, Ms. Kristen Armstrong, M.Sc.⁴, Ms. Eileen Lee, BA (Hons)⁵, Dr. Elaine Lee, PhD⁵ and Dr. Stephen A. Kilfeather, PhD⁵, ¹Adiga Life Sciences, Hamilton, Canada, ²McMaster University, Hamilton, ON, Canada, ³Circassia Ltd, Oxford, United Kingdom, ⁴Adiga Life Sciences Inc., Hamilton, ON, Canada, ⁵Aeirtec Limited, Newcastle upon Tyne, United Kingdom
- 771 Efficacy Of 300IR 5-Grass Pollen Sublingual Tablets In Grass Pollen-Induced Allergic Rhinoconjunctivitis: Pooled Analysis By Age**
Dr. Robert K. Zeldin, MD¹, Prof. Ulrich Wahn, Prof Dr Med², Prof. Alain Didier, MD, PhD³, Mrs. Armelle Montagut¹ and Dr. Marie-Pierre Furrer, PhD¹, ¹Stallergenes S.A., Antony, France, ²Charite, Berlin, Germany, ³Larrey Hospital, CHU, Toulouse, France
- 772 Characterization Of Allergic Rhinitis Symptomatology Induced By a Nasal Allergen Challenge (NAC) Titration In a Dust Mite Sensitize Population**
Mr. Paul Gomes¹, Endri Angjeli², Mr. Keith Lane² and Dr. Paul H. Ratner, MD, FAAAAI³, ¹ORA, Inc, Andover, MA, ²Ora, Inc, Andover, MA, ³Sylvana Research, San Antonio, TX
- 773 Atopic and Non-Atopic Individuals Manifest Partly Concordant Clinical and Leukocyte Responses Following Exposure To House Dust Mite In An Antigen Challenge Chamber (ACC)**
Weijing He, MD^{1,2}, Nathan Harper, BS^{1,2}, Andrew Carrillo, BS^{1,2}, Charles Andrews, MD³, Cynthia Rather, CCRC³, Daniel Ramirez, MD³, Robert L. Jacobs, MD³ and Sunil K. Ahuja, MD^{1,2}, ¹Department of Medicine, University of Texas Health Science Center, San Antonio, TX, ²Veterans Administration Center for Personalized Medicine, South Texas Veterans Health Care System, San Antonio, TX, ³Biogenics Research Chamber, San Antonio, TX
- 774 The Effects Of Pollen Season On Reactions To Subcutaneous Immunotherapy**
Dr. Devi Jhaveri, DO¹, Dr. Julie Abraham, M.D.², Megan Betteley, B.S.³, Dr. Mary Ann O'Riordan, PhD², Dr. Theodore H. Sher, MD, FAAAAI⁴, Dr. Robert W. Hostoffer, DO⁴ and Dr. Haig

Tcheurekdjian, MD, FAAAAI⁴, ¹University Hospitals, South Euclid, OH, ²Rainbow Babies and Children's Hospital, Cleveland, OH, ³Case Western Reserve University School of Medicine, Cleveland, OH, ⁴Allergy/Immunology Associates, Inc., South Euclid, OH

Mechanistic Insight into Pollens and Other Antigens

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

- 775 Protease Inhibitor Reduces Airway Response and Inflammation In Mouse Model Of Cockroach Allergy**
Mr. Sanjay Saw, M.Sc. and Dr. Naveen Arora, Ph.D, CSIR Institute of Genomics and Integrative Biology, New Delhi, India
- 776 Aryl Hydrocarbon Receptor (AhR) Modulates Cockroach Allergen Induced TGF Beta 1 Secretion In Fibroblasts**
Sarah Mirza^{1,2}, Yufeng Zhou, MD, PhD¹, Priya Tripathi, PhD¹, Liang Yuan¹, Beverly Plunkett, MS¹, Allen Myers, Ph.D¹ and Pei-song Gao, MD, PhD¹, ¹Division of Allergy & Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, ²Sher-I-Kashmir Institute of Medical Sciences, Jammu and Kashmir, India
- 777 Effect Of Peanut Allergens On Intestinal Barrier Permeability and Tight Junction Localisation In Caco-2 Cell Cultures**
Prof. Cenk Suphioglu, PhD¹, Ms. Dwan Price, BSc Hons¹, Prof. Leigh Ackland, PhD², A. Wesley Burks, MD, FAAAAI³ and Dr. Matthew Knight, PhD⁴, ¹Deakin University, Australia, ²Deakin University, Australia, ³University of North Carolina, Chapel Hill, NC, ⁴Department of Primary Industries, Australia
- 778 Synergistic Effect Of Dermatophagoides Pteronyssinus Allergens and Dexamethasone On Expression Of CD163 By Peripheral Blood Mononuclear Cells Of Allergic Asthma Patients**
Prof. Krzysztof Kowal, MD, PhD¹, Pawel Bernatowicz, MD, PhD², Prof. Lech Chyczewski, MD, PhD² and Prof. Anna Bodzenta-Lukaszyk, MD, PhD³, ¹Medical University of Bialystok, Bialystok, Poland, ²Medical University of Bialystok, ³Medical University of Bialystok, Poland
- 779 IgE Antibodies and FcεRI Are Critical For Acquired Resistance Against Honeybee Venom In Mice**
Dr. Philipp Starkl, PhD¹, Dr. Thomas Marichal, DVM PhD¹, Dr. Laurent L. Reber, PhD¹, Dr. Janet Kalesnikoff, PhD¹, Dr. Hans C. Oettgen, MD, PhD, FAAAAI², Dr. Martin Metz, MD, PhD³ and Dr. Stephen J. Galli, MD¹, ¹Stanford University School of Medicine, Stanford, CA, ²Boston Children's Hospital, Boston, MA, ³Charite Campus Mitte, Berlin, Germany
- 780 Ragweed Pollen Proteins Bind TLR4/MD2, and Rapidly Recruit MyD88 and TRAF6 To The Signaling Complex**
Dr. Qian Sun, PhD, Dr. Koa Hosoki, MD, PhD, Dr. Leopoldo Aguilera-Aguirre, PhD, Prof. Istvan Boldogh, PhD and Prof. Sanjiv Sur, MD, University of Texas Medical Branch, Galveston, TX
- 781 Sensitization To Silkworm Moth (Bombyx mori) Allergen In Patients With Respiratory Allergy**
Mrs. Laura ML Araujo, Federal University of Parana, Brazil and Prof. Nelson A. Rosario, MD, PhD, FAAAAI, Federal University of Parana, Curitiba, Brazil
- 782 Balsam Of Peru, a Common Contact Dermatitis Allergen, Is a CD1a Antigen**
Sarah Nicolai, MD^{1,2}, Tan-Yun Cheng, PhD^{1,2}, Elvire A. Bourgeois, PhD^{1,2}, Annemieke de Jong, PhD³ and D. Branch Moody, MD^{1,2}, ¹Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA, ²Harvard Medical School, Boston, MA, ³Columbia University Medical Center, Department of Dermatology, New York, NY

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- 783 Cellular Infiltrate Induced By Bites From The Tick Amblyomma Americanum In Subjects With Or Without IgE To Galactose-Alpha-1,3-Galactose (Alpha-gal)**
Dr. Nikhila Schroeder, MD¹, Mr. Jake Eccles², Erin J. Klaffky, MD, PhD¹ and Thomas A.E. Platts-Mills, MD, PhD, FAAAAI¹,
¹Division of Asthma, Allergy & Immunology, University of Virginia Health System, ²University of Virginia School of Medicine
- 784 Duox2 and Mitochondria-Induced Antiviral Innate Immune Response After Influenza A Virus Infection In Human Nasal Epithelium**
Prof. Hyun Jik Kim^{1,2}, Prof. Chang-Hoon Kim^{3,4}, Dr. Sung-Shik Kim⁵ and Prof. Joo-Heon Yoon^{3,6}, ¹Chung-Ang University College of Medicine, Seoul, South Korea, ²Airway Mucus Institute, Seoul, South Korea, ³Department of Otorhinolaryngology, Yonsei University College of Medicine, Seoul, South Korea, ⁴The Airway Mucus Institute, Yonsei University College of Medicine, Seoul, South Korea, ⁵Koenko Nose Infirmary, Seongnam, South Korea, ⁶Research Center for Human Natural Defense System, Yonsei University College of Medicine, Seoul, South Korea
- 785 Persistent Endothelial Damage After Intravenous Immunoglobulin Therapy In Kawasaki Disease**
Dr. Yoshihiko Sakurai^{1,2}, Dr. Hideo Takatsuka¹, Dr. Mutsuzo Takada¹ and Dr. Masato Nishino¹, ¹Nara Prefectural Mimuro Hospital, Sango, Japan, ²Matsubara Tokushukai Hospital, Matsubara, Japan
- 786 Prevalence Of Toxocariasis In General Population Based On Serologic Test**
Prof. Byung-Jae Lee, MD¹, Dr. Jin-Young Lee, MD¹, Dr. Mi-Jung Oh, MD² and Prof. Dong-Chull Choi, MD¹, ¹Samsung Medical Center, ²Bundang Jesaeng General Hospital
- 787 Vitamin D Levels and Sensitization To Indoor Inhalant Allergens In Korea**
Dr. Kyung-Hwan Lim^{1,2}, Dr. Min-Gyu Kang^{1,2}, Dr. Han-Ki Park¹, Prof. So-Hee Lee¹, Prof. Min-Suk Yang^{1,3}, Prof. Woo-Jung Song, M.D.¹, Prof. Hye-Ryun Kang¹, Prof. Heung-Woo Park, MD, PhD¹, Prof. Sun-Sin Kim¹, Prof. Yoon-Seok Chang^{1,2}, Prof. Sang Heon Cho, MD, PhD¹, Prof. Kyung-Up Min, MD, PhD¹ and Prof. Sae-Hoon Kim^{1,2}, ¹Department of Internal Medicine, Seoul National University College of Medicine, Seoul, South Korea, ²Department of Internal Medicine, Seoul National University Bundang Hospital, Seongnam, South Korea, ³SMG-SNU Boramae Medical Center, Seoul, South Korea
- 788 Measuring Vascular Leak During Respiratory Viral Infections**
Dr. Brian T. Kelly, MD, Mrs. Desire Hunter and Dr. Mitchell H. Grayson, MD, FAAAAI, Medical College of Wisconsin, Milwaukee, WI
- 789 Effects Of Rhinovirus (RV) 39 Infection On Airway Hyper-Responsivity (AHR) To Histamine and Carbachol In Human Airways**
Joshua L. Kennedy, MD¹, Stacie M. Jones, MD^{1,2}, Ms. Megan Kurten^{1,3}, Ms. Suzanne House^{1,3} and Richard Kurten, PhD^{1,3}, ¹Arkansas Children's Hospital Research Institute, Little Rock, AR, ²University of Arkansas for Medical Sciences and Arkansas Children's Hospital, Little Rock, AR, ³University of Arkansas for Medical Sciences, Little Rock, AR

- Andrew M. Smith, MD, FAAAAI⁸, Dr. Peter Lenz⁹ and Dr. Tolly Epstein, MD, MS¹⁰, ¹University of Cincinnati Medical Center, Cincinnati, OH, ²Bernstein Allergy Group, Cincinnati, OH, ³Bernstein Clinical Research Center, LLC, Cincinnati, OH, ⁴Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁵Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, ⁶University of Cincinnati, ⁷University of Cincinnati, Cincinnati, OH, ⁸3255 Eden Ave., HPB 350, University of Cincinnati Medical Center, Cincinnati, OH, ⁹The University of Cincinnati Medical Center, ¹⁰Allergy Partners of Central Indiana, Indianapolis, IN
- 791 Texting Medication Reminders For Better Asthma Control In Children and Teens**
Dr. Humaa M. Bhatti, DO¹, Ms. Wafa Alame, RN¹, Mr. Joseph Adams², Dr. Jenny M. Montejo, MD¹, Dr. Milind V. Pansare, MD, FAAAAI¹, Dr. Pavadee Poowuttikul, MD¹ and Dr. Elizabeth A. Secord, MD, FAAAAI², ¹Children's Hospital of Michigan, Detroit, MI, ²Wayne State University, Detroit, MI
- 792 Adherence To Prescribed Controller Therapy and Effects On Asthma Control In The Hispanic Population Of A Pediatric Disease Management Program**
Dr. Lyne G. Scott, MD¹, Tricia Morphew², Marilyn Li¹ and Dr. Salima A. Thobani, MD¹, ¹University of Southern California, ²Morphew Consulting, LLC, CA
- 793 Correlation Between Emergency Department Visits For Asthma Exacerbation and No Show Visits To Primary Care Provider In a Pediatric Population**
Dr. Margaret Redmond, M.D. and David R. Stukus, MD, FAAAAI, Nationwide Children's Hospital, Columbus, OH
- 794 Choosing Wisely: Adherence By Allergists To Recommended Use Of Spirometry In The Diagnosis and Management Of Adult Asthma**
Dr. Kristin C. Sokol, MD, MPH, Dr. Gregg Wilkinson, PhD, Ms. Karen Pierson, MA and Dr. Randall M. Goldblum, MD, University of Texas Medical Branch, Galveston, TX

Bone Marrow Transplantation in Primary Immunodeficiencies

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Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

- 795 G Protein-Coupled Receptor Kinase-3 (GRK-3) In Bone Marrow Niche Interactions and Transplantation**
Jaime M. Brozowski^{1,2}, Roman Timoshchenko², Jessica Koontz³, Janet Rubin^{3,4}, Matthew Billard² and Teresa K. Tarrant^{2,3}, ¹Department of Microbiology and Immunology, University of North Carolina School of Medicine, Chapel Hill, NC 27599, USA, ²Thurston Arthritis Research Center and Department of Medicine, Division of Rheumatology, Allergy, and Immunology, University of North Carolina, Chapel Hill, NC 27599, USA, ³School of Medicine, University of North Carolina, Chapel Hill, NC 27599, USA, ⁴Pediatrics and Pharmacology and Department of Medicine, Division of Endocrinology and Metabolism, University of North Carolina, Chapel Hill, NC 27599, USA
- 796 Allogeneic Hematopoietic Stem Cell Transplantation For Immune Dysregulation, Polyendocrinopathy, X-Linked (IPEX) Syndrome Resolves Enteropathy and Autoimmunity: A Single Institution Experience**
Dr. Zeynep Yesim Yesim Kucuk, MD, Dr. Jack J.H. Blessing, MD, PhD, Dr. Rebecca A. Marsh, MD, Dr. Kejian Zhang, MD, Dr. Stella Davies, MBBS, PhD and Dr. Alexandra H. Filipovich, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Adherence

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Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

- 790 Poor Asthma Control In Older Adults Is Associated With Reduced Adherence To Controller Therapies and Inability To Afford Medications**
Dr. Jessica Tan, MD, MPH¹, Dr. David I. Bernstein, MD, FAAAAI², Ms. Cheryl Koff Bernstein, RN BSN CCRC³, Dr. Patrick Ryan, PhD⁴, Dr. Jonathan A. Bernstein, MD, FAAAAI⁵, Ms. Banu Kesavalu⁶, Dr. Manuel S. Villareal, MD, FAAAAI^{1,7}, Dr.

797 Natural Killer Cell Immunoglobulin Like Receptor (KIR) Genetic Profile Is a Strong Predictor Of Allogeneic Hematopoietic Cell Transplant Outcomes

Dr. Rehan M. Faridi, PhD¹, Taylor Kemp¹, Dr. Poonam Dharmani, PhD¹, Dr. Victor Lewis, MD², Dr. Noureddine Berka, PhD³, Dr. Jan Storek, MD, PhD¹ and Dr. Faisal Khan, PhD¹, ¹University of Calgary, Calgary, AB, Canada, ²Alberta Children's Hospital, Calgary, AB, Canada, ³Calgary Laboratory Services, Calgary, AB, Canada

798 Transient Lymphopenia Of Infancy: A Previously Unrecognized Entity

Dr. Robert Sporter, MD, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Dr. Catherine Capo, MD, Department of Medicine, Hofstra North Shore-LIJ School of Medicine, Manhasset, NY and Dr. Vincent R. Bonagura, MD, FAAAAI, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY

Air Pollution/Allergens/Air Quality

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Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

799 Associations Among Volatile Organic Compounds, Allergic Sensitization, and Respiratory Illness In Children With Asthma Enrolled In a Study Of Low-Income, Green Eco-Friendly Housing (The Green Housing Study)

Dr. Joy Hsu, MD, MSCI¹, Sandra Chaves, MD, MSc², Marika Iwane, PhD, MPH², Yang Qiu, ScM³, Christopher Schaffer, BS⁴, Marty Alvarez-Reeves, MS³, Prof. Tiina Reponen, PhD⁴, Dr. Gary Adamkiewicz, PhD³, Dr. Patrick Ryan, PhD⁵, Doug Brugge, PhD⁶, David Turcotte, ScD⁷, Fuyuen Yip, PhD, MPH⁸, Kanta Sircar, PhD, MPH⁸, Benjamin Blount, PhD⁹, K. Udeni Alwis, PhD⁹, Connie Sosnoff, MA⁹, Peter Ashley, DrPH¹⁰, Curtis Hedman, PhD¹¹, Steve Strelbel, BS¹¹, Behrooz Behbod, MBChB, MSc, ScD¹, Matthew Lozier, PhD, MPH¹ and Dr. Ginger L. Chew, ScD, MSPH⁸, ¹Epidemic Intelligence Service, Centers for Disease Control and Prevention, Atlanta, GA, ²National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention, Atlanta, GA, ³Harvard School of Public Health, Boston, MA, ⁴University of Cincinnati, Cincinnati, OH, ⁵Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁶Tufts University Health Sciences, Boston, MA, ⁷Center for Family, Work and Community, University of Massachusetts Lowell, Lowell, MA, ⁸Air Pollution and Respiratory Health Branch, Division of Environmental Hazards and Health Effects, National Center for Environmental Health, Centers for Disease Control and Prevention, Atlanta, GA, ⁹Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention, Atlanta, GA, ¹⁰Office of Healthy Homes and Lead Hazard Control, U.S. Department of Housing and Urban Development, Washington, DC, ¹¹Wisconsin State Lab of Hygiene, Madison, WI

800 A Systematic Analysis Of Pollen Transcriptomes From Plant Allergens Reveals Conserved Targets Of Immune Responses

Dr. Bjoern Peters¹, Dr. Jason Greenbaum¹, Dr. Veronique M. Schulten¹, Dr. Denise Baker¹, Dr. April Frazier¹, Dr. Alessandro Sette, Dr. Biol. Sci.¹, Dr. Michael Wallner² and Mrs. Heidi Hofer², ¹La Jolla Institute for Allergy and Immunology, La Jolla, CA, ²University of Salzburg, Salzburg, Austria

801 Urinary Polycyclic Aromatic Hydrocarbon Metabolites and Th2 Immunity In Children

Kinjal M. Hew, PhD¹, Annett I. Walker, MD¹, Arunima Kohli¹, Aleena Syed¹, Cameron McDonald-Hyman¹, Zheng Li, PhD, MPH², Andreas Sjobin, PhD² and Dr. Kari C. Nadeau, MD, PhD,

FAAAAAI³, ¹Department of Pediatric Allergy and Immunology, Stanford University, Stanford, CA, ²Division of Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention, Atlanta, GA, ³Pediatric Allergy Immunology, Stanford University, Stanford, CA

802 Impact Of BMI On Ozone-Induced IL-1β In The Airways Of Human Volunteers

Dr. Michelle L. Hernandez, MD¹, Dr. Krista Todoric, MD¹, Ms. Katherine Mills, BA², Dr. Haibo Zhou, PhD³ and Dr. David B. Peden, MD, MS, FAAAAI⁴, ¹University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, NC, ²University of North Carolina Chapel Hill School of Medicine, Chapel Hill, NC, ³University of North Carolina at Chapel Hill, School of Public Health, ⁴Office #544, Campus Box 7310, University of North Carolina at Chapel Hill School Medicine, NC

803 Group-2 Innate Lymphoid Cells Promote Air-Pollutant Induced Airway Inflammation and Hyperresponsiveness (AHR)

Dr. Qi Yang, PhD, Moyer Q. Ge, Blerina Kokalari, Imre G Redai, Xinxin Wang, Dr. Avinash Bhandoola, MBBS PhD and Dr. Angela Haczku, MD, PhD, FAAAAI, University of Pennsylvania, Philadelphia, PA

Food Allergy

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Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

804 Peanut T Cell Epitope Discovery: Ara h1 and Ara h3

Dr. Manish Ramesh, MD, PhD¹, Madhan Masilamani, PhD², Dr. George N. Konstantinou, MD, PhD, MSc^{3,4}, Jay A. Lieberman, MD⁵, Hugh A. Sampson, MD, FAAAAI⁶, Dr. Madhura Sivakumar¹, Dr. Araya Yuenyongviwat, MD⁷ and Dr. Mariona Pascal, PhD⁸, ¹Mount Sinai School of Medicine, New York, NY, ²Icahn School of Medicine at Mount Sinai, New York, NY, ³424 General Military Training Hospital, Thessaloniki, Greece, ⁴First Pediatric Department, Aristotle University of Thessaloniki, Hippokraton General Hospital, Thessaloniki, Greece, ⁵University of Tennessee, Memphis, TN, ⁶Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, ⁷Prince of Songkla University, Songkhla, Thailand, ⁸Servei d'Immunologia, Centre de Diagnostic Biomedic. Hospital Clinic., Barcelona, Spain

805 Microparticles Encapsulated With Antigen Protect Against Sensitization and Reduce Anaphylactic Reactivity In a Food Allergy Model

Dr. Karen B. Chien, PhD, Northwestern University, Chicago, IL and Dr. Paul Bryce, PhD, Division of Allergy-Immunology, Department of Medicine, Feinberg School of Medicine, Northwestern University, Chicago, IL

806 Over-The-Counter Dietary Supplements Genistein and Ipriflavone Suppress Peanut Allergy Symptoms

Ms. Lisa Chang, BS¹, Ms. Mohanapriya Kamalakannan, MS¹, Mr. Matthew Stadler¹, Hugh A. Sampson, MD, FAAAAI² and Madhan Masilamani, PhD¹, ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY

807 Analyzing Casein-Specific IL-4 and IL-13 Secreting T-Cells: A Reliable Tool For Diagnosis Of Cow's Milk Allergy

Dr. Benedicte Michaud, MD, PhD^{1,2}, Dr. Joseph Aroulandom, MD³, Mrs. Nour Baiz, PhD⁴, Dr. Flore Amat, MD³, Dr. Rahelé Gouvís-Echraghi, MD³, Dr. Sophie Candon, MD, PhD^{1,2}, Mr. Remy Couderc, PhD PharmaD⁵, Prof. Jean-Francois Bach, MD, PhD^{1,2}, Prof. Lucienne Chatenoud, MD, PhD^{1,2} and Prof. Jocelyne Just, MD, PhD^{3,4}, ¹Université Paris Descartes, Sorbonne Paris Cité, France, ²Institut national de la santé et de la recherche médicale, Unité U1013, Paris, France, ³Allergology department, Trousseau

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hospital AP-HP-UPMC Paris 6, France, ⁴Epidemiology of Allergic and Respiratory diseases (EPAR) Department, UMR-S 707 INSERM, UPMC Paris 6, France, ⁵Service de Biochimie et Biologie Moléculaire, Hôpital AP-HP, Paris, France

808 Growth Of Children Aged 2-17 With Cow's Milk, Peanut, and Egg Allergy In NHANES

Dr. Karen Robbins, MD¹, Robert A. Wood, MD, FAAAAI² and Corinne Keet, MD, MS², ¹Johns Hopkins University School of Medicine, ²Johns Hopkins University Medical Center, Baltimore, MD

Epidemiology

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Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

809 Allergic Causes Of Death In The United States

Dr. Susan J. Kim, MD, Kaiser Permanente Southern California, Los Angeles, CA and Dr. Jordan C. Brooks, PhD, MPH, Life Expectancy Project, San Francisco, CA

810 Death From Anaphylaxis Is a Reassuringly Unusual Outcome

Dr. Larry Borish, MD, FAAAAI¹, Dr. Theodore Danoff, MD, PhD² and Dr. Liyan (Larry) Ma, PhD², ¹Asthma and Allergic Diseases Center, Carter Center for Immunology Research, University of Virginia, Charlottesville, VA, ²Endo Pharmaceuticals Inc.

811 Allergic Rhinitis, Asthma and Cardiovascular Disease

Dr. Angelina M. Crans Yoon, MD¹, Dr. Anne M. Staveren, MD¹, Dr. Michael S. Kaplan, MD, FAAAAI¹, Dr. Javed Sheikh, MD, FAAAAI² and Dr. Bruce J. Goldberg, MD, PhD, FAAAAI¹, ¹Kaiser Permanente, Los Angeles, CA, ²Kaiser Permanente Los Angeles Medical Center, Los Angeles, CA

812 Pre-Natal and Early Life Predictors Of Atopy In Canadian Children: Results Of The Family Study

Tahira Batool, MBBS, FRCPC¹, Michael M. Cyr, MD, FRCPC¹, Judah Aryeh Denburg, MD, FRCPC, FAAAAI¹, Ms. Karleen Schulze, MMath², Sonia Anand, MD, FRCPC², Koon Teo, MD, FRCPC² and Family Investigators², ¹Division of Clinical Immunology and Allergy, Department of Medicine, McMaster University, ON, Canada, ²Population Health Research Institute, Department of Medicine, McMaster University, ON, Canada

813 Association Between Antibiotic Treatment In The First Six Months Of Life and Clinical Allergic Outcomes At Ages 2 To 3 Years

Kyra Jones, MEd¹, Alexandra Sitarik, M.S.¹, Ms. Suzanne Havstad, M.A.¹, Ganesa Wegienka, PhD¹, Dr. Dennis Ownby, M.D. FAAAAI², Dr. Edward M. Zoratti, MD, FAAAAI³ and Dr. Christine Cole Johnson, PhD MPH FAAAAI¹, ¹Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI, ²Division of Allergy-Immunology and Rheumatology, Georgia Health Sciences University, Augusta, GA, ³Henry Ford Health System, Detroit, MI

Chronic Rhinosinusitis

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Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

814 The Clinical Significance Of Specific Antibody Deficiency (SAD) Severity In Chronic Rhinosinusitis (CRS)

Dr. Anjeni Keswani, MD¹, Neha Mehrotra, MD², Dr. Angelica Manzur³, Dr. Rakesh Chandra, MD⁴, Dr. David Conley, MD⁵, Dr. Bruce K. Tan, MD⁵, Dr. Leslie C. Grammer, MD, FAAAAI¹, Dr. Robert C. Kern, MD⁵, Dr. Robert P. Schleimer, PhD FAAAAI⁶

and Dr. Anju T. Peters, MD, FAAAAI¹, ¹Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²University of Chicago, IL, ³Department of Medicine, Northwestern University Feinberg School of Medicine, ⁴Northwestern University, Chicago, IL, ⁵Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁶Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

815 Meta-Analysis Of Gene Expression Microarrays Reveals Novel Biomarkers Consistent With Altered Functionality Of Mucosal Barrier In Patients With Chronic Rhinosinusitis

Dr. Sergejs Berdnikovs, PhD¹, Dr. Atsushi Kato, PhD², Mr. James Norton, MS², Ms. Lydia Suh, BSc², Dr. Robert C. Kern, MD³, Dr. David Conley, MD³, Dr. Rakesh Chandra, MD⁴, Dr. Anju T. Peters, MD, FAAAAI², Dr. Leslie C. Grammer, MD, FAAAAI², Ms. Kathleen E. Harris, BSc², Dr. Michael Platt, MD⁵, Dr. Ralph Metson, MD⁶ and Dr. Robert P. Schleimer, PhD FAAAAI⁷, ¹Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁴Northwestern University, Chicago, IL, ⁵Department of Otolaryngology, Boston Medical Center, Boston University, Boston, MA, ⁶Department of Otolaryngology and Laryngology, Harvard Medical School, Boston, MA, ⁷Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

816 Evidence For Immunoglobulin D In Patients With Chronic Rhinosinusitis

Dr. Jin Young Min, MD, PhD¹, Dr. Robert C. Kern, MD¹, Dr. Kathryn E. Hulse, PhD², Dr. Rakesh Chandra, MD², Dr. David Conley, MD¹, Ms. Lydia Suh, BSc³, Mr. Roderick Carter, BSc³, Mr. James Norton, MS³, Julia H. Huang¹, Dr. Atsushi Kato, PhD³, Dr. Robert P. Schleimer, PhD FAAAAI⁴ and Dr. Bruce K. Tan, MD¹, ¹Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ²Northwestern University, Chicago, IL, ³Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁴Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

817 Oncostatin M Is Elevated In Chronic Rhinosinusitis and Decreases Barrier Function In Human Airway Epithelium

Ms. Kathryn L. Pothoven^{1,2}, Mr. James Norton, MS², Dr. Christopher Ocampo, MD, PhD², Ms. Lydia Suh, BSc², Mr. Roderick Carter, BSc², Dr. Kathryn E. Hulse, PhD³, Dr. Sudarshan Seshadri, PhD², Dr. Bruce K. Tan, MD⁴, Dr. Rakesh Chandra, MD³, Dr. Anju T. Peters, MD, FAAAAI², Ms. Kathleen E. Harris, BSc², Dr. David Conley, MD⁴, Dr. Leslie C. Grammer, MD, FAAAAI², Dr. Robert C. Kern, MD⁴ and Dr. Robert P. Schleimer, PhD FAAAAI⁵, ¹Driskill Graduate Program, Northwestern University, Chicago, IL, ²Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, ³Northwestern University, Chicago, IL, ⁴Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, ⁵Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

818 Immunologic Changes During Chronic Rhinosinusitis Exacerbations Compared To Controls

Dr. Shefali Samant, MD¹, Dr. Matthew A. Rank, MD, FAAAAI², Dr. John B. Hagan, MD, FAAAAI¹, Dr. Erin O'Brien¹, Dr. Devyani Lal³ and Hirohito Kita, MD¹, ¹Mayo Clinic, Rochester, MN, ²Mayo Clinic, Scottsdale, AZ, ³Mayo Clinic, Phoenix, AZ

Mechanisms of Asthma and Allergic Disease

4607

Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

- 819 Allergen Challenge Increases Peripheral Blood CD84+ ILC2 In Allergic Rhinitis**
Dr. David R. Scott, M.D.¹, Dr. Taylor A. Doherty, MD, FAAAAI², Naseem Khorram, M.S.³, Mr. Sean Lund, B.S.³, Ms. Rachel Baum, B.S.³, Jinny Chang, M.D.⁴, Mr. Peter Rosenthal, B.S.³, Mr. Andrew Beppu, B.S.³, Dr. Marina Miller, MD, PhD³ and Dr. David H. Broide, MB ChB FAAAAI⁵, ¹Allergy and Asthma Center of Western Colorado, ²Medicine, University of California, San Diego, San Diego, CA, ³University of California San Diego, ⁴Sansum Clinic, Santa Barbara, ⁵Department of Medicine, San Diego, CA
- 820 Asthma Susceptibility Due To Environmental Programming Of Innate Immunity In Utero**
Sarah Manners, BS¹, Rafeul Alam, MD, PhD, FAAAAI¹, David A. Schwartz, MD² and Magdalena M. Gorska, MD, PhD¹, ¹National Jewish Health, Denver, CO, ²University of Colorado Denver School of Medicine, Aurora, CO
- 821 Rhinovirus Challenge Augments Allergen Responsiveness In Basophils Of Atopic Asthmatics**
Rachana Agrawal, PhD, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI, Peter W. Heymann, MD and Judith A. Woodfolk, MBChB, PhD, FAAAAI, University of Virginia, Charlottesville, VA
- 822 Der p 3 Allergen Activated Ano-1 Channel On Afferent Airway Nerves Regulates Th2 Cell Responses**
Mr. Mayur Patil, MS¹, Dr. Edward G. Brooks, MD², Dr. Michael Henry, D.D.S, PhD¹ and Dr. Armen Akopian, PhD³, ¹UTHSCSA, san antonio, TX, ²Univ. Texas Health Science Center San Antonio, San Antonio, TX, ³UTHSCSA, San Antonio, TX
- 823 Increased Serum Soluble ST2 In Asthmatic Children and Recurrent Early Wheezers**
Prof. Hai Lee Chung, MD, PhD and Dr. Eun Joo Lee, Catholic University of Taegu, Taegu, South Korea

The Impact of Environmental Factors on Asthma

5201

Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 824 High Traffic Pollution Exposure Is Significantly Associated With Poorer Asthma-Related Quality Of Life In Older Asthmatics**
Dr. Jennifer A. Kannan¹, Dr. David I. Bernstein, MD, FAAAAI², Ms. Cheryl Koff Bernstein, RN BSN CCRC³, Dr. Patrick Ryan, PhD^{1,4}, Dr. Jonathan A. Bernstein, MD, FAAAAI⁵, Dr. Manuel S. Villareal, MD, FAAAAI¹, Dr. Andrew M. Smith, MD, FAAAAI⁶, Dr. Peter Lenz¹ and Dr. Tolly Epstein, MD, MS⁷, ¹University of Cincinnati Medical Center, Cincinnati, OH, ²Bernstein Allergy Group, Cincinnati, OH, ³Bernstein Clinical Research Center, LLC, Cincinnati, OH, ⁴Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ⁵Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, ⁶3255 Eden Ave., HPB 350, University of Cincinnati Medical Center, Cincinnati, OH, ⁷Allergy Partners of Central Indiana, Indianapolis, IN
- 825 Effect Of Early Exposure To Traffic Related Air Pollution On The Asthma Predictive Index and Asthma At Age 7**
Dr. Priyal Amin, DO, University of Cincinnati, College of Medicine, Cincinnati, OH, Afghanistan, Prof. Linda Levin, PhD, University of Cincinnati, Cincinnati, OH, Dr. Tolly Epstein, MD, MS, Allergy Partners of Central Indiana, Indianapolis, IN, Dr. Patrick Ryan, PhD, Cincinnati Children's Hospital Medical Center,

Cincinnati, OH and Dr. David I. Bernstein, MD, FAAAAI, Bernstein Allergy Group, Cincinnati, OH

- 826 Twins' Increased Risk Of Asthma Compared To Singletons Is Mediated By Gestational Age**
Vilhelmina Ullemar¹, Cecilia Lundholm, MSc¹ and Prof. Catarina Almqvist, MD, PhD^{1,2}, ¹Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden, ²Department of Women's and Children's Health, Astrid Lindgren Children's Hospital, Karolinska University Hospital, Stockholm, Sweden
- 827 Viral Etiology Of Early Life Wheezing Illnesses Differentially Predict Persistence Of Asthma In High-Risk Children**
Dr. Frederick Rubner, MD¹, Dr. Daniel J. Jackson, MD², Mr. Michael D. Evans, MS¹, Dr. James E. Gern, MD, FAAAAI¹ and Dr. Robert F. Lemanske Jr., MD, FAAAAI¹, ¹University of Wisconsin School of Medicine and Public Health, Madison, WI, ²Pediatrics, University of Wisconsin School of Medicine and Public Health, Madison, WI
- 828 Prevalence and Severity Of Wheezing In The First Year Of Life Among Infants With Low Birth Weight**
Dr. Nathalia Barroso¹, Dr. Leila Borges, MD¹, Dr. Gustavo Wandalsen, MD², Dr. Elaine Prestes³, Prof. Herberto J. Chong Neto, MD, PhD, FAAAAI⁴, Prof. Nelson A. Rosario, MD, PhD, FAAAAI⁵, Dr. Ana Carolina Dela Bianca⁶, Dr. Carolina Aranda⁷, Dr. Decio Medeiros⁶, Prof. Emanuel Sarinho, Prof. PHD⁸, Dr. Lillian SANCHEZ LACERDA Moraes, MD, MSc⁹, Dr. Javier Mallo¹⁰ and Prof. Dirceu Sole, MD, PhD⁷, ¹UNIFESP, Brazil, ²UNIFESP, Sao Paulo, Brazil, ³State University of Para, ⁴Federal University of Parana, Brazil, ⁵Federal University of Parana, Curitiba, Brazil, ⁶Federal University of Pernambuco, ⁷Federal University of Sao Paulo, Sao Paulo, Brazil, ⁸UFPE, Universidade Federal de Pernambuco, Brazil, ⁹Federal University of Mato Grosso, ¹⁰University of Santiago de Chile
- 829 Interactive Exploration Of Microbial Exposure, Asthma and Allergy Using a Web-Based Tool**
Jeremy Wildfire¹, Mr. Agustin Calatroni, MA MS¹, Dr. Susan V. Lynch, PhD², Dr. Homer A. Boushey Jr., MD, FAAAAI³, Dr. Kei Fujimura, PhD², Dr. Marcus Rauch, PhD² and Henry Lynn¹, ¹Rho, Inc., Chapel Hill, NC, ²University of California San Francisco, San Francisco, CA, ³University of California, San Francisco, San Francisco, CA
- 830 Is There a Link Between Uncontrolled Asthma and Sensitization To Inhalant Allergens?**
Dr. Majdy Qutub, MD¹, Prof. Emad Abdulkader Koshak, MD¹, Dr. Moufag Tayeb² and Dr. Mohammed Alrabea¹, ¹King Abdul Aziz University, Jeddah, Saudi Arabia, ²King Abdul Aziz University, Rabigh, Saudi Arabia
- 831 Allergy To Cockroaches: The Need For Standardization Of Extracts For Clinical Practice**
Prof. Emanuel Sarinho, Prof. PHD, UFPE, Universidade Federal de Pernambuco, Brazil, Dr. Filipe Wanick Sarinho, Md, IMIP, Brazil, Prof. Dirceu Sole, MD, PhD, Federal University of Sao Paulo, Sao Paulo, Brazil and Dr. Isabela Londres, UFPE
- 832 Are Environmental Factors More Important Than Genetic Factors In Incident Asthma?**
Dr. Eflen L. Rael, MD, FAAAAI, Allergy/Immunology, Penn State University College of Medicine, Hershey, PA
- 833 Sensitization In Patients With Allergic Difficult-To-Control Asthma**
Dr. Rosana C. Agondi, MD, PhD¹, Dr. Bruna Saliba², Dr. Carla Bisaccioni, MD¹, Dr. Marcelo Vivolo Aun, MD¹, Prof. Jorge Kalil, MD, PhD¹ and Prof. Pedro Giavina-Bianchi, MD, PhD, FAAAAI^{1,3}, ¹Clinical Immunology and Allergy Division, University of Sao Paulo, Sao Paulo, Brazil, ²Clinical Immunology and Allergy Division University of São Paulo, Brazil, Brazil, ³Clinical Immunology and Allergy Division, University of Sao Paulo, Boston, MA

- 834 Sensitization To Inhalant Allergens In Elderly Patients Of An Allergy Clinic In Rio De Janeiro**
Dr. Jose Luiz M. Rios, MD, PhD, Dr. Luiz C G Arcanjo, Fabio C Kuschnir, Joao BM Rios and Ana CS Oliveira, Policlínica Geral do Rio de Janeiro, Brazil

Diagnostic Modalities of Asthma

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Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 835 The Evaluation Of Airway Obstruction By Lung Sound Analysis In The Patients With Asthma**
Dr. Terufumi Shimoda, MD¹, Dr. Yukio Nagasaka, MD², Dr. Yasushi Obase, MD³, Dr. Michiyoshi Imaoka, MD¹, Dr. Tomoaki Iwanaga, MD¹ and Dr. Reiko T. Kishikawa, MD¹, ¹Fukuoka National Hospital, Fukuoka, Japan, ²Kyoto Respiratory Center, Otowa Hospital, Kyoto, Japan, ³Kawasaki Medical School, Kurashiki, Japan
- 836 IOS Is Useful In Younger Children Who Cannot Perform Spirometry**
Dr. Shintaro Okazaki, MD, Hiroki Murai, MD, PhD, Hisako Hayashi, MD, Akiko Kawakita, MD, Motoko Yasutomi, MD, PhD, Mitsufumi Mayumi, MD, PhD and Yusei Ohshima, MD, PhD, University of Fukui, Fukui, Japan
- 837 The Association Of Spirometry With Asthma Control and Asthma Morbidity In Inner City Schoolchildren With Asthma**
Dr. Watcharoot Kanchongkittiphon, MD, PhD^{1,2}, Dr. Jonathan M. Gaffin, MD, MMSc^{1,3}, Dr. Lianne S. Kopel, MD^{1,3}, Dr. William J. Sheehan, MD^{1,3}, Dr. Sachin N. Baxi, MD^{1,3}, Dr. Perdita Permaul, MD^{3,4}, Dr. Diane R. Gold, MD, MPH^{3,5} and Dr. Wanda Phipatanakul, MD, MS, FAAAAI^{1,3}, ¹Boston Children's Hospital, Boston, MA, ²Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, ³Harvard Medical School, Boston, MA, ⁴Division of Pediatric Allergy/Immunology, Massachusetts General Hospital, Boston, MA, ⁵Channing Laboratory, Brigham and Women's Hospital, Boston, MA
- 838 Impulse Oscillometry (IOS) Is Easier Than Spirometry For Older Asthmatic and Non-Asthmatic Subjects**
Dr. Michael C. Balduzzi, MD¹, Dr. Adam Updegraff, DO¹, Dr. Kerri Rawson, Ph.D, MS², Dr. Brice Taylor, MD³, Dr. Monroe J. King, DO, FAAAAI⁴ and Dr. Richard F. Lockey, MD⁵, ¹University of South Florida, Tampa, FL, ²Washington University School of Medicine of Medicine, St. Louis, MO, ³Morsani College of Medicine, University of South Florida, Tampa, FL, ⁴University of South Florida, Largo, FL, ⁵Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida Morsani College of Medicine and James A. Haley Veterans' Affairs Hospital, Tampa, FL
- 839 Clinical and Spirometric Characteristics In Young Patients With Intermittent and Mild Persistent Atopic Asthma**
Prof. Vera Tsybulkina¹, Dr. N. Kurmaeva¹, Dr. Nicolai Tsybulkin¹ and Prof. Lawrence M. DuBuske, MD, FAAAAI², ¹Kazan State Medical University, Russia, ²George Washington University School of Medicine, DC
- 840 Clinical Impact Of Molecular Diagnosis In Dog Allergy**
Prof. Joaquin Sastre, MD, PhD, FAAAAI and Ms. Silvia Uriarte, Fundación Jiménez Díaz, Madrid, Spain
- 841 Asthma As An Unrecognized Risk Factor For Herpes Zoster In Adults: A Population-Based Case-Control Study**
Dr. Young J. Juhn, MD, MPH¹, Dr. Hyo-Jin Kwon¹, Dr. Duk Won Bang¹, Dr. Eun Na Kim¹, Peter Wollan² and Mr. Brian Lahr², ¹Dept of Pediatric and Adolescent Medicine, Mayo Clinic, Rochester, MN, ²Mayo Clinic, Rochester, MN
- 842 The Simplified Method For Eucapnic Voluntary Hyperventilation (EVH) May Be Useful To Discriminate Between Hyperventilation and Gastroesophageal Reflux Disease (GERD) Induced Bronchospasm**
Dr. Richard R. Rosenthal, MD^{1,2}, Mr. Harvey Howe, BS³ and Mr. Paul Knause, BS³, ¹Allergy and Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, ²INOVA Fairfax Hospital, Fairfax, VA, ³Self
- 843 A Young Adult With Increased Variability Of FEF25-75 Relative To FEV1 Post-Bronchial Thermoplasty**
Dr. Amy M. CaJacob, MD¹, Dr. Mark H. Kalenian, MD, FAAAAI², Dr. John T. Anderson, MD¹, Dr. Mark Dransfield³ and Dr. Jennifer Trevor, MD¹, ¹University of Alabama at Birmingham, Birmingham, AL, ²Alabama Asthma and Allergy, PC, Dothan, AL, ³University of Alabama School of Medicine, AL

Basic and Translational Immunology

5203

Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 844 Interferon- α Release Assay Prevents Unnecessary Tuberculosis Therapy In Individuals With Positive Tuberculin Skin Test**
Dr. Vered Schichter-konfino and Prof. Elias Toubi, Bnai-Zion Medical Center, Rappaport Faculty of Medicine, Technion, Haifa-Israel, Haifa, Israel
- 845 High Dimensional Single-Cell Mass Cytometry Demonstrates Conserved Human Toll-Like-Receptor Activation Signatures**
Dr. Elena Hsieh, MD¹, Dr. William O'Gorman, PhD², Ms. Erica Savig², Dr. Pier Federico Gherardini, PhD², Prof. Mark Davis, PhD² and Prof. Garry Nolan, PhD², ¹Allergy and Immunology, Stanford University, Stanford, CA, ²Stanford University-Microbiology & Immunology, Stanford, CA
- 846 Heterogenous Nuclear Ribonucleoprotein L Regulates The Selective Expression Of Glucocorticoid Receptor Translational Isoforms In HL-60 Cells**
Newton Li, MD, Ingrid Bender and Nick Lu, PhD, Division of Allergy and Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL
- 847 Dendrimeric Silica Particle Composites For IgE Determination In Patients Allergic To Amoxicillin**
Dr. Maria Isabel Montañez, PhD^{1,2}, Dr. Yolanda Vida, PhD^{2,3}, Dr. Adriana Ariza, PhD¹, Dr. Cristobalina Mayorga, PhD¹, Dr. Maria Salas, MD, PhD⁴, Dr. Miguel Blanca, MD, PhD⁴, Dr. Ezequiel Pérez-Inestrosa, PhD^{2,3} and Dr. María José Torres, MD, PhD⁴, ¹Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain, ²Andalusian Centre for Nanomedicine and Biotechnology, BIONAND, Malaga, Spain, ³Organic Chemistry, University of Malaga, Malaga, Spain, ⁴Allergy Service, Carlos Haya Hospital, Málaga, Spain
- 848 Murine Splenocytes From Peanut-Allergic Donors Transfer Peanut Allergy To Naive, Irradiated Recipient Mice**
Daphne Moutsoglou, BS and Dr. Stephen C. Dreskin, MD, PhD, FAAAAI, University of Colorado Denver, Aurora, CO
- 849 Alternaria-Induced Releases Of IL-1 Alpha and IL-1 Beta From Airway Epithelial Cells Through Syk and PKC Signaling Pathways**
Dr. Yonghan Sun, Gil Hospital, Incheon, South Korea and Hirohito Kita, MD, Mayo Clinic Rochester, Rochester, MN
- 850 Transmaternal Bisphenol A Exposure Accelerates Diabetes Type 1 Development In NOD Mice**
Dr. Johanna Bodin¹, Dr. Anette Koebach Bølling¹, Dr. Rune Becher¹, Prof. Fricke Kuper², Prof. Martinus Lovik¹ and Dr. Unni C. Nygaard¹, ¹Norwegian Institute of Public Health, Oslo, Norway, ²TNO Nutrition and Food Research, Zeist, Netherlands

- 851 Soluble Type I Interferon Receptor 2 and Soluble Type II Interferon Receptor 1 Are Independently Regulated**
Thomas B. Lavoie, PhD, Taher Fatakdawala, Xiao-Hong Lin, Michael Skawinski, Jonathan Ferriera and Tara Stauffer, PBL Assay Science
- 852 Regulation Of Innate Immune Recognition Of Viral Infection By Epigallocatechin Gallate**
Dr. Christina L. Nance, PhD^{1,2}, Melinda Mata, B.S.¹, Ashley McMullen, B.S.¹, Sean McMaster, B.S.¹ and Dr. William T. Shearer, MD, PhD, FAAAAI^{1,2}, ¹Baylor College of Medicine, ²Texas Children's Hospital
- 853 Prostaglandin I₂ (PGI₂) Inhibits IL-33-Induced Type 2 Cytokine Responses By Mouse CD4 T Cells**
Weisong Zhou, PhD¹, Jian Zhang, MS¹, Kasia Goleniewska² and Dr. R. Stokes Peebles Jr., MD, FAAAAI¹, ¹Division of Allergy, Pulmonary and Critical Care Medicine, Vanderbilt University School of Medicine, Nashville, TN, ²Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN
- 854 Sequencing Of The ST2 Gene and The Identification Of Genetic Determinants Of Serum Total ST2 Levels: Strong Evidence For Replication Across European and African American Populations**
Dr. Rasika A. Mathias, ScD¹, Lili Huang, MPH¹, Dr. Candelaria I. Vergara, MD, PhD¹, Dr. Li Gao, MD, PhD¹, Nicholas M. Rafaels¹, Joseph Potee¹, Mrs. Monica Campbell¹, Dr. Hironori Masuko, MD, PhD¹, Justyna Fert-Bober², James Snider³, Dr. Margaret Taub, PhD⁴, Dr. Ingo Ruczinski, PhD⁴, Dr. Terri H Beaty, PhD⁴, Dr. Jennifer E. Van Eyk, PhD² and Dr. Kathleen C. Barnes, PhD FAAAAI¹, ¹Division of Allergy and Clinical Immunology, Department of Medicine, Johns Hopkins University, Baltimore, MD, ²Department of Medicine, Johns Hopkins University, Baltimore, MD, ³Critical Diagnostics, San Diego, CA, ⁴Johns Hopkins Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD
- 855 Salmonella Typhimurium Impedes Innate Immunity With a Mast Cell-Suppressing Tyrosine Phosphatase Sptp**
Hae Woong Choi¹, Rhea Brooking, PhD¹, Subham Neupane¹, Chul-Jin Lee, PhD¹, Dr. Edward Miao, MD, PhD², Dr. Herman F. Staats, PhD¹ and Dr. Soman N. Abraham, PhD^{1,3}, ¹Duke University Medical Center, Durham, NC, ²University of North Carolina at Chapel Hill, Chapel Hill, ³Duke-National University of Singapore, Singapore, Singapore
- 856 The Role Of Semaphorin 7A In Alternatively Activation Of Macrophages**
Prof. Hye-Ryun Kang, MD, PhD, Dr. Hyun Seung Lee, PhD, Ms. Da Eun Park, B.A., Ms. Ji Won Lee, B.A., Prof. Woo-Jung Song, MD, Prof. Heung-Woo Park, MD, PhD, Prof. Sang Heon Cho, MD, PhD and Prof. Kyung-Up Min, MD, PhD, Department of Internal Medicine, Seoul National University College of Medicine, Seoul, South Korea
- 857 Immune Perturbation In Patients With Tgfbeta Pathway Defects**
Dr. Dat Q. Tran, MD¹, Mrs. Ellen Regalado² and Dr. Dianna Milewicz², ¹University of Texas Medical School at Houston, Houston, TX, ²UTHealth
- 858 Chemokine Receptors On Regulatory T Cell Surface, Surrogate Markers For Intracellular Th1 and Th2 Cytokines**
Mr. Satoru Watanabe^{1,2}, Dr. Yoshiyuki Yamada¹ and Prof. Hirokazu Murakami², ¹Gunma Children's Medical Center, Shibukawa, Gunma, Japan, ²Gunma University Faculty of Medicine School of Health Science, Maebashi, Gunma, Japan
- 859 IL-4 Signaling Attenuates $\gamma\delta$ T Cell IL-17A Protein Expression**
Melissa T. Harintho, BS¹, Dr. Dawn C. Newcomb Baker, PhD², Jacqueline-Yvonne Cephus, BS², Kasia Goleniewska³ and Dr. R. Stokes Peebles Jr., MD, FAAAAI², ¹Department of Pathology, Microbiology, and Immunology, Vanderbilt University School of Medicine, Nashville, TN, ²Division of Allergy, Pulmonary and Critical Care Medicine,

Vanderbilt University School of Medicine, Nashville, TN, ³Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN

- 860 Influence Of Dietary Fiber On Cellular Immunity In Experimental Vitamin Deficiency**
Dr. Roman Khanferyan, MD, PhD¹, Dr. E.N. Trushina², O.K. Mustafina³, V.M. Kodentzova² and Prof. Lawrence M. DuBuske, MD, FAAAAI⁴, ¹Institute of Nutrition, Russian Academy of Medical Sciences, Moscow, Russia, ²Institute of Nutrition Russian Academy of Sciences, Russia, ³Institute of Nutrition Russian Academy of Sciences, Russia, ⁴George Washington University School of Medicine, DC
- 861 Evaluation Of Cytokine Levels In Patients With Active Pulmonary Tuberculosis Their Household Contacts-A Follow Up Study**
Ms. Ramya Sivangala¹, Ms. Meenakshi Ponnana¹, Ms. Shruthi Thada¹, Mrs. Lavanya Joshi¹, Dr. Vijayalakshmi Valluri^{1,2} and Dr. Sumanlatha Gaddam¹, ¹Bhagwan mahavir medical research center, Hyderabad, India, ²LEPRA India—Blue Peter Public Health & Research Centre, Hyderabad, India
- 862 Semaphorin 4C Is An Intrinsic Regulator Of Cell-Cell Interaction In Th2 Stimulated Memory-B-Cells**
Ms. Marianne Beland¹, Dr. Marylin Desjardins, MD^{1,2}, Ms. Di Xue³ and Dr. Bruce D. Mazer, MD, FAAAAI^{4,5}, ¹Meakins-Christie Laboratories, Montreal, QC, Canada, ²Division of Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, ³McGill University, Montreal, QC, Canada, ⁴Montreal Children's Hospital, Montreal, QC, Canada, ⁵Meakins-Christie Laboratories, Research Institute - McGill University Health Centre, Montreal, QC, Canada

Innate Immunity and Primary Immunodeficiencies

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Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 863 A Patient With a Novel Leukocyte Adhesion Deficiency and Pyoderma Gangrenosum-Like Disease**
Dr. Jared I. Darveau, MD¹, Dr. Anna Huttenlocher², Dr. Daniel Bennett³, Dr. Judith Smith³, Dr. Christine M. Seroogy, MD, FAAAAI³ and Dr. James E. Gern, MD, FAAAAI⁴, ¹University of Wisconsin, Madison, WI, ²University of Wisconsin, Madison, Madison, WI, ³University of Wisconsin, Madison, WI, ⁴University of Wisconsin School of Medicine and Public Health, Madison, WI
- 864 Reduced Macrophages IL-12 Production After Stimulation By BCG/INF-Gamma Suggestive Of Impaired INF-Gamma Pathway Signalling In a Child With Disseminated Atypical Mycobacterial Infection and History Of Chemotherapy For Langerhans Cell Histiocytosis**
Dr. Eliska Furlong, MD, PhD, Dr. Richard K.S. Loh, MD, FAAAAI, Dr. Grace Wooi Kee Gong, MD and Dr. Andrew McLean-Tooke, MBChB, Princess Margaret Hospital for Children, Perth, Australia
- 865 Sporadic Case Of Chronic Mucocutaneous Candidiasis (CMC) Due To a Gain-Of-Function Mutation In STAT1 In a 13 Year Old Female**
Dr. Aimee E. Baer Ellington, MD and Dr. Jennifer A. Shih, MD, Emory University, Atlanta, GA
- 866 A Young Boy With a Novel, Autosomal-Dominant Signal Transducer and Activator Of Transcription 1 (STAT1) Hyperomorphic Mutation Presenting With Pneumocystis Jirovecii Pneumonia (PJP), Chronic Mucocutaneous Candidiasis (CMC), and Combined Immunodeficiency**
Dr. Matthew C. Altman, MD¹, Dr. David Hagin, MD¹, Dr. David Buchbinder, MD², Dr. Suzanne Skoda-Smith, MD³, Dr. Hans D.

- Ochs, MD¹ and Dr. Troy R. Torgerson, MD, PhD¹, ¹University of Washington, Seattle, WA, ²Children's of Orange County, ³Seattle Childrens Hospital, Seattle, WA
- 867 Infections In Mannose-Binding Lectin Deficiency Patients**
Dr. Mary K. Paul, MD^{1,2}, Dr. Christopher Chang, MD, PhD, FAAAAI², Dr. Magee DeFelice, MD³, Dr. Gang Ye, PhD⁴ and Dr. Sam Soundar, PhD⁵, ¹Thomas Jefferson University Hospital, Philadelphia, PA, ²Alfred I duPont Hospital for Children, Wilmington, DE, ³Nemours/AI duPont Hospital for Children, Philadelphia, PA, ⁴Nemours, Orlando, FL, ⁵Nemours
- 868 LRBA Causes Immunodeficiency and Autoimmunity By Deregulating NFkB-Mediated Multiple Immune Effectors Critical For B Cell Activation**
Dr. Jia-Wang Wang, PhD¹, Mrs. Michelle A. Reiser, MS¹, Mrs. Kunyu Li, BS¹, Ms. Eileen Rifkin¹, Ms. Bangmei Wang¹, Dr. Narasaiiah Kolliputi, PhD¹ and Dr. Richard F. Lockey, MD^{1,2}, ¹Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida, Morsani College of Medicine, Tampa, FL, ²James A. Haley Veterans' Affairs Hospital, Tampa, FL
- 869 Giscelli Syndrome: A Case Treated With a Hematopoietic Stems Cells From a Cord Blood**
Dr. Marisol Rico-Arroyo, Instituto Mexicano del Seguro Social
- 870 Fungal Granuloma and Chronic Mucocutaneous Candidiasis Due To Autosomal Dominant Gain Of Function STAT1 Mutation**
Dr. Nauman Salim, MBBS, MD, University of South Florida, Tampa, FL and Dr. Jennifer Leiding, MD, University of South Florida, St. Petersburg, FL
- 871 Impaired T-Independent IgM Responses Due To Irak-4-, MyD88 Deficiency Or Splenectomy**
Dr. Paul J. Maglione, MD, PhD¹, Lin Radigan¹, Sam Black¹, Jessica Overbey¹, Dr. Emelia Bagiella¹, Dr. Isabelle Meyts², Prof. Jean-Laurent Casanova, MD, PhD^{3,4}, Dr. Capucine Picard, MD, PhD³ and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI¹, ¹Mount Sinai Medical Center, New York, NY, ²University Hospitals Leuven, Belgium, ³Hopital Necker-Enfants Malades, Paris, France, ⁴Rockefeller University, New York, NY
- 872 Intestinal Perforation and Non-Tuberculous Mycobacterial Peritonitis In a Patient With Interleukin-1 Receptor Associated Kinase 4 Deficiency**
Dr. Hana B. Niebur, MD, Dr. Nathan Tang, MD, FAAAAI and Dr. Jennifer Leiding, MD, University of South Florida, St. Petersburg, FL
- 873 Suspected Non-Infectious Prosthetic Valve Inflammatory Dehiscence In X-Linked Chronic Granulomatous Disease**
Dr. Monica Bhagat, MD¹, Dr. Joshua A. Steinberg, MD², Dr. Frank Silvestry, MD³, Dr. Lea Surrey, MD³, Dr. Andrea J. Apter, MD MA MSc FAAAAI¹, Dr. Patricia A. Takach, MD, FAAAAI¹ and Dr. Benjamin P. Soule, MD¹, ¹University of Pennsylvania, Philadelphia, PA, ²Medical College of Wisconsin, Milwaukee, WI, ³UPENN, Philadelphia, PA
- 873A The Effects Of Anti-Seizure Medications On Patients With Antibody Deficiency Syndrome**
Dr. Tatyana Gavrilova, MD and Dr. Harumi Jyonouchi, MD, Rutgers University of Medicine and Dentistry, Newark, NJ
- Gonçalves, MD³, Dr. Inês Camelo Nunes² and Prof. Dirceu Sole, MD, PhD³, ¹Division of Allergy and Clinical Immunology, Dept of Pediatrics, Escola Paulista de Medicina, Federal University of São Paulo, São Paulo, Brazil, São Paulo, Brazil, ²Universidade Federal de São Paulo, São Paulo, Brazil, ³Federal University of Sao Paulo, Sao Paulo, Brazil
- 875 Atopic Associations In Asthmatic Patients Readmitted Within 30 Days To The Hospital**
Dr. Larisa Buyantseva, MD, MS, Dr. Melissa Rossi, Prof. Jason Liao, PhD and Dr. Timothy Craig, D.O., Penn State University, Hershey, PA
- 876 Pediatric Asthma Associated With Fungal Exposure**
Dr. Cecilia Nguyen, MD¹, Dr. Christina E. Ciaccio, MD, FAAAAI² and Dr. Charles Barnes, PhD², ¹Children's Mercy Hospitals and Clinics, ²Children's Mercy Hospital, Kansas City, MO
- 877 Assessment Of Factors Associated With PPV23 Vaccine Uptake Among Young Adults With Asthma In Olmsted County, MN**
Maria J. Bachman, Medical Student¹, Joshua Gauger, Medical Student², Dr. Chriss Derauf, MD³, Dr. Slavica Katusic, MD³, Jen Rand-Weaver³, YuBin Choi³, Elizabeth Krusemark³ and Dr. Young J. Juhn, MD, MPH³, ¹Mayo Medical School, Rochester, MN, ²Mayo Medical School, ³Dept of Pediatric and Adolescent Medicine, Mayo Clinic, Rochester, MN
- 878 Clinical Effectiveness In Allergic Airway Disease Of Oriton IgE Chemiphar™: A Rapid Determination System Of Allergen-Specific IgE**
Dr. Tomoyuki Soma, MD^{1,2}, Dr. Ai Masumoto², Dr. Takehito Kobayashi, MD², Dr. Atsushi Kamijyo, MD², Dr. Yoshitaka Uchida^{1,2}, Prof. Kouichi Hagiwara, MD¹, Prof. Minoru Kanazawa, MD¹ and Prof. Makoto Nagata, MD^{1,2}, ¹Department of Respiratory Disease, Saitama Medical University, Japan, ²Allergy Center, Saitama Medical University, Japan
- 879 Gender Differentially Contributes To Airway Hyperresponsiveness In Adult Asthmatics**
Dr. Jeong-Hee Choi, MD¹, Dr. Cheol-Hong Kim, MD², Prof. In-Gyu Hyun, MD³, Dr. Joo-Hee Kim, MD⁴, Dr. Tae-Rim Shin, MD⁵ and Dr. Sang-Myeon Park, MD⁵, ¹Dept. of Pulmonology and Allergy, Hallym University Dongtan Sacred Heart Hospital, Hwaseong, South Korea, ²Dept. of pulmonology and Allergy, Hallym University Dongtan Sacred Heart Hospital, ³Hallym University Dongtan Sacred Heart Hospital, ⁴Hallym University School of Medicine, Anyang, ⁵Hallym University Kangnam Sacred Heart Hospital
- 880 Prevalence Of Sleep Disorders In Children With Asthma and Its Association With The Level Of Control Of The Disease, Smoking and Obesity**
Dr. Lorena Rangel-Garza, MD¹, Prof. Sandra N. Gonzalez-Diaz, MD, PhD, FAAAAI¹, Dr. Alejandra Macias-Weinmann, MD², Prof. Alfredo Arias-Cruz, MD, FAAAAI¹, Dr. Maria Del Carmen Zarate-Hernandez, MD³, Dr. Idalia V. Yanez-Perez, MD⁴ and Dr. Hilda Hernandez-Sanchez, MD⁴, ¹University Hospital Dr. Jose Eleuterio Gonzalez, UANL, Monterrey, Mexico, ²Hospital Universitario UANL, Monterrey, N.L., Mexico, ³University Hospital, Monterrey, Mexico, ⁴Regional Center of Allergy and Clinical Immunology, University Hospital "Dr. Jose Eleuterio Gonzalez", Monterrey, Mexico
- 881 Asthma and Allergic Diseases Of Preschool Children In Korea: Findings From The Pilot Study For The Korean Surveillance Survey For Childhood Asthma**
Prof. Ji Tae Choung, MD, Korea Univ. Medical Center, Seoul, Prof. Sungchul Seo, The Environmental Health Center for Asthma, Korea University, Seoul, Dr. YongMin Cho, The environmental health center for asthma, Dr. Young Yoo, MD, PhD, Department of Pediatrics, College of Medicine, Korea University, Seoul, South Korea; Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY and Dr. Wonsuck Yoon, Department of Life Science and Biotechnology, Seoul, South Korea

Epidemiology and Risk Factors of Asthma

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Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 874 Risk Factors Associated With The Development Of Asthma and Allergic Rhinitis Among Adolescents Living In São Paulo – Brazil**
Dr. Fernanda Patini Furlan¹, Dr. Djanira Andrade², Danielli Christinni Bichuete-Silva, MD³, Dr. Tessa Rachel Tranquilini

882 Atopic Characteristics Of Patients With Paroxysmal Vocal Cord Dysfunction

Casey Curtis, MD^{1,2}, Meagan W. Shepherd, MD^{1,2}, Gary Phillips, M.A.S.³ and Princess U. Ogbogu, MD, FAAAAI^{1,2}, ¹Wexner Medical Center at the Ohio State University, Columbus, OH, ²Nationwide Children's Hospital, Columbus, OH, ³Wexner Medical Center at The Ohio State University, Columbus, OH

883 Relationship Of Allergen Sensitization and LUNG Function In Adults Patients With Asthma In Allergy Clinic In Monterrey, Mexico

Dr. Hilda Hernandez Sanchez, MD, Prof. Sandra N. Gonzalez-Diaz, MD, PhD, FAAAAI, Prof. Alejandra Macias-Weinmann, MD, Prof. Alfredo Arias-Cruz, MD, FAAAAI, Dr. Idalia Vanessa Yanez-Perez, MD and Dr. Lorena Rangel-Garza, MD, University Hospital Dr. Jose Eleuterio Gonzalez, UANL, Monterrey, Mexico

884 Targeting Patient Education: Correlating Fluctuating Pollen Counts With Patient Online Inquiries Into Asthma and Allergic Rhinitis

Dr. John M. Kern, D.O.¹, Dr. Leonard Bielory, MD, FAAAAI^{2,3} and Mr. Spencer H. Luster^{3,4}, ¹Rutgers University - NJMS, oceanport, NJ, ²Robert Wood Johnson University Hospital, New Brunswick, NJ, ³STARx Allergy and Asthma Center, Springfield, NJ, ⁴University of Pennsylvania, Philadelphia, PA

Eosinophilic Gastrointestinal Diseases

5206

Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

886 Elevated Exhaled Nitric Oxide Levels In Eosinophilic Esophagitis Patients With and Without Atopy

Michael Kagen, M.D.¹, Zainab Kagen, MD², Prof. Steve L. Kagen, MD, FAAAAI³ and Joe Zondlo, M.D.³, ¹University of Tennessee College of Medicine-Chattanooga, Chattanooga, TN, ²University of Tennessee College of Medicine-Chattanooga, TN, ³Kagen Allergy Clinic, Appleton, WI

887 Older Mice Intranasally Sensitized with Aspergillus Fumigatus Develop Stronger Eosinophilic Esophageal Inflammation Compared to Their Younger Counterparts

Dr. Antonella Cianferoni, MD, PhD¹, Simona Barni, MD², Cara Smith, BS³, Valsamma Abraham, PhD⁴, Peng Guan, BS³, Dr. Francesca Saretta, MD⁵, Katie Ruyman, BS², Hamid Bassiri, MD, PhD³, Dr. Kim E. Nichols, MD⁶ and Dr. Jonathan M. Spergel, MD, PhD, FAAAAI^{3,7}, ¹The Children's Hospital of Philadelphia, ²University of Florence Italy, Italy, ³Children's Hospital of Philadelphia, ⁴University of Pennsylvania, ⁵Ospedale Di Palmanova, ASS 5 Bassa Friulana, Pagnacco, Italy, ⁶Children's Hospital of Philadelphia, Philadelphia, PA, ⁷The Children's Hospital of Philadelphia, Philadelphia, PA

888 Cripto-1 Is Elevated In Pediatric Subjects With Eosinophilic Esophagitis

Lisa Beppu, BS¹, Arjun Andrew Anilkumar, BS², Richard Kurten, PhD³, Ranjan Dohil, MD⁴, David Broide, MB ChB² and Seema Sharma Aceves, MD, PhD, FAAAAI⁵, ¹University of California San Diego, Department of Pediatrics, Division of Allergy and Immunology, ²University of California San Diego, Department of Medicine, Division of Allergy and Immunology, ³University of Arkansas for Medical Sciences, Little Rock, AR, ⁴University of California San Diego, Rady Children's Hospital, Department of Pediatrics, Division of Gastroenterology, ⁵Pediatrics, University of California San Diego, La Jolla, CA

889 Interleukin-33 and Thymic Stromal Lymphopoietin Are Preferentially Elevated In The Sera Of Infants With Eosinophilic Gastroenteritis

Dr. Ichiro Nomura, MD, PhD^{1,2}, Dr. Akio Matsuda, PhD², Dr. Tetsuo Shoda, MD², Dr. Hideaki Morita, MD., PhD.², Dr. Katsuhiko

Arai, MD³, Dr. Hirota Shimizu, MD³, Dr. Yoshiyuki Yamada, MD, PhD⁴, Dr. Yukihiko Ohya, MD, PhD¹, Dr. Hirohisa Saito, MD., PhD.² and Dr. Kenji Matsumoto, MD, PhD², ¹Division of Allergy, National Center for Child Health and Development, Tokyo, Japan, ²Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan, ³Division of Gastroenterology, National Center for Child Health and Development, Tokyo, Japan, ⁴Gunma Children's Medical Center, Shibukawa, Japan

890 Comprehensive Analysis Of Offending Milk Protein Components In Non-IgE-Mediated Gastrointestinal Food Allergies By Antigen-Specific Lymphocyte Proliferation Test

Dr. Tetsuo Shoda, M.D., Dr. Ichiro Nomura, MD, PhD, Dr. Hideaki Morita, MD., PhD., Dr. Akio Matsuda, PhD, Dr. Hirohisa Saito, MD., PhD. and Dr. Kenji Matsumoto, MD, PhD, Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan

891 Milk Elimination Diet For Treatment Of Eosinophilic Esophagitis

Elizabeth Erwin, MD¹, Patrice Kruszewski², Dr. John Russo, M.D.¹ and Thomas A.E. Platts-Mills, MD, PhD, FAAAAI³, ¹Nationwide Children's Hospital, Columbus, OH, ²Nationwide Children's Hospital, ³Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA

892 Pediatric Eosinophilic Esophagitis: A 10-Year Experience At a Canadian Tertiary Care Centre

Dr. Jason A. Ohayon, MD¹, Perri R. Tutelman², Dr. Jefferson Terry, MD, PhD³ and Dr. Mary E. Sherlock, MB BCh, BAO, PhD², ¹Department of Pediatrics, McMaster Children's Hospital, McMaster University, Hamilton, ON, Canada, ²Department of Pediatric Gastroenterology and Nutrition, McMaster Children's Hospital, McMaster University, Hamilton, ON, Canada, ³Department of Pathology and Molecular Medicine, McMaster Children's Hospital, McMaster University, Hamilton, ON, Canada

893 Clinical Characteristics Of Eosinophilic Esophagitis - a Case Series Of 30 Patients

Dr. Susana D. Piedade¹, Dr. Diana Silva^{1,2}, Dr. Bruno Simões^{1,3}, Dr. Ângela Gaspar¹, Dr. Sandra Morgado⁴, Dr. Filipa Santos⁵ and Dr. Mário Morais-Almeida¹, ¹Immunoallergy Department, Hospital CUF Descobertas, Lisbon, Portugal, ²Immunoallergy Department, Hospital São João, Oporto, Portugal, ³Pediatrics Department, Hospital Faro, Faro, Portugal, ⁴Gastroenterology Unit, Hospital CUF Descobertas, Lisbon, Portugal, ⁵Pediatrics Department, Hospital CUF Descobertas, Lisbon, Portugal

894 Characteristics Of Eosinophilic Esophagitis Among Children Living In Rural, Southern United States

Ms. Erin O'Brien^{1,2}, Dr. Troy Gibbons, MD^{1,2}, Dr. Amy M. Scurllock, MD³, Dr. Jennifer Olivier, MD^{1,2}, Mallikarjuna Rettiganti, PhD^{1,2}, Maria Melguizo Castro^{1,2}, Ms. Peggy L. Chandler, APN^{1,2}, Audrey Fendley, RD², Dr. Helen Casteel, MD^{1,2}, Dr. Mar-yelle VonLanthen, MD^{1,2}, Dr. Stephen Fiedorek, MD^{1,2}, Dr. Tamara T. Perry, MD^{1,2}, Stacie M. Jones, MD^{3,4} and Dr. Robbie D. Pesek^{1,2}, ¹University of Arkansas for Medical Sciences, Little Rock, AR, ²Arkansas Children's Hospital, Little Rock, AR, ³University of Arkansas for Medical Sciences and Arkansas Children's Hospital, Little Rock, AR, ⁴Arkansas Children's Hospital Research Institute, Little Rock, AR

895 Failure To Thrive In a Pediatric Cohort With Eosinophilic Esophagitis

Dr. Brenda Paquet, MD, FRCPC¹, Dr. Philippe Bégin, MD, MSc FRCPC¹, Louis P. Paradis, MD FRCPC FAAAAI², Dr. Eric Drouin, MD FRCPC¹ and Anne M. Des Roches, MD FRCPC FAAAAI², ¹Centre Hospitalier Universitaire Ste-Justine, Montreal, QC, Canada, ²Centre Hospitalier Universitaire Sainte-Justine, Montreal, QC, Canada

- 896 Eosinophilic Esophagitis In The Puerto Rican Pediatric Population**
Dr. Carmen M. Pimentel, MD, Dr. Angel M. Rivera, MD, Dr. Iona K. Malinow, MD, Dr. Cristina J. Ramos, MD, Dr. Anardi Agosto-Mujica, MD, Dr. Rita Diaz, MD and Dr. Sylvette Nazario, MD, University of Puerto Rico School of Medicine, San Juan, PR
- 897 Challenges With Measurement Of IgE Antibodies To Minor Components In Food Allergy: Eosinophilic Esophagitis, Peanut Allergy, and Delayed Anaphylaxis To Mammalian Meat**
Anubha Tripathi, MD¹, Lisa J. Workman, BA¹, Scott Commins, MD, PhD¹, Barrett Barnes, MD², Prof. Robert G. Hamilton, PhD D.ABMLI FAAAAI³, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI¹ and Elizabeth Erwin, MD⁴, ¹Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, ²Division of Pediatric Gastroenterology, University of Virginia Health System, Charlottesville, VA, ³Johns Hopkins University School of Medicine, Baltimore, MD, ⁴Nationwide Children's Hospital, Columbus, OH
- 898 Serum IgE To Allergen Components In Patients With Eosinophilic Esophagitis**
Maria Slack, MD¹, Princess U. Ogbogu, MD, FAAAAI², Anubha Tripathi, MD³, Lisa J. Workman, BA³, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI³ and Elizabeth Erwin, MD⁴, ¹Nationwide Children's Hospital, Columbus, OH, ²Wexner Medical Center at the Ohio State University, Columbus, OH, ³Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, ⁴Nationwide Children's Hospital
- 899 Eosinophilic Gastroenteritis Due To Egg Allergy Presenting As Acute Pancreatitis**
Dr. Kevin Tse, MD, UCSD and Dr. Sandra C. Christiansen, MD, FAAAAI, Southern CA Permanente Med Grp, San Diego, CA
- 900 Patient Ratings Of Various Eosinophilic Esophagitis Treatment Options**
Dr. Samantha K. Lin, MD, Dr. Neelul Kalra, MD and Dr. Gisoo Ghafari, MD, FAAAAI, Penn State Hershey Medical Center, Hershey, PA
- 901 Eosinophilic Esophagitis and Serum Eotaxin-3 Levels: A Non-Invasive Method To Monitor Disease Activity**
Dr. Cristina Jimenez-Aponte¹, Dr. Jose Torres-Silva¹, Dr. Eric Gonzalez-Hernandez¹, Dr. Liza Gonzalez-Benitez¹, Dr. Mairim Wiscovich-Torres¹, Dr. Carlos Camacho¹ and Dr. Vylma Velazquez, MD², ¹Hospital Episcopal San Lucas-Ponce, ²Hospital Episcopal San Lucas, Ponce, PR
- 902 Evaluation Of Antigenic Triggers and Etiologies In Eosinophilic Esophagitis: A Single Center Experience**
Dr. Tanvi Patel, University of Florida, Gainesville, FL and Dr. Sarah Glover, University of Florida at Gainesville, Gainesville, FL
- 903 Eosinophilic Esophagitis and Selective IgA Deficiency. A New Combined Disorder**
Dr. Eric Gonzalez Hernandez¹, Dr. Vylma Velazquez, MD², Dr. Carlos Camacho³ and Dr. Sheila Capre¹, ¹Hospital Episcopal San Lucas, ²Hospital Episcopal San Lucas, Ponce, PR, ³Hospital Episcopal San Lucas-Ponce
- 905 Rituxan Hypersensitivity and Management**
Dr. Johnson T. Wong, MD, FAAAAI¹, Dr. Aleena Banerji, MD¹, Dr. Timothy P. Lax, MD², Dr. Aidan Long, MD, FAAAAI¹, Dr. Michael T. Wilson, MD, PhD¹ and Dr. Caroline Sokol, MD, PhD², ¹Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, ²Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, Boston, MA, ³Massachusetts General Hospital
- 906 Diagnostic Evaluation Of Hypersensitivity Reactions To Beta-lactam Antibiotics In A Large Population Of Children**
Dr. Maria J Torres, MD, PhD¹, Dr. Maria Angeles Zambonino², Dr. Jose Luis Corzo, MD³, Dr. Candelaria Muñoz³, Dr. Gloria Requena³, Dr. Adriana Ariza, PhD⁴, Dr. Cristobalina Mayorga, PhD⁵, Dr. Antonio Urda³ and Dr. Miguel Blanca, MD, PhD¹, ¹Allergy Service, Carlos Haya Hospital, Málaga, Spain, ²Allergy Service, Carlos Haya Hospital, Málaga, Spain, Málaga, Spain, ³Pediatric Service, Carlos Haya Hospital, Málaga, Spain, ⁴Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain, ⁵Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - IBIMA, Málaga, Spain
- 907 Clinical Presentation and Outcomes Of Children Undergoing Evaluation For Drug Allergy**
Dara Mairiang, MD, Dr. Wiparat Manuyakorn, MD, Wasu Kamchaisatian, MD, Soamarat Vilaiyuk, MD and Suwat Benjaponpitak, MD, Division of Pediatric Allergy/Immunology/Rheumatology, Department of Pediatrics, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand
- 908 Analysis Of Drug Hypersensitivity Reactions In A Large Serie Of Children**
Dr. Maria Angeles Zambonino¹, Dr. Candelaria Muñoz², Dr. Jose Luis Corzo, MD², Dr. Gloria Requena², Dr. Adriana Ariza, PhD³, Dr. Cristobalina Mayorga, PhD³, Dr. Antonio Urda², Dr. Miguel Blanca, MD, PhD¹ and Dr. Maria J Torres, MD, PhD¹, ¹Allergy Service, Carlos Haya Hospital, Málaga, Spain, ²Pediatric Service, Carlos Haya Hospital, Málaga, Spain, ³Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain
- 909 Assessing IgE-Mediated Reactions In Children Presenting To An Allergy Clinic With a Suspected Antibiotic Allergy**
Mr. Christopher Mill, BSc¹, Dr. Marie-Noel Primeau, MD², Dr. Christine Lejtenyi, MD³, Dr. Elaine J. Medoff³, Ms. Nofar Kimchi⁴ and Dr. Moshe Ben-Shoshan, MD, MSc^{5,6}, ¹Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, ²McGill University Health Center, Montreal, QC, Canada, ³Montreal Children's Hospital, Montreal, QC, Canada, ⁴Technion American Medical Students Program, Israel, ⁵Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, ⁶Montreal Children's Hospital, Montreal, Canada
- 910 Hypersensitivity Drug Reactions (HDR) In Latin America. Similarities and Differences Between Children and Adults**
Dr. Ricardo Cardona-Villa, MD¹, Dr. Edgardo J. Jares, MD², Dr. Maximiliano Gómez³, Dr. Luis Felipe C. Ensina, MD⁴, Dr. Mario Sánchez-Borges, MD, FAAAAI⁵, Dr. Alfredo Arias Cruz⁶, Dr. Carlos Serrano⁷, Dr. Mabel Noemi Cuello, MD⁸, Ivan Cherez⁹, Dr. Andrea Znacchi¹⁰, Prof. Alicia De Falco¹¹, Dr. Silvana Monsell², Dr. Adolfo Salvatierra¹², Dr. Susana Barayzarra¹⁰, Dr. Susana Diez-Zuloaga¹, Dr. Blanca Maria Morfin-Maciel, MD¹³, Dr. Paola Toche Pinaud¹⁴, Dr. Sandra González Díaz⁶ and Dr. Juan F. Schuhl, MD, FAAAAI¹⁵, ¹Universidad de Antioquia, Medellin, Colombia, ²C.M.P. SA, Buenos Aires, Argentina, ³Hospital San Bernardo, Salta, Argentina, ⁴Universidade Federal de São Paulo, São Paulo, Brazil, ⁵Clinica El Avila, 6a transversal Altamira, piso 8,

Drug Allergy

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Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 904 Cephalosporin Cross-Reactivity In Skin Test**
Dr. Jong-Myung Lee, MD^{1,2} and Dr. Min-Hye Kim^{1,3}, ¹Regional Pharmacovigilance Center, Kyungpook National University Hospital, Daegu, South Korea, ²Department of Internal Medicine, Kyungpook National University School of Medicine, Daegu, South Korea, ³Department of Internal Medicine, Kyungpook National University School of Medicine, Daegu, South Korea

- consultorio 803, Caracas., Caracas, Venezuela, ⁶Hospital Universitario, Monterrey, Mexico, ⁷Fundación Valle del Lili, Cali, Colombia, ⁸Consultorios San Juan, San Juan, Argentina, ⁹Respiralab - Hospital Kennedy, Guayaquil, Ecuador, ¹⁰Nuevo Hospital San Roque, Córdoba, Argentina, ¹¹Universidad Nacional de La Plata, La Plata, Argentina, ¹²Fundair, San Luis, Argentina, ¹³Hospital Mocel, Mexico City, Mexico, ¹⁴Clínica Las Condes, Santiago, Chile, ¹⁵British Hospital, Montevideo, Uruguay
- 911 Copy Number Variations In ALOX5 and PTGER1 Genes Are Associated With Susceptibility To AERD and Mnsaid-UA**
Mrs. Maria Del Carmen Plaza Seron, Bsc.¹, Dr. Pedro Ayuso Parejo, PhD¹, Dr. Natalia Blanca-López, MD, PhD¹, Dr. Inmaculada Doña, MD, PhD², Dr. Jose A Cornejo-Garcia, PhD³, Dr. María José Torres, MD, PhD², Dr. Javier Fernández⁴, Dr. Jose Julio Laguna, MD, PhD⁵, Veronique Godineau³, Ms. Miriam Osorio⁶, Mrs. Luisa Galindo, RN², Dr. Gabriela Canto, MD, PhD¹ and Dr. Miguel Blanca, MD, PhD², ¹Allergy Service, Infanta Leonor Hospital, Madrid, Spain, ²Allergy Service, Carlos Haya Hospital, Málaga, Spain, ³Research Laboratory, Carlos Haya Hospital, Malaga, Spain, ⁴UMH Alicante G.University Hospital - Allergy Sect., Alicante, Spain, ⁵De La Cruz Roja Hospital, Madrid, Spain, ⁶Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain
- 912 Association Study Of Genes Involved In Mast Cell Activation and Mnsaid-UA**
Dr. Pedro Ayuso Parejo, PhD¹, Mrs. Maria del Carmen Plaza Serón, Bsc¹, Dr. Inmaculada Doña, MD, PhD², Dr. Natalia Blanca-López, MD, PhD¹, Dr. Jose A Cornejo-Garcia, PhD³, Dr. Maria J Torres, MD, PhD², Dr. Javier Fernández⁴, Dr. Jose Julio Laguna, MD, PhD⁵, Ms. Miriam Osorio⁶, Veronique Godineau³, Mrs. Luisa Galindo, RN², Dr. Cristobalina Mayorga, PhD³, Dr. Gabriela Canto, MD, PhD¹ and Dr. Miguel Blanca, MD, PhD², ¹Allergy Service, Infanta Leonor Hospital, Madrid, Spain, ²Allergy Service, Carlos Haya Hospital, Málaga, Spain, ³Research Laboratory, Carlos Haya Hospital, Malaga, Spain, ⁴UMH Alicante G.University Hospital - Allergy Sect., Alicante, Spain, ⁵De La Cruz Roja Hospital, Madrid, Spain, ⁶Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain
- 913 Non-Steroidal Antiinflammatory Drugs (NSAIDs)-Induced Acute Urticaria: A Genome-Wide Association Study In The Spanish Population**
Dr. Jose A Cornejo-Garcia, PhD¹, Dr. Mike Lee², Dr. Natalia Blanca-López, MD, PhD³, Dr. Lih-Bang Liou⁴, Dr. Chien-Hsiun Chen⁵, Dr. Inmaculada Doña, MD, PhD⁶, Veronique Godineau¹, Dr. Jose Julio Laguna⁷, Dr. F. Javier Fernandez, MD, PhD⁸, Dr. Pedro Ayuso Parejo, PhD³, Mrs. Maria del Carmen Plaza-Serón, Bsc³, Dr. Gabriela Canto, MD, PhD³ and Dr. Miguel Blanca, MD, PhD⁶, ¹Research Laboratory, Carlos Haya Hospital, Malaga, Spain, ²Laboratory for International Alliance on Genomic Research, RIKEN Center for Integrative Medical Sciences, Yokohama Kanagawa, Japan, ³Allergy Service, Infanta Leonor Hospital, Madrid, Spain, ⁴Division of Rheumatology, Allergy and Immunology, Chang Gung Memorial Hospital at Lin-kou, Kwei-san, Tao-yuan, Taiwan, ⁵Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, ⁶Allergy Service, Carlos Haya Hospital, Málaga, Spain, ⁷Hospital De La Cruz Roja., Madrid, Spain, ⁸UMH Alicante G.University Hospital - Allergy Sect., Alicante, Spain
- 914 Tolerance To COX-2 Inhibitors In Children With Multiple Hypersensitivity To Non- Steroidal Anti-Inflammatory Drugs**
Dr. Jose Luis Corzo Higuera, MD¹, Dr. Maria Angeles Zambonino², Dr. Candelaria Muñoz¹, Dr. Cristobalina Mayorga, PhD³, Dr. Gloria Requena¹, Dr. Antonio Urda¹, Dr. Miguel Blanca, MD, PhD⁴ and Dr. Maria J Torres, MD, PhD⁴, ¹Pediatric Service, Carlos Haya Hospital, Málaga, Spain, ²Allergy Service, Carlos Haya Hospital, Málaga, Spain, ³Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain, ⁴Allergy Service, Carlos Haya Hospital, Málaga, Spain
- 915 Aspirin Allergy In a High Risk VA Population and Potential Benefit From Aspirin Desensitization**
Bhavisha Patel, MD^{1,2}, Joseph Karls², Sandra Tompkins², Dawn Nyland², Jo Ann Clough², Jane Ludwig² and Sameer K. Mathur, MD, PhD, FAAAAI^{1,2}, ¹University of Wisconsin School of Medicine and Public Health, Madison, WI, ²William S. Middleton Veterans Hospital, Madison, WI
- 916 Novel Protocol For Successful Aspirin Desensitization In a Patient With Laryngeal Angioedema To Aspirin**
Dr. Nikki Garg, MD, Dr. Pratik Patel, MD and Dr. Sindhura Bandi, MD, Rush University Medical Center, Chicago, IL
- 917 Allergy To Beta-Lactams In Patients Consulting Allergology Center Of The Antioquia University, Colombia**
Dr. Elizabeth Lopez¹, Dr. Kaddy Juliana Beltran¹, Dr. Jorge Sanchez¹ and Dr. Ricardo Cardona-Villa, MD², ¹Universidad de Antioquia, Colombia, ²Universidad de Antioquia, Medellin, Colombia
- 918 Effect Of Penicillin Allergy On Outpatient Antibiotic Prescriptions At VA Hospital**
Mark Biagtan, MD^{1,2}, Bryan Babler, BS Pharm RPh², Sujani Kakumanu, MD^{1,2} and Sameer K. Mathur, MD, PhD, FAAAAI^{1,2}, ¹University of Wisconsin School of Medicine and Public Health, Madison, WI, ²William S. Middleton Veterans Hospital, Madison, WI
- 919 Value Of Clavulanic Acid In Basophil Activation Test For Evaluating Immediate Reactions To The Combination Amoxicillin-Clavulanic Acid**
Dr. Cristobalina Mayorga, PhD¹, Dr. Adriana Ariza, PhD², Dr. Inmaculada Doña, MD, PhD³, Dr. Maria Angeles Zambonino³, Dr. Maria Isabel Montañez, PhD¹, Dr. Maria Salas, MD, PhD³, Ms. Maria Dolores Ruiz³, Ms. Lidia Melendez, Lab. Tech.¹, Mrs. Maria D Cañamero³, Dr. Miguel Blanca, MD, PhD³ and Dr. Maria J Torres, MD, PhD³, ¹Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - IBIMA, Málaga, Spain, ²Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain, ³Allergy Service, Carlos Haya Hospital, Málaga, Spain
- 920 Persistence Of Penicillin Allergy Label Despite Documented Tolerance**
Matthew Feldman, MD and Dr. David A. Khan, MD, FAAAAI, University Texas SW Medical Center, Dallas, TX
- 921 Allergy To Betalactams In Brazil: Placebo Effect Or Misdiagnosis?**
Dr. Manoela Crespo-Magalhães¹, Dr. Marcelo Vivolo Aun, MD¹, Dr. Roberta Almeida-Castro², Dr. Marisa Rosimeire Ribeiro, MD³, Dr. Laila Sabino Sabino Garro, MD, PhD³, Prof. Jorge Kalil, MD, PhD¹, Prof. Antonio Abílio Motta, MD, PhD³ and Prof. Pedro Giavina-Bianchi, MD, PhD, FAAAAI¹, ¹Clinical Immunology and Allergy Division, University of Sao Paulo, Sao Paulo, Brazil, ²Clinical Immunology and Allergy Division, University of Sao Paulo, Sao paulo, Brazil, ³Clinical Immunology and Allergy Division, University of Sao Paulo, Sao Paulo, Brazil
- 922 Prevalence Of Reported Penicillin Allergy In a Tertiary Allergy Immunology Clinic In The United States**
Dr. Sara M. May, MD, Andrew Nickles, MD and Dr. Michael Park, MD, FAAAAI, Mayo Clinic, Rochester, MN
- 923 Successful Oxacillin Desensitization With Interrupted Dosing Versus Continuous Infusion**
Dr. Melinda Brskett, MD, UCLA Med Center - Mattel Children's Hospital, Los Angeles, CA and Dr. Monika Saedian, MD, University of California, Los Angeles
- 924 IgE To Penicillins With Different Specificities Can Be Identified By a Multi-epitope Macromolecule. Bihaptenic Penicillin Structures and IgE Specificities**
Dr. Adriana Ariza, PhD¹, Dr. Cristobalina Mayorga, PhD², Dr. Maria José Jose Torres, MD, PhD³, Dr. Maria Isabel Montañez,

- PhD², Dr. Ezequiel Pérez-Inestrosa, PhD⁴, Dr. Antonio Jesús Ruiz-Sánchez, PhD⁵, Dr. Rosa María Rodríguez-Guéant, MD, PhD⁶, Dr. Tahía Fernández, PhD⁷, Dr. Jean Louis Guéant⁶ and Dr. Miguel Blanca, MD, PhD³, ¹Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain, ²Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - IBIMA, Málaga, Spain, ³Allergy Service, Carlos Haya Hospital, Málaga, Spain, ⁴Andalusian Centre for Nanomedicine and Biotechnology, BIONAND, Malaga, Spain, ⁵Andalusian Centre for Nanomedicine and Biotechnology-BIONAND, and Department of Organic Chemistry, Faculty of Sciences, University of Malaga, Málaga, Spain, ⁶Laboratory of Cellular and Molecular Pathology in Nutrition, Faculty of Medicine, University of Nancy, Nancy, France, ⁷Research Laboratory - FIMABIS Foundation, Málaga, Spain
- 925 Cephalosporin Prescribing Habits In Penicillin Allergic Patients**
Dr. Shannon D. Tiedeken, MD, Nemours, A.I. duPont Hospital for Children, Conshohocken, PA, Dr. Christopher Chang, MD, PhD, FAAAAI, Alfred I duPont Hospital for Children, Wilmington, DE and Dr. Gang Ye, PhD, Nemours, Orlando, FL
- 926 Radiocontrast Media Reactions: Rectifying Misconceptions About Shellfish Allergy and Iodine “Allergy” In An Academic Institution**
Dr. Amber N. Pepper, MD¹, Dr. Emma Westermann-Clark, MD, MA¹, Dr. Neetu Talreja, MD² and Dr. Richard F. Lockey, MD², ¹Department of Internal Medicine, University of South Florida Morsani College of Medicine, Tampa, FL, ²Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida Morsani College of Medicine and James A. Haley Veterans’ Affairs Hospital, Tampa, FL
- 927 Clinical Predictors Of The Outcome Of Medication Challenges**
Dr. Farah Khan, DO^{1,2}, Dr. Christopher Chang, MD, PhD, FAAAAI² and Dr. Gang Ye, PhD³, ¹Thomas Jefferson University Hospital, Philadelphia, PA, ²Alfred I duPont Hospital for Children, Wilmington, DE, ³Nemours, Orlando, FL
- 928 Clinical Experience With Oxaliplatin (O) Desensitization (OD): A Case Series**
Dr. Adam Updegraff, DO, University of South Florida, Tampa, FL and Dr. Devang R. Doshi, MD, FAAAAI, William Beaumont Hospital, Royal Oak, MI
- 929 Clinical Value Of a Negative Skin Test To Contrast Radio Media (CR) In Further Exposures**
Dr. Luiz C G Arcanjo, Dr. Tania M T Gonçalves, Flavia C Loyola, Matheus Ribeiro, Alfredo Alves Neto, Tatiana L Carvalho and Dr. Jose Luiz M. Rios, MD, PhD, Policlínica Geral do Rio de Janeiro, Brazil
- 930 Perioperative Reactions: Are They So Infrequent?**
Dr. Claude M. Urbain, MD¹, Dr. Alberto Lafuente, MD², Dr. Gracia Javaloyes, MD, PhD¹, Dr. Paula Cabrera-Freitag, MD, PhD³, Dr. Juan De La Borbolla Moran, MD⁴, Dr. M Jose Goikoetxea, Ph.D, MD⁴, Dr. Rafael Moncada, MD², Dr. Maria L Sanz, MD, PhD¹, Dr. Marta M. Ferrer, MD, PhD, FAAAAI⁴ and Dr. Gabriel Gastaminza, MD, PhD¹, ¹Department of Allergy, Clinica Universidad de Navarra, Spain, ²Department of Anesthesia, Clinica Universidad de Navarra, Spain, ³Department of Allergy, Clinica Universidad de Navarra, Spain, Pamplona, Spain, ⁴Department of Allergy, Clinica Universidad de Navarra, Pamplona, Spain
- 931 Causes Of Perioperative Allergic Reactions – Our Experience In The Last Two Years**
Dr. Lourdes Arochena, MD, Mrs. Deborah Hughes, RN, Dr. Bryan N. Fernandes, MD, Dr. Marina Tsoumani, MD and Dr. Susana F. Marinho, MD, PhD, University Hospital of South Manchester NHS Foundation Trust, Manchester, United Kingdom
- 932 Perianesthetic Hypersensitivity Reactions In Latin America**
Dr. Edgardo J. Jares, MD¹, Dr. Ricardo Cardona-Villa, MD², Prof. Carlos E. Baena-Cagnani, MD³, Dr. Luis Felipe C. Ensina, MD⁴, Dr. Juan C. Ivancevich, MD⁵, Dr. Alfredo Arias Cruz⁶, Dr. Maximiliano Gómez⁷, Dr. Mabel Noemi Cuello, MD⁸, Dr. Paola Toche Pinaud⁹, Dr. Blanca Maria Morfin-Maciél, MD¹⁰, Prof. Alicia De Falco¹¹, Dr. Adolfo Salvatierra¹², Dr. Juan F. Schuhl, MD, FAAAAI¹³, Dr. Ivan Oswaldo Tinoco Moran, MD¹⁴, Dr. Susana Barayazara¹⁵, Dr. Andrea Znacchi¹⁵, Prof. Ada Castillo Méndez¹⁶ and Dr. Mario Sánchez-Borges, MD, FAAAAI¹⁷, ¹C.M.P. SA, Buenos Aires, Argentina, ²Universidad de Antioquia, Medellín, Colombia, ³Catholic University of Cordoba, Cordoba, Argentina, ⁴Universidade Federal de São Paulo, São Paulo, Brazil, ⁵Division of Immunology, Medical School, Universidad del Salvador, Buenos Aires. Head of the Division of Allergy and Immunology, Clínica Santa Isabel, Buenos Aires, Argentina, ⁶Hospital Universitario, Monterrey, Mexico, ⁷Hospital San Bernardo, Salta, Argentina, ⁸Consultorios San Juan, San Juan, Argentina, ⁹Clínica Las Condes, Santiago, Chile, ¹⁰Hospital Mocol, Mexico City, Mexico, ¹¹Universidad Nacional de La Plata, La Plata, Argentina, ¹²Fundair, San Luis, Argentina, ¹³British Hospital, Montevideo, Uruguay, ¹⁴Clinica Torre Medica Para La Familia, Machala, Ecuador, ¹⁵Nuevo Hospital San Roque, Córdoba, Argentina, ¹⁶Hospital Clinico Quirurugico Dr. Salvador Allende, La Habana, Cuba, ¹⁷Clinica El Avila, 6a transversal Altamira, piso 8, consultorio 803, Caracas., Caracas, Venezuela
- 933 A New In Vitro Flow Cytometry Method For Detection Of Delayed Drug Sensitization To Local Anesthetics. The Lymphocyte Activation Test (LAT)**
Dr. Massimo Caruso, PhD, FIT AAAAI, Dr. Rosalia Emma, Dr. Raffaella Lizzio and Prof. Riccardo Polosa, MD, PhD, FAAAAI, University of Catania, Catania, Italy
- 934 Utility Of ICD-9-CM Codes For Identification Of Allergic Drug Reactions**
Dr. Rebecca Saff, MD, PhD¹, Dr. Carlos Camargo Jr., MD, DrPH^{1,2}, Dr. Susan A. Rudders, MD³, Dr. Sunday Clark, MPH, ScD⁴, Dr. Aidan Long, MD, FAAAAI¹ and Dr. Aleena Banerji, MD¹, ¹Division of Rheumatology, Allergy, and Immunology, Department of Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, ²Department of Emergency Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, ³Division of Asthma and Allergy, Department of Pediatrics, Rhode Island Hospital, Alpert School of Medicine at Brown University, Providence, RI, ⁴Department of Emergency Medicine, Weill Cornell Medical College, New York, NY
- 935 Vancomycin Use and Vancomycin Resistant Enterococcus Are Increased In Patients With Reported Penicillin Allergy**
Dr. Vinitha Reddy, MD, Penn State Hershey Medical Center, Hershey, PA and Dr. Faoud T. Ishmael, MD, PhD, FAAAAI, The Pennsylvania State University College of Medicine, Hershey, PA
- 936 Detection Of Causative Drugs Using Measurement Of Interferon-̑with Quantiferon-TB Gold Test In Severe Drug Allergy: Preliminary Study**
Dr. Young-Hee Nam, MD¹, Dr. Kyeong-Hee Kim, MD², Dr. Dong Sub Jeon, MD³, Dr. Hye-Won Lee, MD³, Hee-Joo Nam⁴ and Mr. Soo-Keol Lee, MD⁵, ¹Department of Internal Medicine, College of Medicine, Dong-A University, Busan, South Korea, ²Department of Laboratory Medicine, College of Medicine, Dong-A University, South Korea, ³Department of Internal Medicine, College of Medicine, Dong-A University, South Korea, ⁴Department of Pharmacy, Dong-A University Hospital, South Korea, ⁵Dong-A University College of Medicine, Pusan, South Korea
- 937 Successful Rapid Desensitization To Glatiramer Acetate In a Patient With Multiple Sclerosis**
Dr. Ekaterini I. Syrigou, PhD, Department of Allergy, “Sotiria” General Hospital, Athens, Greece, Dr. Photis Psarros, Department of Allergy, Athens Naval Hospital, Greece and Prof. Konstantinos Syrigos, Athens School of Medicine, Greece
- 938 Hypersensitivity Reaction To Denosumab In Patient With Osteoporosis: Desensitization Methodology**
Dr. Antonio Foncubierta, MD, PhD MPH^{1,2}, Dr. Diego Gutierrez, MD, PhD³, Dr. Fermin Medina, MD³, Dr. Salvador Fernandez, MD,

- PhD⁴, Dr. Maria Jose Fernandez³ and Dr. Juan Luis Anguita, MD⁵,
¹Servicio Andaluz de Salud: UGC Joaquin Pece, ²Universidad de
Cadiz, ³Hospital Universitario Puerta del Mar, ⁴Hospital Universi-
tario Carlos Haya, ⁵Complejo Hospitalario de Jaen
- 939 Patient With Severe Primary IgE Deficit and Mecasermine Al-
lergy: Desensitization Methodology**
Dr. Diego Gutierrez, MD, PhD¹, Dr. Antonio Foncubierta, MD,
PhD MPH^{2,3}, Alfonso M. Lechuga, MD, PhD¹, Dr. Maria Jose Fer-
nandez¹, Juan Luis Anguita, MD, PhD⁴ and Jose Luis Lechuga, MD,
PhD³, ¹Hospital Universitario Puerta del Mar, ²Servicio Andaluz de
Salud: UGC Joaquin Pece, ³Universidad de Cadiz, ⁴Complejo Hos-
pitalario de Jaen
- 940 Drug-Induced Anaphylaxis: A Five Year Study In a Third Level
Spanish Hospital**
Maria Elisa Caralli, M.D.¹, Sarah Micozzi, M.D.¹, Abdonias
Rodríguez Gamboa, M.D.¹, Dasha Roa Medellin, M.D.¹, Alberto
Alvarez-Perea, MD² and Manuel De Barrio, M.D.¹, ¹Hospital Gen-
eral Universitario Gregorio Marañón, Allergy Department, Madrid,
Spain, ²Hospital Materno Infantil Gregorio Marañón, Pediatric Al-
lergy Department, Madrid, Spain
- 941 Quinolones Allergy In An Allergy Unit. Our Experience In 3
Years**
Dr. Tamara Fernandez-Teruel¹, Gabriela Zambrano, M.D.², Celia
Pinto¹, Beatriz Ameiro, M.D.², Dr. Roberto Pelta¹ and Manuel De
Barrio¹, ¹Department of Allergy, Gregorio Marañón University
Hospital, Madrid, Spain., ²Department of Allergy, Gregorio
Marañón University Hospital, Madrid, Spain., Spain
- 942 A Successful Desensitization Protocol For Filgrastim**
Brett Hronek, MD, Washington University School of Medicine, St
Louis, MO and Anthony Kulczycki Jr., MD, FAAAAI, Washington
University School of Medicine, St. Louis, MO
- 943 Are Proton Pump Inhibitors(PPI) Naive? A Case Of Drug Re-
action With Eosinophilia and Systemic Symptom (DRESS) Sec-
ondary To Lansoprazole**
Dr. Aditya Uppalapati, MD¹, Dr. Sindhura Gogineni, MD¹, Dr.
Sravanika Koneru, MBBS² and Dr. Ghassan Kamel, MD³, ¹St.
Louis University, St. Louis, MO, ²Mamata Medical College, ³Saint
Louis University, St. Louis
- 944 Increased Of PCT and CRP In Dress Syndrome By Two Drugs
Structurally Unrelated Molecular In The Same Patient**
Dr. Rafael A. Perez Arango, Ramón and Cajal University
Hospital, Spain
- 945 Non-Immediate Skin Reactions Due To Antibiotics**
Gabriela Zambrano, M.D.¹, Dr. Tamara Fernandez², Beatriz
Ameiro, M.D.¹, Celia Pinto³, Alberto Alvarez-Perea, MD⁴ and
Manuel De Barrio, M.D.⁵, ¹Department of Allergy, Gregorio
Marañón University Hospital, Madrid, Spain., Spain, ²Hospital gen-
eral universitario gregorio marañon, Madrid, Spain, ³Department of
Allergy, Gregorio Marañón University Hospital, Madrid, Spain.,
⁴Hospital Materno Infantil Gregorio Marañón, Pediatric Allergy
Department, Madrid, Spain, ⁵Hospital General Universitario Greg-
orio Marañón, Allergy Department, Madrid, Spain
- 946 Multiple Drug Hypersensitivity Syndrome In Our Allergy Ser-
vice**
Dr. Inmaculada Doña, MD, PhD, Dr. Maria J Torres, MD, PhD,
Dr. Paloma Campo, MD, PhD, Dr. Francisca Gómez, MD, PhD,
Dr. Maria Salas, MD, PhD, Ms. Maria Dolores Ruiz, Ms. Maria
Auxiliadora Guerrero and Dr. Miguel Blanca, MD, PhD, Allergy
Service, Carlos Haya Hospital, Málaga, Spain
- 947 Desensitization To Anakinra. Case Report**
Dr. Miriam Zamora Verduga, Dr. Maria Alicia Urena Tavera,
Mrs. Denisse Angel Pereira, Dr. Ricardo Madrigal-Burgaleta,
MD, Dr. Pilar Berges-Gimeno, PhD and Dr. Emilio Alvarez-Cuesta,
MD, PhD, Ramon y Cajal University Hospital, Madrid, Spain
- 948 Vitamin K Anaphylaxis Confirmed With Skin Test**
Dr. Min-Hye Kim^{1,2} and Dr. Jong-Myung Lee, MD^{1,3}, ¹Regional
Pharmacovigilance Center, Kyungpook National University
Hospital, Daegu, South Korea, ²Department of Internal Medicine,-
Kyungpook National University School of Medicine, Daegu, South
Korea, ³Department of Internal Medicine, Kyungpook National
University School of Medicine, Daegu, South Korea
- 949 Successful Rapid Induction Of Temporary Drug Tolerance To
Colistimethate Sodium**
Dr. Colleen S. Adkins, MD, University of Alabama, Birmingham,
AL and Dr. James Ryan Bonner, MD, FAAAAI, Alabama Allergy
& Asthma Center, Birmingham, AL
- 950 Anaphylactic Reaction During a Folfox Scheme Administration
Secondary To Calcium Folate: A Case Report**
Dr. Maria Alicia Urena Tavera, MD¹, Dr. Miriam Zamora Ver-
duga¹, Mrs. Denisse Angel Pereira², Dr. Ricardo Madrigal-Burga-
leta, MD¹, Dr. Pilar Berges, MD, PhD¹ and Dr. Emilio Alvarez-
Cuesta¹, ¹Ramon y Cajal University Hospital, Spain, ²Ramon y Ca-
jal University Hospital, Madrid, Spain
- 951 Dual Hypersensitivity To Oxaliplatin Revealed Following Rapid
Drug Desensitization: A History Of Anaphylaxis and New-Onset
Hemolytic Anemia**
Dr. Jared Silver, MD, PhD¹, Dr. Timothy Kyin, MD¹ and Dr. Ma-
riana C. Castells, MD, PhD, FAAAAI¹, ¹Brigham and Women's
Hospital, Boston, MA, ²Division of Rheumatology, Allergy and Im-
munology, Department of Medicine, Brigham and Women's Hospi-
tal, Harvard Medical School, Boston, MA
- 952 Outpatient Lenalidomide Desensitization For Delayed Hyper-
sensitivity Reactions In 5 Patients With Multiple Myeloma**
Dr. Min Jung Lee, MD¹, Dr. Paige G. Wickner, MD², Dr. Robert
Schlossman, MD³, Dr. Paul Richardson, MD³, Dr. Jacob Laubach,
MD³ and Dr. Mariana C. Castells, MD, PhD, FAAAAI⁴, ¹Brigham
& Women's Hospital, Boston, MA, ²Brigham & Women's Hospital,
Chestnut Hill, MA, ³Dana Farber Cancer Institute, Boston, MA,
⁴Division of Rheumatology, Allergy and Immunology, Department
of Medicine, Brigham and Women's Hospital, Harvard Medical
School, Boston, MA
- 953 An Atypical Case Of Drug Reaction With Eosinophilia and Sys-
temic Symptoms (DRESS) With Well-Formed Non-Necrotizing
Granulomas On Bone Marrow Biopsy**
Dr. Katie Miro, MD, Rutgers- New Jersey Medical School, New-
ark, NJ and Dr. Eugenio Capitle, MD, Rutgers-New Jersey Medical
School, Newark, NJ
- 954 Anaphylactic Reaction To Bacitracin Zinc Topical Antibiotic
Ointment: A Case Report**
Dr. Jake D. Lenington, MD, Oregon Health and Science Univer-
sity, Portland, OR, Dr. David R. Scott, MD, Allergy and Asthma
Center of Western Colorado and Dr. Anthony Montanaro, MD,
FAAAAAI, Oregon Health Science University, Portland, OR

Ocular Allergy

5208

Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 956 Ocular Surface Disease Index (OSDI) and Pollen Counts (PC)**
Mr. Spencer H. Luster, STARx Allergy and Asthma Center, Spring-
field, NJ; University of Pennsylvania, Philadelphia, PA and Dr. Leon-
nard Bielory, MD, FAAAAI, Rutgers University, New Brunswick,
NJ; Robert Wood Johnson University Hospital, New Brunswick, NJ
- 957 Efficacy and Safety Of a New Olopatadine Hydrochloride,
0.77% Ophthalmic Formulation In Patients With Allergic Con-
junctivitis Using The Conjunctival Allergen Challenge (CAC)
Model (NCT01479374)**
Gail Torkildsen, Andover Eye Associates, Andover, MA, Thomas
Macejko, Apex Eye, Fairfield, OH, Abhijit Narvekar, Alcon Labo-
ratories, Inc., Fort Worth, TX and Mark Bergmann, Apex Eye, Cin-
cinnati, OH

TUESDAY

- 958 Cytokine Secretion Profiles In The Tears Of Patients With Chronic Allergic Conjunctivitis**
Dr. Naoko Okada¹, Dr. Hiroshi Fujishima², Dr. Kazumi Fukagawa³, Dr. Akio Matsuda, PhD¹, Dr. Hirohisa Saito, MD., PhD.¹ and Dr. Kenji Matsumoto, MD, PhD¹, ¹Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan, ²Department of Ophthalmology, Tsurumi University, ³Department of Ophthalmology, Keio University School of Medicine
- 959 Severity and Frequency Of Allergic Conjunctivitis Symptoms**
Dr. Milton M. Hom, OD FAAO, Private Practice, Azusa, CA, Dr. Dominick Opitz, OD FAAO, Illinois College of Optometry, Chicago, IL, Dr. Justin Kwan, OD FAAO, Marshall B. Ketchum University, Fullerton, CA and Dr. Leonard Bielory, MD, FAAAAI, Robert Wood Johnson University Hospital, New Brunswick, NJ; Rutgers University, New Brunswick, NJ
- 960 Ocular Symptoms Are Proportionally More Bothersome In Subjects With More Symptoms Of Cat Allergic Rhinoconjunctivitis**
Dr. Peter Creticos, Associate Professor of Medicine; Johns Hopkins School of Medicine, Johns Hopkins School of Medicine; Division of Allergy & Clinical Immunology, Crownsville, MD, Dr. Stephen Durham, co-author, Imperial College, London, Dr. Margaret MacLennan, co-author, InVentiv Health and Dr. Rod Hafner, PhD, Circassia Ltd, Oxford, United Kingdom
- 961 Alcaftadine 0.25% Versus Olopatadine 0.2% In Prevention Of Ocular Itching In Allergic Conjunctivitis**
Eugene B. McLaurin, MD, FACS¹, Nicholas P. Marsico, MD, FACS², Joseph B. Ciolino, MD³, Linda Villanueva, COT⁴, Julia M. Williams, MA, BS⁴ and David A. Hollander, MD, MBA⁴, ¹Total Eye Care P.A., Memphis, TN, ²East West Eye Institute, Los Angeles, CA, ³Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA, ⁴Allergan, Inc., Irvine, CA
- 962 Cetirizine Significantly Relieves Ocular Allergy Symptoms In Subjects With Seasonal Allergic Rhinitis**
Dr. Mitesh Patel, PharmD¹, Dr. Eduardo Urdaneta, MD¹, Ms. Kathleen B. Franklin, BSN, RN², Ms. Xiaoyan Tian, MS³, Dr. Meimiao Wu, Dr PH⁴ and Ms. Qiong Du, MS³, ¹McNeil Consumer Healthcare, Fort Washington, PA, ²Franklin Consultants, LLC., Phoenixville, PA, ³Johnson & Johnson Consumer Products, China, Shanghai, China, ⁴J & J Consumer Products, US, Morris Plains, NJ
- 963 Cetirizine Effectively Relieves Both Ocular Allergy Symptoms and Nasal Allergy Symptoms In Subjects With Seasonal Allergic Rhinitis**
Dr. Eduardo Urdaneta, MD¹, Ms. Xiaoyan Tian, MS², Dr. Meimiao Wu, Dr PH³, Ms. Qiong Du, MS², Ms. Kathleen B. Franklin, BSN, RN⁴ and Dr. Mitesh Patel, PharmD¹, ¹McNeil Consumer Healthcare, Fort Washington, PA, ²Johnson & Johnson Consumer Products, China, Shanghai, China, ³J & J Consumer Products, US, Morris Plains, NJ, ⁴Franklin Consultants, LLC., Phoenixville, PA
- 964 Automated Evaluation Of Conjunctival Provocation Tests**
Mr. Torsten Sehlinger¹, Mr. Jaron Zuberbier², Dr. Oliver Kuehler¹, Mr. Frank Goergen¹, Prof. Torsten Zuberbier³ and Prof. Karl-Christian Bergmann³, ¹Bluestone Technology GmbH, Woerrstadt, Germany, ²Evangelic High-School Kleinmachnow, Germany, ³Allergy-Centre-Charité, Berlin, Germany
- 958 Cytokine Secretion Profiles In The Tears Of Patients With Chronic Allergic Conjunctivitis**
MD, FAAAAI², ¹Hackensack University Medical Center, Hackensack, NJ, ²Center for Allergy, Asthma and Immune Disorders Hackensack University Medical Center, Hackensack, NJ
- 966 Nanoparticle Engineering For The Immunomodulation Of Dendritic Cells**
Dr. Xavier le Guevel, PhD¹, Dr. Tahia Fernández, PhD², Dr. Adriana Ariza, PhD³, Dr. Maria Isabel Montañez, PhD⁴, Dr. Maria J Torres, MD, PhD⁵, Dr. Cristobalina Mayorga, PhD⁶ and Dr. Miguel Blanca, MD, PhD⁵, ¹Bionand, Campanillas, Spain, ²Research Laboratory - FIMABIS Foundation, Málaga, Spain, ³Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain, ⁴Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - IBIMA, Málaga, Spain, ⁵Allergy Service, Carlos Haya Hospital, Málaga, Spain, ⁶Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain
- 967 Specific Immunotherapy Modified T-Cells Responses In A Spanish Population Of Der p Allergic Patients**
Dr. Tahia Fernández, PhD¹, Dr. Cristobalina Mayorga, PhD², Dr. Enrique Gomez³, Mrs. Rosa Garcia⁴, Mrs. Maria Isabel Sanchez⁵, Dr. Ana Aranda, PhD², Ms. Miriam Osorio², Dr. Miguel Blanca, MD, PhD⁶ and Dr. María José Torres, MD, PhD⁶, ¹Research Laboratory - FIMABIS Foundation, Málaga, Spain, ²Research Laboratory, Carlos Haya Hospital-FIMABIS, Málaga, Spain, ³Research Laboratory of allergic diseases - Carlos Haya Hospital. FIMABIS Foundation. Spain, Malaga, Spain, ⁴Allergy Service- Carlos Haya hospital. Spain, Malaga, Spain, ⁵Allergy Service -Carlos Haya Hospital. Spain, ⁶Allergy Service, Carlos Haya Hospital, Málaga, Spain
- 968 Efficacy Of 300IR 5-Grass Pollen Sublingual Tablets In Grass Pollen-Associated Allergic Rhinoconjunctivitis: Pooled Analysis By Level Of Pollen Exposure**
Prof. Alain Didier, MD, PhD¹, Prof. Ulrich Wahn, Prof Dr Med², Mr. Yann Amistani, Msc³ and Dr. Robert K. Zeldin, MD³, ¹Larrey Hospital, CHU, Toulouse, France, ²Charite, Berlin, Germany, ³Stalergenes S.A., Antony, France
- 969 The Print Survey II: Perceptions Regarding Injection Number and Technique**
Dr. Michael S. Tankersley, MD, FAAAAI¹, Dr. Sandy Yip, MD² and Dr. Christopher A. Coop, MD², ¹Wilford Hall Ambulatory Surgical Center, Joint Base San Antonio, San Antonio, TX, ²Wilford Hall Ambulatory Surgical Center, Lackland AFB, TX
- 970 Allergy Immunotherapy: Characteristics and Risk Factors For Recurrent Systemic Reactions**
Kerline Ductan, MD¹, Ewa Schafer, MD, FAAAAI², Rachel E. Story, MD², Deebe Masood, MD², Paul Detjen, MD³ and Ying Zhou, PhD⁴, ¹Department of Internal Medicine, University of Chicago-NorthShore, Evanston, IL, ²Allergy and Immunology, North-Shore University HealthSystem (NUHS), IL, ³Kenilworth Medical Allergy & Immunology, Kenilworth, IL, ⁴Center for Clinical and Research Informatics (CCRI), NUHS Research Institute, Evanston, IL
- 971 Allergen Specific Immunotherapy In Monosensitized and Poly-sensitized Allergic Rhinitis Patients**
Dr. L. Maslova, Republican Scientific and Practical Center for Epidemiology and Microbiology, Minsk, Belarus, Dr. Leonid P. Titov, MD, PhD, Republican Scientific and Practical Center for Epidemiology and Microbiology, Minsk, Belarus and Prof. Lawrence M. DuBuske, MD, FAAAAI, George Washington University School of Medicine, DC
- 972 The Effect Of The Ragweed Sublingual Immunotherapy Tablet MK-3641 On Rescue Medication Use**
Dr. Sandra M. Gawchik, DO, FAAAAI¹, Dr. Peter S. Creticos, MD, FAAAAI², Kevin R. Murphy, MD³, Dr. Gary D. Berman, MD, FAAAAI⁴, Dr. David I. Bernstein, MD, FAAAAI⁵, Dr. Jennifer Maloney, MD⁶, Dr. Amarjot Kaur, PhD⁶ and Dr. Hendrik Nolte, MD, PhD⁶, ¹Asthma and Allergy Associates, Chester, PA, ²Johns Hopkins Division of Allergy & Clinical Immunology, ³Boys Town National

Allergen Immunotherapy

5209

Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

- 965 Aeroallergen Immunotherapy Reduces Wheal Diameter In Seasonal and Perennial Allergen Intradermal Skin Tests**
Mr. Michael Hawk¹, Mrs. Barbara A. McGoey, RN¹, Mr. Parimal Patel¹, Mrs. Nicole Argenzia, RN¹ and Dr. Mary Ann Michelis,

Research Hospital, Boys Town, NE, ⁴Allergy and Asthma Specialists, Minneapolis, MN, ⁵Bernstein Allergy Group, Cincinnati, OH, ⁶Merck, Whitehouse Station, NJ

Asthma Epidemiology and Risk Factors

5601

Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

973 Exposures That Alter The Early Life Microbiome and The Risk Of Asthma

Amy S. Feldman, MD¹, Pingsheng Wu, PhD, MS^{1,2}, Kristina James, MD³, Tebeb Gebretsadik, MPH^{1,2}, Gabriel Escobar, MD^{4,5}, Kecia N. Carroll, MD⁶, Sherian Xu Li, MS⁵, Eileen Walsh, RN, MPH⁵, Ed Mitchel, MS¹ and Dr. Tina V. Hartert, MD, MPH⁷, ¹Division of Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, and Center for Asthma and Environmental Sciences Research, Vanderbilt University School of Medicine, Nashville, TN, ²Department of Biostatistics, Vanderbilt University School of Medicine, Nashville, TN, ³Peninsula Allergy & Asthma Center, Soldotna, AK, ⁴Kaiser Permanente Medical Care Program, Oakland, CA, ⁵Kaiser Permanente Northern California, Perinatal Research Unit, Division of Research, ⁶Department of Pediatrics, Vanderbilt University School of Medicine, Nashville, TN, ⁷Vanderbilt University School of Medicine, Nashville, TN

974 Ethnic Differences Of Reported Asthma Symptoms In Urban School-Based Screening Surveys

Dr. Margee Louisias, MD¹, Dr. Joanne Sordillo, ScD^{2,3}, Mrs. Chunxia Fu, MS^{4,5} and Dr. Wanda Phipatanakul, MD, MS, FAACAP^{3,6}, ¹Brigham and Women's Hospital, Boston, MA, ²Channing Division of Network Medicine, Brigham & Women's Hospital, Harvard Medical School, Boston, MA, ³Harvard Medical School, Boston, MA, ⁴Harvard School of Public Health, Boston, MA, ⁵Channing Laboratory, Brigham and Women's Hospital, Boston, MA, ⁶Boston Children's Hospital, Boston, MA

975 Year One Daycare Attendance Predicts Asthma At Age Seven: The Cincinnati Childhood Allergy and Air Pollution Study (CCAAPS)

Dr. Gang Cheng, MD, PhD¹, Linda Levin, PhD², Dr. Andrew M. Smith, MD, FAACAP³, Dr. Tolly Epstein, MD, MS⁴, Patrick Ryan, PhD⁵, Grace K. LeMasters, PhD² and Dr. David I. Bernstein, MD, FAACAP¹, ¹Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, CINCINNATI, OH, ²University of Cincinnati, Cincinnati, OH, ³3255 Eden Ave., HPB 350, University of Cincinnati Medical Center, Cincinnati, OH, ⁴Allergy Partners of Central Indiana, Indianapolis, IN, ⁵Cincinnati Children's Hospital, Cincinnati, OH

976 Determining Risk Levels Of The Composite Asthma Severity Index (CASI)

Rebecca A. Zabel¹, Dr. Peter J. Gergen, MD, MPH², Dr. Christine A. Sorkness, PharmD³, Jeremy Wildfire¹, Mr. Agustin Calatroni, MA MS¹ and Dr. Herman Mitchell, PhD¹, ¹Rho, Inc., Chapel Hill, NC, ²AAIBDAIT/NIH, Bethesda, MD, ³University of Wisconsin, Madison, WI

977 BMI and Asthma Severity In An Elementary and Middle School Inner City Population

Dr. Christina G. Kwong, MD¹, Ms. Christina Mahl, RN², Ms. Lisa D. Henry, PNP-BC², Dr. Deborah Loman, PhD, CPNP³, Dr. Robert C. Strunk IV, MD, FAACAP¹, Ms. Lisa A. Meadows, PNP-BC² and Dr. Alysa G. Ellis, MD¹, ¹Washington University School of Medicine, Saint Louis, MO, ²St. Louis Children's Hospital, Saint Louis, MO, ³St. Louis University School of Nursing, Saint Louis, MO

Basic and Translational Immunology

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978 Novel NK Cytotoxicity Assay Enables Drug Discovery For Hemophagocytic Lymphohistiocytosis

Dr. Jinzhu Li, MD, PhD, Ms. Sarah E. Figueira, Ms. Julie Ferrel and Dr. Kimberly A. Risma, MD, PhD, FAACAP, Cincinnati Children's Hospital Medical Center, Cincinnati, OH

979 Exploitation Of The Host Ubiquitin System By Respiratory Syncytial Virus Nonstructural Protein 2

Jillian N. Whelan¹, Kim C. Tran¹, Ruan R. Cox Jr.¹, Damian B. van Rossum², Randen L. Patterson² and Michael Teng¹, ¹Division of Allergy and Immunology, Department of Internal Medicine, and the Joy McCann Culverhouse Airway Diseases Research Center, University of South Florida Morsani College of Medicine, Tampa, FL, ²The Pennsylvania State University, University Park, PA

980 Epigenetic Regulation Of Dendritic Cell Migration

Dr. Timothy P. Moran, MD, PhD¹, Dr. Hideki Nakano, PhD², Dr. Hrisavgi Kondilis-Mangum, PhD², Dr. Paul Wade, PhD² and Dr. Donald Cook, PhD², ¹Duke University Medical Center, Durham, NC, ²National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC

981 LRBA Subcellular Localization: Evidence Of The LRBA's Role In Vesicle Trafficking From The Golgi To Cell Membrane and Endocytosis

Mrs. Michelle A. Reiser, MS¹, Dr. Jia-Wang Wang, PhD¹, Mrs. Kunyu Li, BS¹ and Dr. Richard F. Lockey, MD², ¹Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida, Morsani College of Medicine, Tampa, FL, ²Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida Morsani College of Medicine and James A. Haley Veterans' Affairs Hospital, Tampa, FL

982 Differential Role Of Dendritic Cell Subsets In Shaping T-Cell Responses To Respiratory Viruses

Dr. Meera Rani Gupta, M.D., Dr. Deepthi Kolli, PhD, Dr. Antonella Casola, M.D. and Dr. Roberto P. Garofalo, MD, University of Texas Medical Branch, Galveston, TX

Environmental Risk Factors and Diseases Outcomes

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983 Effect Of Prenatal Exposure To Indoor PM2.5 and Environmental Tobacco Smoke Affecting Lower Respiratory Tract Infection Was Modified By ROS Genes: Cocoa Study

Dr. Song I Yang, MD¹, Dr. Eun Lee, MD¹, Dr. Young Ho Jung, MD¹, Kil-Yong Choi², Mi-Jin Kang, MS², Ho-Sung Yu², Cheol Min Lee³, Prof. Youn Ho Shin, MD, PhD⁴, Prof. Kangmo Ahn, MD, PhD⁵, Prof. Kyung Won Kim, MD, PhD⁶, Prof. Soo-Jong Hong, MD, PhD¹ and Cocoa study Group⁷, ¹Childhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea, ²Asan Institute for Life Sciences, University of Ulsan College of Medicine, Seoul, South Korea, ³Institute of Environmental and Industrial Medicine, Hanyang University, Seoul, South Korea, ⁴Department of Pediatrics, CHA Medical Center, CHA University College of Medicine, Seoul, South Korea, ⁵Department of Pediatrics, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, South Korea, ⁶Department of Pediatrics, Yonsei University College of Medicine, Seoul, South Korea, ⁷COCOA study group

- 984 IgE Anti-Respiratory Syncytial Virus Antibodies In Older Asthmatic Children**
Mira Mandal¹, Dr. Rauno O. Joks, MD, FAAAAI², Dr. Kevin Norowitz, M.D.³, Dr. Diana Weaver, MD⁴, Dr. Helen G. Durkin, PhD⁵, Dr. Martin H. Bluth, MD, PhD⁶, Dr. Stephan Kohlhoff, MD⁵ and Dr. Tamar A. Smith-Norowitz, PhD⁷, ¹SUNY Downstate Medical Center, ²SUNY-HSC, Brooklyn, NY, ³SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY, ⁴SUNY Downstate Med. Ctr, Brooklyn, NY, ⁵Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY, ⁶Wayne State University Medicine, Detroit, MI, ⁷Center for Allergy and Asthma Research at SUNY Downstate, Brooklyn, NY
- 985 Asthma Symptoms and Rhinovirus In A Longitudinal Children's Cohort**
Dr. Euan R. Tovey, PhD^{1,2}, Dr. S. Stelzer-Braid, PhD^{3,4}, Dr. B.G. Toelle, PhD¹, Ms. C.M. Willenborg, BSc³, Dr. H.K. Reddel, PhD, MBBS^{1,2}, Ms. F.L. Garden, MPH^{1,2}, Prof. A. Jaffe, PhD MD^{4,5}, Ms. R. Strachan⁵, Dr. B.G. Oliver, PhD^{1,2}, Dr. Y.C. Belessis, MBBS^{4,5}, Prof. G.B. Marks, PhD, MD^{1,2} and Prof. W.D. Rawlinson, PhD, MD^{3,4}, ¹Woolcock Institute of Medical Research, Sydney, Australia, ²University of Sydney, Australia, ³Virology Division, SEALS Microbiology, Prince of Wales Hospital, Sydney, Australia, ⁴University of NSW, Australia, ⁵Sydney Children's Hospital, Randwick Australia
- 986 Maternal Transfer Of Der p 1 and Blo t 5 Allergens and Their Respective Specific Antibodies Trough Placenta and Colostrum**
Dr. Patricia Macchiaverni, Department of Immunology, Institute of Biomedical Sciences, University of São Paulo, SP, Brazil, Christina Arslanian, University of São Paulo, Dr. Valerie Verhasselt, INSERM, Valbonne, France and Prof. Antonio Condino-Neto, MD, PhD, Institute of Biomedical Sciences, Department of Immunology, University of São Paulo, Sao Paulo, Brazil
- 987 Rhinovirus Infection Is Associated With Changes In The Airway Microbiome**
Dr. Kirsten Kloepfer, MD¹, Dr. Valeriy Poroyko, PhD², Mrs. Rose Vrtis, BS³, Mrs. Tressa Pappas, BS³, Dr. Theresa Kang, PhD³, Dr. Wai-Ming Lee, PhD³, Mr. Michael D. Evans, MS³, Dr. Ronald E. Gangnon, PhD³, Dr. Yury Bochkov, PhD³, Dr. Robert F. Lemanske Jr., MD, FAAAAI³ and Dr. James E. Gern, MD, FAAAAI³, ¹Riley Hospital for Children at Indiana University Health, Indianapolis, IN, ²University of Chicago, Chicago, IL, ³University of Wisconsin School of Medicine and Public Health, Madison, WI

Eosinophilic Gastrointestinal Diseases

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Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

- 988 Natural History Of Esophageal Remodeling In Pediatric Eosinophilic Esophagitis Treated For Four Years**
Dr. Jessica Rajan, MD^{1,2}, Dr. Robert Newbury, MD^{3,4}, Arjun Andrew Anilkumar, BS^{2,5}, Ranjan Dohil, MD^{6,7}, Dr. David H. Broide, MB ChB FAAAAI⁸ and Seema Sharma Aceves, MD, PhD, FAAAAI⁹, ¹Scripps Clinic Medical Group, San Diego, CA, ²Division of Allergy/Immunology, ³Department of Pediatrics, ⁴Division of Pathology, ⁵Department of Medicine, ⁶Department of Pediatrics, Division of Gastroenterology, ⁷Division of Gastroenterology, UCSD, Rady Children's Hospital, San Diego, ⁸Department of Medicine, San Diego, CA, ⁹Pediatrics, University of California San Diego, La Jolla, CA
- 989 Diagnostic Inaccuracy Of Biopsy Evaluations In Eosinophilic Esophagitis Underscores The Value Of a Secondary Review Process**
Emily Stucke, BA¹, Dr. Katherine E. Clarridge, MD, MSc^{1,2}, Dr. Margaret Collins, MD¹, Dr. Lisa J. Martin, PhD¹, Carol J. Henderson, PhD RD LD¹ and Dr. Marc E. Rothenberg, MD, PhD, FAAAAI¹, ¹Cincinnati Children's Hospital Medical Center, Cincinnati, OH, ²University of Cincinnati

- 990 Development Of Eosinophilic Esophagitis To Food After Development Of IgE Tolerance To The Same Food**
Dr. Solrun Melkorka Maggadottir, MD¹, Dr. David Hill, MD, PhD², Dr. Terri F. Brown-Whitehorn, MD¹ and Dr. Jonathan M. Spergel, MD, PhD, FAAAAI³, ¹Children's Hospital of Philadelphia, Philadelphia, PA, ²Children's Hospital of Philadelphia, Philadelphia, PA, ³The Children's Hospital of Philadelphia, Philadelphia, PA
- 991 Mast Cells, Eosinophils and Eosinophilic Esophagitis**
Dr. Jay Jin, MD, PhD, Dr. Jeffrey Alexander, MD, Hirohito Kita, MD, Ms. Diane Squillace, MS, Dr. Joseph A. Murray, MD, Dr. Amindra Arora, MD, Dr. Yvonne Romero, MD, Dr. Thomas Smyrk, MD and Dr. Catherine R. Weiler, MD, PhD, FAAAAI, Mayo Clinic, Rochester, MN
- 992 CD3 and CD8 Cells Produce IL-9 In Pediatric Eosinophilic Esophagitis**
Arjun Andrew Anilkumar, BS, Department of Medicine; Division of Allergy/Immunology, Lisa Beppu, BS, Department of Pediatrics University of California San Diego; Division of Allergy and Immunology, Richard Kurten, PhD, University of Arkansas for Medical Sciences, Little Rock, AR; Department of Physiology and Biophysics, Dr. Robert Newbury, MD, Department of Pediatrics; Division of Pathology, Ranjan Dohil, MD, Department of Pediatrics, Division of Gastroenterology; Division of Gastroenterology, UCSD, Rady Children's Hospital, San Diego, David Broide, MB ChB, University of California San Diego, Department of Medicine, Division of Allergy and Immunology and Seema Sharma Aceves, MD, PhD, FAAAAI, Pediatrics, University of California San Diego, La Jolla, CA

Population Health and Food Allergy

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Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

- 993 Longitudinal Effect Of Food Allergy Education On Epinephrine Availability In Public Schools Dipika Patel, MD¹**, Gwendolyn Johnson, BSN, RN, MEd², Danielle Guffey, MS¹, Charles Minard, PhD¹ and Carla Davis, MD¹, ¹Baylor College of Medicine, Houston, TX, ²Houston Independent School District, Houston, TX
- 994 Population Response To Change In Infant Feeding Guidelines For Allergy Prevention**
Dr. Dean Tey, MD^{1,2}, Prof. Katrina Jane Allen, MD, PhD, FAAAAI^{1,2}, Ms. Rachel Peters, MPH², Dr. Jennifer Koplin, PhD², Prof. Mimi L. K. Tang, MD, PhD, FAAAAI³, Prof. Lyle Gurrin, PhD^{2,4}, Prof. Anne-Louise Ponsonby, PhD², Dr. Adrian Lowe, PhD^{2,4}, Prof. Melissa Wake, MD, PhD^{1,2} and Prof. Shyamali Dhar-mage, MD, PhD^{2,4}, ¹Royal Children's Hospital, Victoria, Australia, ²Murdoch Childrens Research Institute, Victoria, Australia, ³The University of Melbourne, Melbourne, Australia, ⁴University of Melbourne, Victoria, Australia
- 995 Teasing and Bullying Among Adolescents With Food Allergy**
Dr. Adora Lin, MD, PhD, National Institute of Allergy and Infectious Diseases, Bethesda, MD and Dr. Hemant P. Sharma, MD MHS FAAAAI, Children's National Medical Center, Division of Allergy and Immunology, Washington, DC
- 996 Differences In Food Allergy Quality Of Life Between Caregivers In a Clinic-Based and a Caregiver-Reported Food Allergic Population**
Dr. Matthew J. Greenhawt, MD, MBA, MSc, Department of Internal Medicine, The University of Michigan Medical School, Division of Allergy and Clinical Immunology, Ann Arbor, MI
- 997 Food Allergy Management In An Urban Pediatric Population**
Dr. Jennifer M. Camacho, MD, Dr. Stephanie Albin, MD, Dr. Doerthe A. Andreae, MD and Dr. Julie Wang, MD, FAAAAI, The Icahn School of Medicine at Mount Sinai, New York, NY

New Forms of Immunotherapy

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Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

- 998 Persistent Treatment Effect Achieved At One Year After Four Doses Of Der p Derived Synthetic Peptide Immuno-Regulatory Epitopes In An Exposure Chamber Model Of House Dust Mite Allergy**
Dr. Rod Hafner, PhD¹, Dr. Peter Couroux, M.D.², Ms. Kristen Armstrong, M.Sc.³, Dr. AnneMarie Salapatek, PhD⁴, Dr. Deepen Patel, M.D.² and Dr. Mark Larche, PhD⁵, ¹Circassia Ltd, Oxford, United Kingdom, ²Topstone Research, Toronto, ON, Canada, ³Adiga Life Sciences Inc., Hamilton, ON, Canada, ⁴Inflamax Research, Mississauga, ON, Canada, ⁵McMaster University/St. Joseph's Healthcare, Hamilton, ON, Canada
- 999 Treatment With Synthetic Peptide Immuno-Regulatory Epitopes Derived From Grass Allergens Leads To a Substantial Reduction In Grass Allergy Symptoms In The Environmental Exposure Unit**
Dr. Anne K. Ellis, MD, MSc FAAAAI^{1,2}, Dr. Charles W. Frankish, MD³, Ms. Kristen Armstrong, M.Sc.⁴, Dr. Mark Larche, PhD⁵, Ms. Lisa Steacy, BSc¹ and Dr. Rod Hafner, PhD⁶, ¹Allergy Research Unit, Kingston General Hospital, Kingston, ON, Canada, ²Departments of Medicine and Biomedical & Molecular Science, Queen's University, Kingston, ON, Canada, ³Kanata Allergy Services, Kanata, ON, Canada, ⁴Adiga Life Sciences Inc., Hamilton, ON, Canada, ⁵McMaster University/St. Joseph's Healthcare, Hamilton, ON, Canada, ⁶Circassia, Oxford, United Kingdom
- 1000 Epicutaneous Immunotherapy Induces Epigenetic Changes In Sensitized Mice**
Lucie Mondoulet, PhD¹, Dr. Vincent Dioszeghy, PhD¹, Mrs. Mélanie Ligouis¹, Mrs. Véronique Dhelft¹, Mrs. Emilie Puteaux¹, Mrs. Camille Plaquet¹, Prof. Christophe Dupont, MD, PhD² and Pierre Henri Benhamou, MD¹, ¹DBV Technologies, Bagneux, France, ²Hopital Necker Enfants Malades, Paris, France
- 1001 Ultra-Fast Hypoallergenic Birch Pollen Allergy Vaccine Allert Is Efficient and Safe: Results Of a Phase IIB Study**
Dr. Francois Spertini, MD¹, Prof. Frederic de BLAY², Dr. Lars Jacobsen, MD³, Prof. Marek Jutel, MD, PhD⁴, Dr. Margitta Worm, MD⁵, Dr. Gilles Della Corte, MD⁶, Dr. Alexander Kettner, PhD⁷, Dr. Vincent Charlon, PhD⁶ and Dr. Christophe Reymond⁷, ¹Division of Immunology and Allergy, CHUV, LAUSANNE, Switzerland, ²CHRU Strasbourg, France, ³Glostrup University Hospital, Copenhagen, Denmark, ⁴Wroclaw Medical University, Wroclaw, Poland, ⁵Charite - Universitätsmedizin Berlin, Berlin, Germany, ⁶Anergis SA, Epalinges, Switzerland, ⁷ANERGIS SA, EPALINGES, Switzerland
- 1002 Stable Conjugates Between A Novel Toll-Like Receptor 7 Ligand and Protein Allergens As Modulators Of Th2 Responses In Vitro and In Vivo**
Dr. Lucia Fili¹, Dr. Alessandra Vultaggio¹, Dr. Elisa Cardilicchia¹, Dr. Cinzia Manuelli¹, Dr. Andrea Casini², Dr. Francesca Nencini¹, Dr. Laura Maggi¹, Dr. Sara Pratesi¹, Dr. Giulia Petroni¹, Dr. Francesca Boscaro³, Prof. Ernesto Giovanni Occhiato², Prof. Sergio Romagnani¹, Prof. Enrico Maggi¹ and Prof. Paola

Parronchi¹, ¹University of Florence, DENOTHE Center, Florence, Italy, ²University of Florence, Dept. of Chemistry "U. Shiff", Florence, Italy, ³University of Florence, Mass Spectrometry Center (CISM), Florence, Italy

Mechanisms of T Cell-Mediated Allergic Disease

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Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

- 1003 TSLP Induces Corticosteroid Resistance In Natural Helper Cells Via STAT5 Pathway**
Hiroki Kabata¹, Kazuyo Moro^{2,3}, Koichi Fukunaga¹, Yusuke Suzuki¹, Katsunori Masaki¹, Tomoko Betsuyaku¹, Shigeo Koyasu^{1,2} and Prof. Koichiro Asano, MD⁴, ¹Keio University School of Medicine, Tokyo, Japan, ²RIKEN Center for Integrative Medical Sciences, Kanagawa, Japan, ³PRESTO, JST, Japan, ⁴Tokai University School of Medicine, Kanagawa, Japan
- 1004 Impairment Of IL-27's Differential Effect On CD4+T Cells In Asthma**
Dr. Zhihong Chen¹, Shanze Wang², Xiaopeng Qi², Prof. Chunxue Bai¹ and Prof. Hua Huang², ¹Zhongshan Hospital, Fudan University, Shanghai, China, ²National Jewish Health, Denver, CO
- 1005 Profile Of Food Allergen-Specific T Cells In Allergic and Clinically Tolerant Individuals**
David Chiang, MS¹, Alexander V. Grishin, PhD¹, Madhan Masilamani, PhD¹, Miriam Merad, MD, PhD¹, A. Karolina Palucka, MD, PhD^{1,2}, Hideki Ueno, MD, PhD², A. Wesley Burks, MD, FAAAAI³, Stacie M. Jones, MD⁴, Andrew H. Liu, MD⁵, Scott H. Sicherer, MD, FAAAAI¹, Robert A. Wood, MD, FAAAAI⁶, Wendy Davidson, PhD⁷, Hugh A. Sampson, MD, FAAAAI⁸ and M. Cecilia Berin, PhD¹, ¹Icahn School of Medicine at Mount Sinai, New York, NY, ²Baylor Institute for Immunology Research, Dallas, TX, ³University of North Carolina, Chapel Hill, NC, ⁴University of Arkansas for Medical Sciences and Arkansas Children's Hospital, Little Rock, AR, ⁵National Jewish Health, Denver, CO, ⁶Johns Hopkins University Medical Center, Baltimore, MD, ⁷National Institutes of Health, Bethesda, MD, ⁸Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY
- 1006 Follicular Helper T Cells Mediate IgE Antibody Production and Allergic Immune Responses in Mice**
Takao Kobayashi, PhD¹, Koji Iijima, PhD¹ and Hirohito Kita, MD², ¹Mayo Clinic, Rochester, MN, ²Mayo Clinic Rochester, Rochester, MN
- 1007 Analysis Of Circulating Rhinovirus-Specific CD4+ T Cells Using Novel MHC Class II Tetramers Reveals Marked Expansion Of Effector Memory Cells In Infected Subjects**
Lyndsey Muehling¹, Rachana Agrawal, PhD¹, Julia Wisniewski, MD¹, Paul Wright¹, William W. Kwok, PhD², Ronald Turner, MD¹ and Judith A. Woodfolk, MBChB, PhD, FAAAAI¹, ¹University of Virginia Health System, Charlottesville, VA, (2)-Benaroya Research Institute at Virginia Mason, Seattle, WA

LATE-BREAKING ABSTRACTS PRESENTED AT SCIENTIFIC SESSIONS AAAAI ANNUAL MEETING FEBRUARY 28-MARCH 4, 2014

The following abstracts were accepted for presentation after the deadline for the abstract supplement

L1 Human TNFR2 Exhibits Bi-Directional Control over Regulatory T Cells

Dr. Denise L. Faustman, MD, PhD¹, Limei Wang², Yoshiaki Okubo²; ¹Massachusetts General Hospital/Harvard Medical, Charlestown, MA, ²Massachusetts General Hospital/Harvard Medical.

BACKGROUND: The homeostatic functions of CD4⁺ regulatory T-cells (Treg) protect against autoimmunity, cancer and infections, but mechanisms governing Treg activity are ill-defined. We hypothesized that tumor necrosis factor receptor 2 (TNFR2) may control Treg functions, considering that TNFR2 is highly expressed on human Tregs.

METHODS: Effects of TNFR2 monoclonal antibodies (moAbs) on Treg proliferation, signaling, phenotype, and function were studied by multiple *in vitro* assays using isolated fresh human CD4⁺ and CD25^{hi} coexpressing T cells from >100 donors. Antibody performance was compared to standard Treg expansion methods and categorized as agonist, antagonist or neutral in activity.

RESULTS: Two antibodies exclusively acted as either a TNFR2 agonist or antagonist. *In vitro* the newly identified TNFR2 agonist induced proliferation of enriched human T_{regs} into phenotypically homogeneous populations of effector Tregs (FOXP3^{hi}CD45RO⁺CD25^{hi}HLA-DR⁺CTLA4⁺CD127⁺CXCR3⁺). Conversely, the TNFR2 antagonist suppressed human Treg proliferation. When Tregs were co-incubated with their target CD8⁺ T-cells, the agonist-treated Tregs suppressed CD8⁺ proliferation, whereas the antagonist had negligible effects. The two ligands also triggered different downstream intracellular Treg signaling, with the agonist upregulating TRAF2, FOXP3 and cIAP2.

CONCLUSIONS: The findings show that certain TNFR2 ligands can act as antagonists or agonists by exerting opposing actions in human cells regarding Treg proliferation, signaling, and target cell activity. TNFR2 has the potential for bidirectional control over Treg homeostatic functions in humans, opening new clinical opportunities for Treg expansion or suppression.

L2 Contribution of Sequential and Conformational IgE-Binding Epitopes to the Allergenicity of Major Peanut Allergen Ara h 2

Stephane Hazebrouck, PhD¹, Blanche Guillon, BSc¹, Marie-Françoise Drumare, BSc¹, Evelyne Paty, MD², Jean-Michel Wal, PhD¹, Herve Bernard, PhD¹; ¹INRA UR496, Gif-sur-Yvette, France, ²Université Paris Descartes, Hôpital Necker Enfants Malades, Paris, France.

RATIONALE: Protein unfolding reduces significantly the allergenic activity of the most potent peanut allergen Ara h 2. This allergen also contains major sequential IgE-binding epitopes, especially in a flexible region comprising the repetitive post-translationally modified peptide DPYSP^{OH}S, with a hydroxyproline (HYP). We then investigated the relative contributions of sequential and conformational epitopes to the allergenic activity of Ara h 2.

METHODS: Peptides overlapping the HYP-domain were synthesized with or without the prolines hydroxylated. A variant lacking the HYP-domain was generated by deletion mutagenesis. IgE reactivity of 19 peanut-allergic patients toward synthetic peptides and recombinant Ara h 2 variants was determined by IgE-binding inhibition assays and by degranulation tests of rat basophil leukemia (RBL) SX38 cells sensitized with patients' IgE antibodies.

RESULTS: The peptide encompassing the longest HYP-domain exhibited an inhibitory capacity similar to that of the full-length unfolded Ara h 2, but

only when prolines were hydroxylated. Deletion of the HYP-domain did not prevent the variant to refold correctly and to display Ara h 2 conformational epitopes. The IgE-binding capacity of Ara h 2 was then recapitulated with an equimolar mixture of the deletion variant and the synthetic HYP-peptide. Surprisingly, the HYP-peptide was also able to trigger the degranulation of RBL cells as efficiently as the unfolded Ara h 2, which retained an allergenic activity with most of the tested sera.

CONCLUSIONS: Proline hydroxylation is critical for Ara h 2 allergenicity and peptides overlapping the HYP-domain, as short as 15 and 27 amino acid residues, retain an anaphylactic potential.

L3 ImmunoCap Cellulose Displays Cross-Reactive Carbohydrate Epitopes and Can Cause False-Positive Test Results in Patients with Anti-CCD IgE Antibodies

Wolfgang Hemmer, PhD¹, Stefan Wohrl, MD, MSc, FAAAAI¹, Felix Wantke, MD, FAAAAI¹, Friedrich Altmann, PhD²; ¹Floridsdorf Allergy Center, Vienna, Austria, ²Department of Chemistry, University of Natural Resources and Life Sciences, Vienna, Austria.

RATIONALE: Cross-reactive carbohydrate determinants (CCDs) in plant and insect venom extracts are a common cause of false-positive results during *in vitro* allergy diagnosis. We noticed, when using the Phadia ImmunoCAP system, that some CCD-positive sera deliver multiple positive results even when tested with CCD-free recombinant allergens.

METHODS: ImmunoCAP IgE binding to selected recombinant allergens and to blank ImmunoCAPs (BIC) with no allergens coupled to the cellulose sponge was compared in CCD-positive sera before and after inhibition with a CCD inhibitor (ProGlycAn, Vienna, Austria).

RESULTS: 30/45 (67%) CCD-positive sera (MUXF-CCD 1.01-59.6 kU/l) showed IgE-binding to BIC greater than 0.35 kU/l (0.41-6.66 kU/l). Among those with anti-CCD IgE levels >7.0 kU/l, 86% (24/28) were positive. IgE-binding to BIC correlated with IgE-binding to MUXF-CCD (r=0.66) and was completely abolished by serum pre-incubation with a CCD inhibitor (n=11). Binding scores with a second lot of BIC were lower but correlated strongly with the first lot (r=0.99). IgE-binding of seven highly CCD-reactive sera (14.0-52.5 kU/l) to the recombinant allergens rPhl p12, rFel d1, rAra h2, and rPru p3 was positive to all four components (up to 1.6 kU/l). Binding correlated strongly with antibody binding to MUXF-CCD and BIC (r=0.92) and could be completely blocked by the CCD inhibitor. Mass spectroscopic analysis confirmed the presence of MMXF glycans in unprocessed and processed cellulose.

CONCLUSIONS: Cellulose used as an allergen carrier in the ImmunoCAP system contains varying traces of CCDs itself, which can cause multiple false-positive results even to non-glycosylated recombinant components in patients with elevated levels of anti-CCD IgE antibodies.

L4 The RNA-Binding Protein HuR Is Required to Control Cytokine Expression in CD4+ T Cells

Dr. Ulus Atasoy, MD, FAAAAI¹, Dr. Patsharaporn Techasintana², Dr. Joseph Magee², Dr. Matt Gubin³, Mr. Joe Rowles²; ¹Surgery, University of MO-Columbia, Columbia, MO, ²University of Missouri, ³Washington University.

RATIONALE: During T cell activation, up to 50% of changes occur at the posttranscriptional level, which is mediated by RNA-binding proteins (RBPs). HuR is a stabilizing RBP which regulates mRNA target expression via AU-rich elements present in mRNA 3'UTRs. It is permissive for Th2 and Th17 differentiation.

METHODS: Previously, we showed HuR regulates GATA-3, IL-4, IL-13 and other Th2 restricted transcripts, as well as IL-17. We hypothesized that HuR is required for Th2 differentiation and Th2 associated disease such as asthma. To avoid defects in T cell development, we utilized a HuR KO mouse model in which HuR is ablated in mature CD4+ T cells, using distal Lck-Cre-ROSA-HuR^{fl/fl}.

RESULTS: Activated or Th2 polarized HuR KO CD4+ T cells showed striking increases in IL-2 secretion and an inability to shut off IL-2 expression. These also mice had profound reductions in Th2 and Th17 cytokine expression. We used the ova challenge model of airway inflammation to further investigate HuR KO under antigenic conditions. HuR KO mice had profound reductions in BAL IL-4 and IL-13, and in pulmonary cellular infiltration with suppression of neutrophils, lymphocytes and eosinophils. The levels of cellular infiltration in HuR KO mice resembled un-immunized controls.

CONCLUSIONS: HuR appears to be required for Th2 and Th17 but not Th1 differentiation and cytokine production. Furthermore, HuR functions as an off switch for IL-2 expression during T cell activation. These results may have implications for understanding mechanisms of tolerance under antigen challenge as well as in allergen driven airway lung inflammation.

L5 Whole-Exome Sequencing Reveals *IKBKB* As a Cause of Combined Immunodeficiency

Dr. Talal Mousallem, MD^{1,2}, Dr. Jialong Yang, PhD¹, Dr. Thomas J. Urban, PharmD, PhD², Mrs. Hongxia Wang, MS^{1,3}, Mrs. Roberta E. Parrott, BS¹, Dr. Joseph L. Roberts, MD, PhD¹, Dr. Rebecca H. Buckley, MD, FAAAAI¹, Dr. Xiaoping Zhong, MD, PhD¹, Dr. David B. Goldstein, PhD²; ¹Department of Pediatrics, Duke University Medical Center, Durham, NC, ²Center for Human Genome Variation, Duke University Medical Center, Durham, NC, ³Laboratory Medicine Center, Nanfang Hospital, Southern Medical University, Guangzhou, China.

RATIONALE: There is considerable interest in the use of next generation sequencing to identify molecular defects in patients with primary immunodeficiency.

METHODS: To identify the cause of Combined Immunodeficiency in 2 patients from 2 different consanguineous Qatari families who had a similar clinical and immunologic phenotype, we used whole-exome sequencing. The patients presented at an early age with fungal, viral and bacterial infections. The patients had hypogammaglobulinemia, normal numbers of B and T cells (most of which were CD45RA positive) and low numbers of NK cells. T cell proliferative responses to mitogens were normal, but were absent to antigens and anti-CD3. We looked for homozygous variants that were present in the patients but absent in controls and public databases. Additional studies included IKK β , IKK α , and phospho-IKK α immunoblotting, retroviral mediated reconstitution of IKK β , and cell growth in an immortalized patient B cell line.

RESULTS: We found the same homozygous nonsense mutation in *IKBKB* (R286X) in both patients. IKK β acts as part of the IKK complex in NF- κ B activation and phosphorylates the NF- κ B inhibitor, IKK α . The mutation co-segregated with disease in both families. Western blotting showed absence of detectable IKK β , and retroviral mediated reconstitution with wild type IKK β corrected cell growth and restored IKK α phosphorylation and IKK α degradation in an EBV transformed patient B cell line.

CONCLUSION: These data indicate that mutated *IKBKB* is the likely cause of immunodeficiency in these two patients. To our knowledge, this is the first report of combined immunodeficiency caused by a mutation in *IKBKB*.

L6 Sputum Cytokines and Adult Asthma Endotypes

Dr. Ioana O. Agache¹, Dr. Costel Agache², Mrs. Beate Rückert³, Prof. Liliana Rogozea¹, Dr. Cristina Ciobanu², Prof. Cezmi A. Akdis, MD, FAAAAI⁴; ¹Transylvania University Brasov, Romania, ²Theramed Medical Center, Romania, ³Swiss Institute of Allergy and Asthma Research, Switzerland, ⁴Swiss Institute of Allergy and Asthma Research, Davos, Switzerland.

RATIONALE: Asthma clusters can be separated according to their endotype by combining visible properties and sputum cytokines.

METHODS: The Local Ethics Committee approved the study. Induced sputum sampled outside an exacerbation was processed by dialysis (D-Tube Dialyzers Midi, Novagen) followed by ultrafiltration (Amicon Ultra 3K, Millipore, 3000 NMWL). Sputum cytokines were measured with the 27 Plex Human Cytokine Group I Bioplex (Biorad). Hierarchical cluster analysis with a wide array of variables was used. Difference between clusters was assessed by One-way Anova.

RESULTS: 60 adult asthmatics, mean age 44 \pm 14 years old, 52% females were included. Three clusters were separated, significantly different for all sputum cytokines (except RANTES and FGF-b), asthma severity (GINA), onset of asthma, ACT score, lung function (LF), AHR, exacerbation frequency, near-fatal asthma (NFA), corticosteroid-resistance, blood eosinophils. Cluster 1 (n=27, 67% males) had the lowest frequency of asthma exacerbations, the best LF, predominant macrophages and lymphocytes in induced sputum and the highest sputum IL-4, IL-1RA, VEGF and IL-7. Cluster 2 (n=14, 64.3% females) had the longest asthma duration, the highest AHR and frequency of asthma exacerbations, corticosteroid-resistance and NFA, the worst LF and ACT score, the highest sputum and blood eosinophilia and the highest sputum cytokines. Cluster 3 (n=19, 63.2% females), had the shortest asthma duration, the highest FeNO and total serum IgE, the highest incidence of LF decline and atopy, sputum neutrophilia and the lowest values for all sputum cytokines.

CONCLUSION: Deep phenotyping incorporating phenotypic traits, longitudinal data and biomarkers of inflammation stratifies asthma into subclasses according to their biological basis.

L7 Omalizumab Therapy Is Associated with Reduced Circulating Basophil Populations in Asthmatic Children

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RATIONALE: Basophils have been implicated in promoting the early development of TH2 cell responses in some murine models of TH2 cytokine-associated inflammation. However, the specific role of basophils in allergic asthma remains an active area of research. Recent studies in animal models and human subjects suggest that IgE may regulate the homeostasis of human basophil populations. Here, we examine basophil populations in children with severe asthma before and during therapy with the IgE directed monoclonal antibody omalizumab.

METHODS: Subjects were selected based on age between 5 and 18 years, body weight and IgE level compatible with the omalizumab dosing table, and severe asthma. Asthma symptoms assessments were administered during therapy. Peripheral blood samples were obtained before and during therapy and basophil frequencies and numbers were monitored using flow cytometric techniques.

RESULTS: Omalizumab therapy was associated with a significant reduction in circulating basophil frequencies and numbers (p<0.05, Wilcoxon Signed Rank Test), a finding that correlated with improved clinical outcomes.

CONCLUSIONS: The observation that circulating basophils are reduced following omalizumab therapy supports a mechanistic link between IgE levels and circulating basophil populations and may provide new insights into one mechanism by which this drug improves asthma symptoms.

L8 Elucidating the Basis of Airway Protection By Gastrointestinal *Lactobacillus Johnsonii*

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RATIONALE: We recently demonstrated that the gram-positive, facultative anaerobe, *L. johnsonii*, is significantly enriched in the cecal microbiome of mice whose airways are protected against allergen and viral challenge, and that oral supplementation with this species alone can afford airway protection. Current studies are aimed at deciphering the basis for gastrointestinal *L. johnsonii* protection of the airways.

METHODS: *L. johnsonii* was isolated from airway protected mice, and its genome was sequenced using the Illumina MiSeq platform. The gut microbiome composition of mice supplemented with *L. johnsonii* was compared to unsupplemented animals, and used in conjunction with a metagenome predictive tool, PICRUSt, to compare the functional capacity of these communities.

RESULTS: *L. johnsonii* preferentially localizes in the terminal ileum and cecum. While its 16S rRNA is 99% homologous to *L. johnsonii* NCC 533, only 85% of the assembled contigs of its 2Mb genome are identical, suggesting that 15% of its genome is distinct from this species. Genes relevant to colonization, survival, and inter-species competition in the gut are present. Oral supplementation of mice with *L. johnsonii* is associated with significant enrichment of specific members of the Bacteroides, Proteobacteria, Firmicutes, Spirochaetes, Cyanobacteria, and Caldiseptica (Welch's t-test p-value < 0.05, q-value < 0.16) and collectively this community imparts a myriad of immunomodulatory functions.

CONCLUSION: *L. johnsonii* is a crucial species of the gut microbial community that reshapes community composition and function in a manner that affords airway protection in mice.

L9 IL-13/CD14 Polymorphisms and Prenatal Risk Factors That Shape Gut Microbiota Influence the Development of Atopic Dermatitis in Infancy in a Synergistic Manner: A Birth Cohort Study (COCO)

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RATIONALE: Although cesarean delivery and prenatal exposure to antibiotics are likely to affect the gut microbiome in infancy, their effect on the development of atopic dermatitis (AD) in infancy is unclear. The influence of individual genotypes on these relationships is also unclear. To evaluate with a prospective birth cohort study whether cesarean section, prenatal exposure to antibiotics, and susceptible genotypes act synergistically to promote the development of AD in infancy.

METHODS: The study population comprised 412 infants from the Cohort for Childhood of Asthma and Allergic Diseases (COCO). Their cord blood DNA was subjected to IL13 (rs20541) and CD14 (rs2569190) genotype analysis. Fecal samples were obtained from 11 of the 412 infants in this study at the age of 6 months and 16s rRNA bacterial gene sequencing was performed.

RESULTS: The combination of cesarean delivery and prenatal exposure to antibiotics associated significantly and positively with AD (aOR, 5.70; 95% CI, 1.19–27.3). The association between cesarean delivery and AD was significantly modified by parental history of allergic diseases or risk-associated IL-13 (rs20541) and CD14 (rs2569190) genotypes. Infants who were exposed prenatally to antibiotics and were born by cesarean delivery had lower total microbiota diversity in stool samples at 6 months of age than the control group. As the number of these risk factors increased, the AD risk rose (trend p<0.05).

CONCLUSION: Cesarean delivery and prenatal antibiotic exposure may affect the gut microbiota, which may in turn influence the risk of AD in infants. These relationships may be shaped by the genetic susceptibility alleles.

L10 The Role of Chitin and TNF-Alpha in Airway Inflammation Induced By House Dust Mite in Murine Model

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BACKGROUND: Chitin is a potent adjuvant in immune responses of Th2, Th1 and Th17. In our previous study, tumor necrosis factor- α (TNF- α) is a key mediator in the development of Th2 cell response to inhaled allergens.

OBJECTIVE: We investigated the role of chitin in the induction of Th1, Th2, and Th17 response, sensitizing and challenging mice intranasally with OVA and chitin in this study. We also evaluated the role of TNF- α and the size of chitin in the development of Th2 immune response induced by chitin, using TNF- α -deficient mice and chitinase-treated chitin, respectively.

METHODS: A mouse model was generated via simultaneous intranasal administration of 75 μ g of ovalbumin (OVA) and 100 μ g of house dust mite (HDM)-derived chitin in the presence or absence of chitinase. The effect of TNF- α on adaptive immune response was also evaluated using TNF- α -deficient mice.

RESULTS: HDM-derived chitin induced airway inflammation and increased the expression of all cytokines of Th1, Th2, and Th17 as well as the serum level of OVA-specific IgE, IgG1, and IgG2a. In the absence of TNF- α or in the presence of chitinase, the expression of Th2 cytokines and the serum level of OVA-specific IgE were alleviated, while the expression of Th1 and Th17 cytokines and the serum level of OVA-specific IgG1 and IgG2a were preserved or more enhanced.

CONCLUSION: HDM-derived chitin is size-dependent multifaceted immune adjuvant inducing Th1, Th2, and Th17 immune response, and TNF- α produced by airway exposure to HDM-derived chitin is a key mediator in the development of Th2 cell response to inhaled allergens.

L11 Platelets Constitutively Express Interleukin-33 Protein

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RATIONALE: Recent studies revealed that platelets are activated during asthma exacerbation and that depletion of platelets in a mouse model of asthma improves airway inflammation. However, the precise mechanisms of how platelets—despite being devoid of a nucleus—regulate allergic inflammation are not fully understood. IL-33, an IL-1 family cytokine, has attracted attention as a critical cytokine in the development of allergic diseases because of its potent ability to induce type 2 immunity and its strong genetic association with asthma. Objective: To determine whether platelets express IL-33 protein.

METHODS: IL-33 protein in human platelets and a megakaryocyte cell line, MEG-01, and in bone marrow-derived mouse megakaryocytes was detected by Western blot analysis and fluorescent immunostaining. Papain inhalation (100 mg/day × 3 days)-induced IL-33-dependent airway inflammation (Oboki K. et al. PNAS 2010) was compared between platelet-intact and platelet-depleted (by injection of anti-CD41 mAb) groups.

RESULTS: Human platelets and anucleated fragments of mouse bone-marrow-derived megakaryocytes expressed full-length IL-33 protein, which is biologically active. Cytosol, but not nuclear, fractions of MEG-01 and mouse megakaryocytes also expressed full-length IL-33 protein. Depletion of platelets resulted in a significant decrease in eosinophilic, but not neutrophilic, inflammation in papain-treated mouse airways.

CONCLUSIONS: Our novel findings suggest that platelets constitutively express active IL-33 protein and that activation of platelets plays a pivotal role in IL-33-dependent type II airway inflammation. Further understanding of the precise molecular mechanisms may lead to platelets' becoming an attractive new target in asthma treatment.

L12 Targeted Resequencing Identified Damaging Rare Variants in *IFNGR1* Associated with Atopic Dermatitis Complicated by Eczema Herpeticum

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RATIONALE: Genetic variations in *IFNGR1* gene have been reported that abrogate IFN- γ signaling leading to enhanced susceptibility to mycobacterial infection. However, the causality of *IFNGR1* variants in atopic dermatitis with eczema herpeticum (ADEH+) has not been established. Utilizing targeted resequencing, we assess the influence of rare functional variations in *IFNGR1* to ADEH+ susceptibility.

METHODS: We performed targeted resequencing in 122 European American (EA) ADEH+ cases and 107 ADEH- controls followed by validation genotyping for 3 rare missense variants in the entire cohort including a total of 411 EA patients (133 ADEH+, 157 ADEH- and 121 non-atopic controls (NA)). Association tests between rare variants and risk of ADEH+ was performed using SKAT-O. The IFN- γ induced CD80 expression on peripheral blood mononuclear cells (PBMC) was examined in a selected group of patients.

RESULTS: We identified 18 common and 118 rare variants in *IFNGR1*. Among the rare variants, 6 were missense with 3 as possibly damaging (Val14Met, Val61Ile and Tyr397Cys) including one novel variant (Tyr397Cys). The 3 damaging rare variants conferred greater risk for ADEH+ ($P < 0.031$) when we compared 133 ADEH+ patients including 5 heterozygous carriers to 278 non-ADEH+ subjects (157 ADEH-, 121 NA). Enhanced signal was observed ($P < 7.48E-14$) when we compared findings to an unphenotyped control population (4300 EAs) from the

Exome Sequencing Project. In functional studies conducted thus far, we observed that an 8-year-old boy carrying the Val14Met variant had a blunted response to IFN- γ induced CD80 expression.

CONCLUSIONS: Our novel findings provide evidence that functional polymorphisms in *IFNGR1* contribute to ADEH+ susceptibility. Additional functional studies are underway.

L13 Grass Pollen Allergoids Coupled to Mannan Are Novel Vaccines with Enhanced Capacity to be Captured By Dendritic Cells Promoting Th1 Immune Responses and High Levels of IL-10

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RATIONALE: The immunogenicity and efficacy of allergen vaccines depend on the capacity of dendritic cells (DCs) to capture them and to induce proper immune responses. Herein, we compared the ability of native grass pollen extracts (N), glutaraldehyde-polymerized allergoids (P) and glutaraldehyde-polymerized allergoids coupled to mannan (PM) to be internalized by DCs and to regulate immune responses.

METHODS: N, P and PM *Phleum pratense* pollen extracts were produced. Human monocytes from buffy coats were differentiated to DCs with IL-4/GM-CSF. Allergen uptake was assessed by flow cytometry and confocal microscopy. Co-culture experiments, real-time quantitative PCR, ELISA and ELISPOT were performed. Antibody levels in serum from BALB/c mice immunized with extracts, proliferation of splenocytes and cytokine production were determined.

RESULTS: PM was captured by human DCs more efficiently than N or P through mechanisms partially depending on receptor-mediated internalization. DCs stimulated with N, P and PM expressed high levels of HLA-DR, CD86 and CD83. PM-activated DCs produced higher levels of IL-6 and IL-10 than N- or P-activated DCs. Allogeneic and allergen-specific co-cultures showed that PM-activated DCs generated T cells producing higher levels of IFN- γ and lower levels of IL-5 or IL-4 than N- or P-activated DCs. Splenocytes from mice immunized with PM showed a Th1 cytokine-signature and high levels of IL-10 with higher proliferation than those from mice immunized with N or P.

CONCLUSIONS: Grass pollen hypoallergenic allergoids conjugated to mannan may represent safer and more effective novel vaccines due to their enhanced immunogenicity and capacity to promote Th1 mediated T cell responses to allergens.

L14 Upregulated Matrix Metalloproteinase 2/9 Activity in Murine Asthma Detected with Activatable Cell-Penetrating Peptides

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RATIONALE: Asthma, an airway inflammatory disease characterized by intermittent airway obstruction, affects more than 300 million people worldwide. Matrix metalloproteinase 2 and 9 (MMP2/9) mRNA and protein levels correlate with asthma pathogenesis; however, the role of MMP2/9 in asthma is not well understood, particularly because previous studies have not evaluated protease activity. We report the application of activatable cell-penetrating peptides (ACPPs), injectable probes that highlight *in vivo* protease activity, to assess protease activity in murine asthma.

METHODS: Asthma mice were sensitized (ovalbumin [OVA] + alum in saline [PBS]) and then challenged (OVA in PBS). Age-matched control mice were sensitized but not challenged. The day after the final OVA challenge, ACPPs (cleavable and uncleavable, n = 3-6 mice each) were administered intravenously 6 hr before mice were sacrificed. Lungs were imaged for Cy5 fluorescence (Maestro, CRi). Lung sections (10 μ m, 8 images/mouse) were imaged for Cy5 fluorescence on a confocal microscope (5Live, Zeiss) and stained with hematoxylin and eosin.

RESULTS: MMP2/9 activity was > 2-fold higher in lungs from asthma mice than controls (p = 1.8×10^{-4}). The same pattern was observed for radiometric ACPPs. MMP2/9 activity localized around inflamed airways with 1.6-fold higher ACPP uptake surrounding airways compared to the normal lung parenchyma (p = 0.03). MMP2/9 activity detected by ACPPs co-localized with gelatinase activity measured with *in situ* DQ gelatin.

CONCLUSIONS: MMP-activated ACPPs allow for real-time detection of protease activity in a murine asthma model, improving our understanding of protease activation in asthma progression and elucidating novel therapy targets.

L15 Asthma and Airway Hyperresponsiveness in Children with Eosinophilic Esophagitis: EGF and FGF-2 as a Link

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RATIONALE: Asthma is prevalent in children with eosinophilic esophagitis (EoE), previously estimated at 24-42% versus 9% for the general population. However, studies of pulmonary function and airway hyperresponsiveness (AHR) in children with EoE are lacking.

METHODS: A cross-sectional study was conducted of children aged 6-18 years with EoE and healthy controls. Methacholine challenge (AHR defined as provocative concentration of methacholine <8mg/ml), and exhaled nitric oxide were performed. Peripheral blood was analyzed for total IgE, eosinophil count, eotaxin, and serum cytokines.

RESULTS: Baseline spirometry was normal and not significantly different for EoE subjects (n=33) and healthy controls (n=37). AHR was present in 33% of children with EoE and 10.8% of healthy controls (p=0.04). 20% of EoE subjects with asthma (n=15) had AHR, versus 44% of EoE subjects without asthma (n=18). Overall, 69.7% of EoE subjects had either asthma or AHR. AHR correlated strongly with serum IgE (p<0.0001) and exhaled nitric oxide (p=0.0002). Epidermal growth factor (EGF) and fibroblastic growth factor 2 (FGF-2) were elevated in subjects with EoE and asthma, compared to healthy controls and those with EoE but no asthma (p<0.05). Subjects with EoE and asthma who were on asthma controller medications had similar levels of EGF and FGF-2 as healthy controls. Th₂ cytokines and eotaxin did not differ significantly among any groups.

CONCLUSIONS: Asthma and AHR may be more prevalent than previously estimated in children with EoE. Serum elevations of EGF and FGF-2 were seen in EoE subjects with asthma, but not in subjects on asthma controller medications.

L16 Efficacy and Safety of Lebrikizumab in Severe Uncontrolled Asthma: Results from the Lute and Verse Phase II Randomized, Double-Blind, Placebo-Controlled Trials

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RATIONALE: A subset of severe asthma patients are inadequately controlled despite treatment with inhaled corticosteroids (ICS) and a second controller. Lebrikizumab is a humanized antibody to IL-13, a key effector cytokine in asthma pathogenesis. In a previous Phase 2 trial, lebrikizumab treatment increased forced expiratory volume in 1 sec (FEV₁), particularly in patients with higher blood periostin levels.

METHODS: LUTE and VERSE were replicate, multicenter, double-blind studies that randomized (1:1:1:1) patients with uncontrolled asthma despite treatment with ICS and a second controller to receive lebrikizumab 37.5mg, 125mg, 250mg, or placebo subcutaneously every 4 weeks. The primary endpoint was the rate of exacerbations. Secondary endpoints included change in FEV₁. The trials, initially Phase 3, were converted to Phase 2b upon identification of a process-related impurity requiring changes to the lebrikizumab manufacturing process.

RESULTS: 463 patients were pooled for analysis. The median number of doses received was 6 (range 1-12). Compared with placebo (n=116), the exacerbation rate (95% CI) was reduced by 62% (23%-83%; n=117), 35% (-17%-65%; n=112), and 11% (-54%-49%; n=118) in all patients and by 81% (35%-97%), 77% (26%-95%), and 22% (-62%-63%) in periostin-high (≥ 50 ng/mL) patients in the lebrikizumab 37.5mg, 125mg, and 250mg groups, respectively. At Week 12, increases in FEV₁ were greater for lebrikizumab versus placebo, particularly in periostin-high patients. No important safety signals were observed.

CONCLUSIONS: Lebrikizumab treatment reduced the exacerbation rate and increased FEV₁ in patients with uncontrolled asthma on ICS and a second controller, particularly those who were periostin-high, confirming the findings from the previous Phase 2 trial.

L17 Dose-Finding Efficacy and Safety Trial of House Dust Mite Sublingual Immunotherapy Tablet, MK-8237, Using an Environmental Exposure Chamber

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RATIONALE: Sublingual immunotherapy with house dust mite (HDM) might be beneficial in patients with allergic rhinitis with/without conjunctivitis (AR/C), although reported effect size is small to moderate and varies greatly among studies. MK-8237 (Merck/ALK-Abelló) is a sublingual HDM immunotherapy tablet currently under investigation.

METHODS: In this randomized, double-blind, single-site trial adults with HDM-induced AR/C with/without asthma (n=124) received daily MK-8237 12 DU, 6 DU, or placebo for 24 weeks, and underwent exposure challenges (Vienna Challenge Chamber) at weeks 8, 16, and 24. The primary objective was to evaluate the dose-related efficacy of MK-8237 versus placebo on total nasal symptom score (TNSS) during chamber challenge at week 24. TNSS was the sum of 4 nasal symptom scores (maximum=12).

RESULTS: MK-8237 12 DU and 6 DU provided a 48.4% and 26.2% improvement, respectively, in TNSS at week 24 versus placebo (mean difference: -3.62, $P < .001$ and -1.98, $P = .003$). TNSS improvements were also observed at weeks 8 (mean difference: -1.37, 20.3%; $P = .007$) and 16 (mean difference: -2.08, 30.1%; $P < .001$) for the 12 DU dose and week 16 (mean difference: -1.23, 17.8%; $P = .032$) for the 6 DU dose. Total symptom scores (nasal+ocular symptoms) were significantly improved by both doses versus placebo at week 24. Both doses of MK-8237 were well tolerated, with no systemic allergic reactions or reactions requiring epinephrine.

CONCLUSIONS: MK-8237 appears promising, with potential for high and clinically meaningful (>20% reduction in symptoms) effect to be further evaluated in field trials. A dose-dependent effect was observed, with the 12 DU dose exhibiting the best benefit/risk ratio.

L18 Long-Lasting Egg Consumption in Egg Allergic Children Treated with Oral Immunotherapy (OIT): Follow-up from the Consortium of Food Allergy Research (CoFAR) Study

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RATIONALE: Egg OIT results in sustained unresponsiveness (SU) in a subset of egg-allergic children; however, long-term treatment effects off-therapy are not established.

METHODS: Egg-allergic children (5-18 y/o) received egg OIT (n=40), maximum 4 years, or placebo (n=15), maximum 1 year. Through year 4, subjects were assessed as SU (passed OFC after 4-6 weeks off OIT) or desensitized (D) (passed OFC on therapy only). SU subjects were instructed to add unbaked egg ad libitum; other subjects added egg independent of physician instruction. Long-term, follow-up questionnaires (LFQ) were administered at a median of 61.6 months from enrollment to assess unbaked (lightly cooked) vs. baked (heat-denatured) egg consumption in current diet and symptoms.

RESULTS: Of 40 egg OIT-treated subjects, 22/40(55%) were SU by year 4 (versus 27.5% at year 2). Of 8,925 egg OIT doses in years 2-4, 95% were symptom-free. 45/55 (81.8%) subjects completed the LFQ. More egg OIT

subjects [23/34(67.6%)] consumed unbaked and baked egg vs. placebo subjects [2/11(18.2%)] ($p = 0.006$). 20/20 (100%) OIT-SU subjects were consuming all forms of egg in their diet. 7/8 (87.5%) OIT-D subjects were consuming some egg; 3 unbaked and 4 only baked egg. 1/6 (16.7%) OIT-not-desensitized subjects were consuming only baked egg. 4/11 (36.4%) placebos were consuming some egg; 2 unbaked and 2 only baked egg.

CONCLUSIONS: Findings suggest sustainability of long-term egg consumption among subjects demonstrating SU after completion of egg OIT. Future work is needed to identify individuals who will benefit from egg OIT.

L19 A Randomized, Double-Blind, Placebo-Controlled Trial of Omalizumab Combined with Oral Immunotherapy (OIT) in the Treatment of Cow's Milk Allergy (CMA): Safety of Dosing

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RATIONALE: Determine whether the addition of omalizumab reduces dosing-related side-effects in subjects with CMA undergoing milk OIT.

METHODS: Fifty-seven milk-allergic subjects (7-32 y/o) confirmed by DBPCFC with a milk-specific IgE >0.35 kUA/L and/or positive PST were randomized 1:1 to receive blinded omalizumab or placebo for 16 months. Open-label milk OIT dosing was initiated after Month 4 of omalizumab/placebo with an escalation to maintenance over 22-40 weeks; goal - 3.84 g milk protein/day.

RESULTS: At enrollment, there were no statistically significant differences between the omalizumab/placebo treatment arms for age, milk specific-IgE (39.4 vs. 42.0 kUA/L), milk PST wheal (10.0 vs. 8.0 mm) or OFC dose at first symptom (20 vs. 20 mg). Three subjects withdrew prior to OIT dosing. Significant differences between the omalizumab (n=26) and placebo (n=28) groups were seen for dose-related symptoms per subject during dose escalation and maintenance therapy through 16 months (median: 5.0 vs. 47.5; $p = 0.0001$), dosing reactions requiring treatment (median: 1.0 vs. 12.0; $p = 0.0003$), and need for epinephrine (1 time in 1 omalizumab subject vs. 17 times in 9 placebo subjects). Significantly fewer doses were required to achieve maintenance dosing in the omalizumab group (median: 198.0 vs. 224.5; $p = 0.01$) resulting in a shorter escalation phase with omalizumab (25.9 vs. 30.8 weeks; $p = 0.01$).

CONCLUSIONS: This is the first randomized, double-blinded, placebo-controlled OIT trial demonstrating that omalizumab significantly reduces the dosing symptoms and treatment requirements, including epinephrine, of OIT-related side-effects and reduces the time to achieve maintenance dosing. Future DBPCFCs will determine whether omalizumab improves the induction rate of desensitization and tolerance.

L20 Dupilumab Monotherapy in Adults with Moderate-to-Severe Atopic Dermatitis: A 12-Week, Randomized, Double-Blind, Placebo-Controlled Study

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RATIONALE: Dupilumab, a human monoclonal antibody targeting the IL-4R α subunit, blocks IL-4/IL-13 signaling.

METHODS: This European trial randomized adults with moderate-to-severe atopic dermatitis poorly controlled by topical agents to 12 weekly subcutaneous doses of placebo (n=54) or dupilumab 300 mg (n=55); topical agents were not permitted. Primary efficacy endpoint was percent change in Eczema Area and Severity Index (EASI) score from baseline to week 12. Secondary endpoints included changes from baseline in EASI, body surface area, SCORAD, pruritus numerical rating scale, and 5-D Pruritus Scale; proportions of patients achieving EASI reduction \geq 50% (EASI-50), Investigator's Global Assessment (IGA) 0 or 1, and safety were assessed.

RESULTS: Baseline characteristics were similar between groups (EASI mean \pm SD: 23.12 \pm 12.35 on dupilumab and 24.10 \pm 12.70 on placebo). Percent change from baseline in EASI showed improvements that significantly favored dupilumab relative to placebo, -74.0% and -23.3%, respectively ($P<0.0001$). EASI-50 responder rate was 85.5% with dupilumab and 35.2% with placebo ($P<0.0001$). Other measures of disease activity (SCORAD and IGA) and pruritus scores significantly favored dupilumab ($P<0.0001$). Eleven SAEs were reported in the placebo group compared to 1 in the dupilumab group. Skin infections were also reported less often in dupilumab group (2[4%] vs 14[26%]). Treatment-emergent adverse events (TEAEs) were 74.5% with dupilumab and 77.8% with placebo. Frequent TEAEs reported more often with dupilumab were injection site reactions and nasopharyngitis.

CONCLUSIONS: In this study, 12 weeks of dupilumab monotherapy was associated with rapid, marked improvements in measures of disease activity and pruritus, fewer SAEs, less infections compared to placebo, and was generally well-tolerated.