THURSDAY, FEBRUARY 27 AND FRIDAY, FEBRUARY 28

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 Unni 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 Intratable 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 S. Sedlak, MSN CPNP

8:00 **Introduction**  
Debra S. 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!**  
Karlo 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.

**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

**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

**1101C Opening Pandora’s Box: Asking the Right Questions**
Marriott North Tower, Lobby Level, Torrey Pines 1 & 2  
David Wayne Unklee, MSN APN FCCM  
Anthony J. Rickett, MD FAACCI FCCP

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 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 Allergy/Immunology 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 Allergy/Immunology 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 allergy fellowship faculty and community volunteer clinical faculty; Provide practical tips for developing and enhancing an allergy 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

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
11:00 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 sinuses.

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: 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 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. Dobson, 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 Ballow, 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 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 Dermatitits  
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 OEC

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.
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
4:45 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.
FRIDAY, FEBRUARY 28

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 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 Catastroni, MA MS
3:00 Break
3:20 IgE Sensitization and Current Allergen Exposure: Implications for Environmental Intervention
Herman Mitchell, 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: 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 Catastroni, MA MS
3:00 Break
3:20 IgE Sensitization and Current Allergen Exposure: Implications for Environmental Intervention
Herman Mitchell, 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 FAAAAA
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 FAAAAA

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 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

**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 FAAAAA
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 FAAAAA
Patrick J. Brennan, MD PhD
Taylor A. Doherty, MD FAAAAA
Tanya M. Laidlaw, MD FAAAAA
Brian P. Vickery, MD FAAAAA

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 Rhinolaryngoscopy**
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 Rhinolaryngoscopy
Jerald W. Koepke, MD FAAAAA

3:15 Break

3:30 Hands-On Instruction
Allen D. Adinoff, MD FAAAAA
Kevin R. Murphy, MD
Grant C. Olson, MD
Donald W. Pulver, MD FAAAAA
C. Ross Westley, MD FAAAAA

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 CCRC
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. Reijula, 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 probiotics and prebiotics 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. Holzhauser, MD MBA FAAAAI

5:15 **Hiring and Firing**  
Vinish 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**

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
AAAAI Membership

**Pros**

- ✓ Free subscription to the JACI
- ✓ Free subscription to the JACI: In Practice
- ✓ Discounted AAAAI Annual Meeting Registration
- ✓ First access to popular Annual Meeting Sessions
- ✓ Listing in the Find an Allergist/Immunologist directory
- ✓ Great networking opportunities
- ✓ Members only access to printable pub ed materials

**Cons**

Apply online at www.aaaaai.org/apply

*Member benefits vary by member type.*
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: Review 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. Gem, MD FAAAAI
Kirsten Koepef, 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
Annahita 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 Crameri, 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.
Allied Health Workshop  

**2021 Cockroach Immunotherapy**  
Luisa Karla P. Arzuda, 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-ILS 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.

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**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  
Kate 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.

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.

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**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 CCRC  
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.

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.

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.

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**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 adult 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 Allergens?
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  
Karín 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 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.

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 Thomas-Hansel, 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
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. Chipp, 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. MacGinnite, 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. Mc Climon, 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: Review new data on the combination of immunotherapy and certain immunomodulators; Discuss the possible mechanisms that might account for these findings, analyzing the mechanisms of immunotherapy in a new light.

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 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 allergy 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 IgL class switch recombination to IgE.

2515 Prostaglandins: Regulatory Lipid Mediators
Daryll 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.
**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, TGFβ, TLR4, TLR8 and ADAM2 Genes Resulted Associated To Asthma In Brazilian Family Trio Study
Isabel Rugê 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 Bisyuk, MD
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, MD
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 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, MD
2:45 Epidermal Growth Factor Receptor (EGFR) Mediates Cell Fusion and Infectivity Of Respiratory Syncytial Virus (RSV)
Sujin Lee, MD
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. Klatky, 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 Khouyr, 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-á Up-Regulation In CS7BL/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.
Allied Health Session  

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  
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. McGeary, 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 C. 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**  
  Angela Hague, PA-C

- **2:35**  
  **Indentifying 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**  
  **Effective 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

- **3:30**  
  **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**  
  **Randall M. Goldblum, MD**

- **5:00**  
  **Terumi Midoro-Horiuti, MD PhD FAAAAI**

- **5:15**  
  **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.

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**Annual Meeting Workshops**

Programmed by the AAAAI. Annual Meeting Workshops funded through an educational grant from Merck.
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 FAAAAA  
Panelists:  
- Donald W. Aaronson, MD FAAAAA  
- Gary N. Gross, MD FAAAAA  
- Richard W. Honsinger, MD MACP FAAAAA  
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 FAAAAA  
4:45  **Skin Prick Testing in the Diagnosis of Occupational Type I Allergies**  
Joaquin Sastre, MD PhD FAAAAA  
5:00  **Occupational Rhinitis**  
Santiago Quirce, MD PhD  
5:15  **Prevention of Work-Related Respiratory Allergies in Young Workers**  
André Cartier, MD FAAAAA  
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 FAAAAA  
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 FAAAAA  
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. Naciero, MD FAAAAA  
- Martin Wagenmann, MD FAAAAA  
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.

**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.

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**Annual Meeting Workshops**

Programmed by the AAAAI. Annual Meeting Workshops funded through an educational grant from Merck.
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
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 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.
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-IL-4, anti-IL-13, anti-IL-5, anti-IL-17, anti-IL-9) 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
Nathanial 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. Pithyn, 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 Halbreich, 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 EsE management in adults; Demonstrate the different medications and become familiar with dose and delivery; Describe the pros and cons of esophageal dilation in EsE.

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 control- ler 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.
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. Piatts-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.

3016 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.

3017 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).

3018 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
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  
Nikolas 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  
Mubeeccel 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.

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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.

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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  
Karim 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.

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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
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.

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.

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.

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. McGeady, 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.
<table>
<thead>
<tr>
<th>Interest Section Forum</th>
<th>3522</th>
<th>BCI: Cutting-Edge Research from Members of the Basic and Clinical Immunology Interest Section</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12:30 to 2:30 pm</td>
<td>Convention Center, Upper Level, Room 11AB</td>
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<td>Pre-registration and ticket required. No fee. Box lunch included.</td>
<td>Credit: 1.25 CME / 1.50 CE</td>
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<td>Moderator: Francisco A. Bonilla, MD PhD FAAAAI</td>
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<td>12:30 Lunch</td>
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<td></td>
<td>12:35 Business Meeting</td>
<td>Francisco A. Bonilla, MD PhD FAAAAI</td>
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<td>1:05 Question &amp; Answer</td>
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<td>1:15 Nanotechnology Meets Allergy: The Yin and Yang of Nanoscale Toxicity and Therapy</td>
<td>James R. Baker, Jr., MD FAAAAI</td>
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<td>1:45 Genome Safari: Navigating the Nucleotides to Find the Origins of Asthma</td>
<td>Kathleen C. Barnes, PhD FAAAAI</td>
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<td>2:15 Question &amp; Answer</td>
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<td>Interest completion of this session, participants should be able to:</td>
<td>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.</td>
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<tr>
<th>Interest Section Forum</th>
<th>3523</th>
<th>EORD: Metals, Cements and Glues: Assessing the Exposure: Diagnosing the Disease</th>
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<tbody>
<tr>
<td></td>
<td>12:30 to 2:30 pm</td>
<td>Convention Center, Mezzanine Level, Room 14AB</td>
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<td>Pre-registration and ticket required. No fee. Box lunch included.</td>
<td>Credit: 1.25 CME / 1.50 CE</td>
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<td>Moderator: Jeffrey G. Demain, MD FAAAAI</td>
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<td>12:30 Lunch</td>
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<td>12:35 Business Meeting</td>
<td>Karin A. Pacheco, MD MSPH FAAAAI</td>
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<td>1:05 Question &amp; Answer</td>
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<td>1:15 Metals: Source Exposures, Disease Outcomes, and Making the Association Between the Two</td>
<td>James S. Taylor, MD</td>
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<td>1:45 Cements and Glues: Common and Overlooked Causes of Allergic Disease</td>
<td>Karin A. Pacheco, MD MSPH FAAAAI</td>
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<td>2:15 Question &amp; Answer</td>
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<tr>
<td>Interest completion of this session, participants should be able to:</td>
<td>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.</td>
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<tr>
<th>Interest Section Forum</th>
<th>3524</th>
<th>FADDA: Practice Parameter Updates on Allergic Skin Diseases</th>
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<tr>
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<td>12:30 to 2:30 pm</td>
<td>Convention Center, Upper Level, Ballroom 6A</td>
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<td>Pre-registration and ticket required. No fee. Box lunch included. Bring your mobile device to participate.</td>
<td>Credit: 1.25 CME / 1.50 CE</td>
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<td>Moderator: David A. Khan, MD FAAAAI</td>
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<td>12:30 Lunch</td>
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<td>12:35 Business Meeting</td>
<td>David A. Khan, MD FAAAAI</td>
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<td>1:05 Question &amp; Answer</td>
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<td>1:15 Atopic Dermatitis: Updates on Evaluation and Management from the Practice Parameter</td>
<td>Lynda C. Schneider, MD FAAAAI</td>
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<td>1:45 Chronic Urticaria: Updates on Diagnostic Testing and Therapy from the Practice Parameter</td>
<td>Jonathan A. Bernstein, MD FAAAAI</td>
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<td>2:15 Question &amp; Answer</td>
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<td>Interest completion of this session, participants should be able to:</td>
<td>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.</td>
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<tr>
<th>Interest Section Forum</th>
<th>3525</th>
<th>HEDQ: Bringing Added Value to Accountable Care Organizations (ACOs) Through Asthma Population Management</th>
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<tbody>
<tr>
<td></td>
<td>12:30 to 2:30 pm</td>
<td>Convention Center, Mezzanine Level, Room 15AB</td>
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<td>Moderators: Bruce G. Bender, PhD FAAAAI</td>
<td>Giselle Mosnaim, MD MS FAAAAI</td>
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<td>12:30 Lunch</td>
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<td>12:35 Tribute to Dr. Noreen Clark</td>
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<td></td>
<td>12:40 Business Meeting</td>
<td>Giselle Mosnaim, MD MS FAAAAI</td>
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<td>1:05 Question &amp; Answer</td>
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<td>1:15 Asthma Population Management (Part 1): Identifying Persistent Asthma, Defining High Risk Asthma, and Measuring Quality of Asthma Care</td>
<td>Michael Schatz, MD MS FAAAAI</td>
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<td>1:45 Asthma Population Management (Part 2): Strategies for Improving Clinical Outcomes and Improving Quality of Care</td>
<td>William W. Crawford, MD Robert J. Becker, MD, Memorial Lectureship Recipient</td>
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<td>2:15 Question &amp; Answer</td>
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<td>Interest completion of this session, participants should be able to:</td>
<td>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.</td>
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### 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.

### 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 Lunch
1:10 What’s in a Label?  
Berber Vlieg-Boerstra, PhD RD
1:45 Food Triggers: The Degree of Avoidance  
Carina Venter, PhD 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  
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-Francisco
3:45 Fc-Gamma-Receptor-IIb 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

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
Amon 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
Gyu W. Scadding, MD

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

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.
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.

**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
Faouad T. Ismael, 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, peristin, 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. Koneti 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 Cautet, MD
Anna H. Nowak-Wegrzytn, 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 Ig 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**
Mubecel 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.
**Plenary ▼**

**401 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**
MONDAY, MARCH 3

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 RSV in Asthma 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
Huma 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 Sporter, 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
Kirjal 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

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

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)
Anjani 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
Sergej 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

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
Programmed by the AAAAI. Annual Meeting Workshops funded through an educational grant from Merck.
4805 Q & A Workshop  
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.

4806 Year-in-Review Workshop  
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 TREC for Newborn Screening  
John M. Routes, MD FAAAAI  
5:15 PID Cases Missed Using TREC 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 TREC screening; Identify PID that can be potentially missed via TREC screening.

4807 Q & A Workshop  
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.

4808 Q & A Workshop  
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.

4809 Q & A Workshop  
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. Volker, 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 aeroallergens, 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.
MONDAY, MARCH 3

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. Szefler, 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
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 pathophysiological 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. Baptst, 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
Kirsil 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
Programmed by the AAAAI. Annual Meeting Seminars funded through an educational grant from Merck.
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. Stadtmuwer, 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.
**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.

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**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**

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

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<tr>
<th>Time</th>
<th>Session Description</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>10:45</td>
<td>Mucosal Immunity: Balancing Immune Responses at the Forefront of Microbial Exposure</td>
<td>Andrea Cerutti, MD</td>
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<td>11:05</td>
<td>Immunity and B Cells in the Gut: From Immune Exclusion to Food Allergy</td>
<td>Cecilia Berin, PhD</td>
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<td>11:25</td>
<td>B Cells and Respiratory Immunity</td>
<td>Kathryn E. Hulse, PhD</td>
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**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.

### 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

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<tr>
<th>Time</th>
<th>Session Description</th>
<th>Speaker(s)</th>
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<tr>
<td>10:45</td>
<td>Introduction: Control of Type 2 Immunity</td>
<td>Mitchell H. Grayson, MD FAAAAI</td>
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<td>11:05</td>
<td>Transcriptional Cross-Regulation of Th1 and Th2 Cell Differentiation</td>
<td>Jinfang Zhu, PhD</td>
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<td>11:15</td>
<td>Question &amp; Answer</td>
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<td>11:20</td>
<td>Location, Location, Location: Dendritic Cells, B Cells and Th2 Development</td>
<td>Frances E. Lund, PhD</td>
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<td>11:45</td>
<td>Question &amp; Answer</td>
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<td>11:50</td>
<td>From Friend to Foe: T Regs Acting Th2</td>
<td>Prabir Ray, PhD</td>
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<td>12:15</td>
<td>Question &amp; Answer</td>
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<td>12:20</td>
<td>Break</td>
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<td>12:40</td>
<td>Introduction: Novel Concepts in Immunoglobulin E and its Receptors</td>
<td>Mitchell H. Grayson, MD FAAAAI</td>
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<td>12:45</td>
<td>Breaking Up is Hard to Do: Disassembly of IgE and FceRI</td>
<td>Theodore S. Jardetzky, PhD</td>
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<td>1:10</td>
<td>Question &amp; Answer</td>
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<tr>
<td>1:15</td>
<td>Exclusivity: IgE Binding to CD23 or FceRI</td>
<td>Hannah J. Gould, PhD</td>
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<td>Brian Sutton, MA DPhil</td>
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<tr>
<td>1:40</td>
<td>Question &amp; Answer</td>
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</tbody>
</table>

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-FceRI complexes and how IgE interacts with CD23 and how this prevents binding to FceRI and vice versa.
TUESDAY, MARCH 4

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 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 The Role of Motivational Interviewing to Help Guide Patients to Favorable Asthma Management Actions
Belinda Borrelli, PhD

1:00 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

11:15 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 GIO and post-menopausal osteoporosis pathophysiology, risk factors and screening tools; Discuss present and emerging guidelines and pharmacotherapy in the prevention and management of GIO.

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.
TUESDAY, MARCH 4

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
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.

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.

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

5521 Approach to the Evaluation of Immunodeficiency in Adults
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
Moderator: Michael E. Manning, MD FAAAAI
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
12:30 to 1:30 pm
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
12:30 to 1:30 pm
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
12:30 to 1:30 pm
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
12:30 to 1:30 pm
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
Margie 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
Sorun 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 FAAAAAI
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 Impairment Of IL-27's Differential Effect On CD4+T Cells In Asthma
Zhihong Chen
2:15 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
Lyndsley 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 FAAAAAI
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 FAAAAAI

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. Spann, 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 FcgRII I 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.
**Annual Meeting Workshops**

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

<table>
<thead>
<tr>
<th>Year-in-Review Workshop</th>
<th>Q &amp; A Workshop</th>
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<tbody>
<tr>
<td><strong>5806</strong> Mechanistic Basis of Food Allergy: New Frontiers</td>
<td><strong>5808</strong> Follicular Helper T Cells in Health and Disease</td>
</tr>
<tr>
<td>3:30 to 4:45 pm</td>
<td>3:30 to 4:45 pm</td>
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<tr>
<td>Convention Center, Upper Level, Room 11AB</td>
<td>Convention Center, Mezzanine Level, Room 16AB</td>
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<tr>
<td>Credit: 1.25 CME / 1.50 CE</td>
<td>Credit: 1.25 CME / 1.50 CE</td>
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<tr>
<td>Moderator: Kari C. Nadeau, MD PhD FAAAAI</td>
<td>Moderator: John W. Steinke, PhD FAAAAI</td>
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<tr>
<td>3:30 Environmental Sanitizers as a Potential Cause of Epidemic Food Allergy</td>
<td>3:30 Development of Follicular Helper T Cells</td>
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<tr>
<td>Jessica R. Savage, MD</td>
<td>Shane Crotty, PhD</td>
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<tr>
<td>3:45 Novel iNKT Ligands in Foods: Potential Role in the Development of Allergy</td>
<td>3:45 Vaccines and Follicular Helper T Cells</td>
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<tr>
<td>Patrick J. Brennan, MD PhD</td>
<td>Michael G. McHeyzer-Williams, PhD</td>
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<tr>
<td>4:00 Role of B Cells in Food Allergy Therapy</td>
<td>4:00 The Role of Follicular Helper T Cells in Autoimmunity</td>
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<tr>
<td>Duane R. Wesemann, MD PhD</td>
<td>Eric Mettre, PhD</td>
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<tr>
<td>4:15 Question &amp; Answer</td>
<td>4:15 Question &amp; Answer</td>
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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.

<table>
<thead>
<tr>
<th>Panel Discussion Workshop</th>
<th>Problem-Based Learning Workshop</th>
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<tbody>
<tr>
<td><strong>5807</strong> Rapid Desensitizations: Protocols and Management of Reactions</td>
<td><strong>5809</strong> A Case of Chronic Severe Urticaria</td>
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<td>3:30 to 4:45 pm</td>
<td>3:30 to 4:45 pm</td>
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<tr>
<td>Convention Center, Mezzanine Level, Room 15AB</td>
<td>Convention Center, Upper Level, Room 31C</td>
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<tr>
<td>Credit: 1.25 CME / 1.50 CE</td>
<td>Pre-registration and ticket required. Fee: $50.</td>
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<tr>
<td>Moderator: Karen S. Hsu Blatman, MD</td>
<td>Credit: 1.25 CME / 1.50 CE</td>
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<tr>
<td>David E. Sloane, MD</td>
<td>PBL Facilitator: Don A. Bukstein, MD</td>
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<tr>
<td>Timothy J. Sullivan, MD</td>
<td>Content Lecturer: Allen P. Kaplan, MD FAAAAI</td>
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<tr>
<td>Katharine M. Woessner, MD FAAAAI</td>
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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.

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.

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.
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) Delivered By Pressurized Metered-Dose Inhaler (pMDI) In Adults and Adolescents With Moderate To Severe Asthma
Kevin R. Murphy, MD, Rajiv Dhand, MD,2 Frank Trudo, MD,3 Tom Uryniak, MS1 and Ajay Aggarwal, MD,1 1 Boys Town National Research Hospital, Boys Town, NE, 2 Department of Medicine, University of Tennessee Graduate School of Medicine, 3 AstraZeneca 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. Chippis, 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 Poachanuukoon, MD, Thammasat University, Pathumtani, Thailand, Dr. Theerasak Kawman, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, Dr. Hiroshi Chantaphakul, MD, FAAAAl, Chutsachak District, Chulalongkorn University, Thailand, Dr. Chanchai Sittipunt, Chulalongkorn University, Thailand, Dr. Hiroshi Chantaphakul, MD, FAAAAl, Chutsachak District, Chulalongkorn University, Thailand, Dr. Kittipong Maneontheesuwan, Siriraj Hospital, Mahidol University, Bangkok, Thailand, Dr. Kittipong Maneontheesuwan, Siriraj Hospital, Mahidol University, Bangkok, Thailand, Dr. Pintip Ngaanchanaya, Ramathibodi Hospital, Mahidol University, Thailand, Dr. Chanchai Sittipunt, Chulalongkorn University, Thailand, Dr. Hiroshi Chantaphakul, MD, FAAAAl, Chutsachak District, Chulalongkorn University, Thailand, Dr. Kittipong Maneontheesuwan, Siriraj Hospital, Mahidol University, Bangkok, Thailand, Dr. Kittipong Maneontheesuwan, Siriraj Hospital, Mahidol University, Bangkok, Thailand, Dr. Pintip Ngaanchanaya, Ramathibodi Hospital, Mahidol University, Thailand, Dr. Chanchai Sittipunt, Chulalongkorn University, Thailand, Dr. Chanchai Sittipunt, Chulalongkorn University, Thailand, Dr. Chaicharn Pothirat, Chiangmai University, Thailand and Dr. Watchara Boonsawat, Siriraj 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 Khoobar, 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. Chippis, 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 Díez-Gómez Pastor, MD, Dr. Ruth Mielgo Ballesteros, MD and Dr. Consuelo Fernández Rodríguez, MD, PhD, Hospital Universitario 12 de Octubre, Spain

9 FDA Guidance-Directed 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 and West Penn Allegheny Health System, Pittsburgh, PA

10 Extended Omalizumab Dosage Intervals and Efficacy
Dr. Saraleen Benouni, MD,1 Dr. Lee E. Sheinkopf, MD, FAAAAI,2 Dr. LanAnh T. Do, MD, FAAAAI,3 Dr. Asif Rafi, MD,2 and Dr. Roger M. Katz, MD, FAAAAI,2 1 UCLA, Los Angeles, CA, 2 ucla, los angeles, CA, 3 ucla, Los Angeles, CA

11 Effect Of Roflumilast On Asthma Control In Moderate and Severe Asthma Patients
Prof. V.A. Beloglozov1, Dr. Yuri Popenko1 and Prof. Lawrence M. DuBuske, MD, FAAAAI, 2 grim State Medical University, Ukraine, 3 George Washington University School of Medicine, DC

12 The Potent and Selective CRTH2 Antagonist OCM00459 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 Lewis2, Dr. Jan Steiner2, Prof. John Bell2, Dr. Mark Payton2 and Dr. Michael Hunter2, 1 Atpox Therapeutics, Abingdon, United Kingdom, 2 Cubed, Abingdon, United Kingdom, 3 TLW Consulting, Cambridge, United Kingdom, 4 Oxford Therapeutics Consulting, Brightwell-cum-Sotwell, United Kingdom, 5 Medical Sciences Division, Oxford, United Kingdom, 6 Medical Sciences Division, Oxford, United Kingdom, 7 Medical Sciences Division, Oxford, United Kingdom, 8 Medical Sciences Division, Oxford, United Kingdom, 9 Medical Sciences Division, Oxford, United Kingdom, 10 Medical Sciences Division, Oxford, United Kingdom

13 Safety and Efficacy Of ARY012, A Potent, Selective, Oral CRTH2 Antagonist, In Patients With Mild To Moderate Th2-Driven Asthma
Sally E. Wenzel, MD, FAAAAI, Robert Hopkins, Director of Clinical Operations2, Dr. Michael Saunders, MD, Senior Director of Drug Safety2, David Chanry, 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 Pharmacology3, Dr. Jeremy Cole, MD, Principal Investigator3, Dr. James Wolfe, MD, Physician/Research Investigator4, Dr. Sheldon L. Spector, MD, FAAAAI, Dr. Lawrence D. Sher, MD, FAAAAI, Dr. Edward M. Kerwin, MD, FAAAAI and Dr. Larry Burgess, Ph.D, Executive Director of Medicinal Chemistry4, 1 University of Pittsburgh Medical Center NW, Pittsburgh, PA, 2 Array BioPharma Inc., Boulder, CO, 3 IPS Research Company, Oklahoma City, OK, 4 Allergy & Asthma Associates of Santa Clara County Research Center, San Jose, CA, 5 California Allergy & Asthma Medical Group, Los Angeles, CA, 6 Peninsula Research Associates, Rolling Hills Estates, CA, 7 Allergy and Asthma Center of Southern OR, Medford, OR
A Phase I Assessment Of Safety and Tolerability Of RNS60, a Novel Therapeutic Containing Charge-Stabilized Nanostuctures In Asthma
Supurna Ghosh, PhD, Andreas Kalmes, PhD, Jarrad Mock, Jocelyn Sutherland and Richard Watson, MD, Reavesio 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 Paggiaro, Dr. David M.G. Halpin, MD,2, Roland Buhl,1, Dr. Michael Engel, MD, Dr. Petra Moroni-Zentgraf1 and Dr. Emilio Pizzichini2,1University of Pisa, Pisa, Italy,3Royal Devon & Exeter Hospital, Exeter, United Kingdom,4Mainz University Hospital, Mainz, Germany,3Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim Am Rhein, Germany,3Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, CT,5Boehringer Ingelheim RCV GmbH & Co. KG, Vienna, Austria,6NUPAIVA (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 T4/2 Inflammatory Status
Dr. Thomas B. Casale, MD, FAAAAI,1 Dr. Eric Donn Bateman, MD,2 Prof. Ronald Dahl, MD,3 Dr. Emilio Pizzichini4, Dr. Mark L. Vandewalker, MD, Dr. Johann Christian Virchow5, Dr. Michael Engel, MD,1 Dr. Petra Moroni-Zentgraf6, Dr. Hendrik Schmidt6 and Huib A.M. Kerstjens7,8University Of South Florida Morsani College Of Medicine, Tampa, FL,9University of Cape Town Lung Institute, Cape Town, South Africa,10Odense University Hospital, Odense, Denmark,11NUPAIVA (Asthma Research Centre), Universidade Federal de Santa Catarina, Florianópolis, Brazil,12Clinical Research of the Ozarks, Columbia, MO,13University Clinic Rostock, Rostock, Germany,14Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim Am Rhein, Germany,15Boehringer Ingelheim Pharma GmbH & Co. KG, Biberach an der Riss, Germany,16University 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, MD,1 Prof. Dennis E. Doherty2, Jonathan Corren, MD,2 Dr. Jill Karpel2, Huib A. M. Kerstjens3, Dr. Michael Engle1, MD,1 Dr. Petra Moroni-Zentgraf4, Dr. Hendrik Schmidt4 and Dr. Shu Hashimoto, MD, Ph.D,5 Odense University Hospital, Odense, Denmark,6Lexington VA Medical Center, University of Kentucky, Lexington, KY,7University of California, Los Angeles, CA,8North Shore Medical Arts LLP, Great Neck, NY,9University Medical Center Groningen, University of Groningen, Groningen, Netherlands,10Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim Am Rhein, Germany,11Boehringer Ingelheim Pharma GmbH & Co. KG, Biberach an der Riss, Germany,12Nihon University School of Medicine, Tokyo, Japan

Asthma Epidemiology

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Satuday, 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

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, PhD, Dr. Koji Hashimoto, MD, PhD3, Dr. Hiroshi Odajima4 and Dr. Akira Akasawa, MD, PhD5,6Division of Allergy, Tokyo Metropolitan Children’s Medical Center, Tokyo, Japan,7Department of Pediatrics, University of Toyama, Toyama, Japan,8Department of Pediatrics and Child Health, Nihon University School of Medicine, Tokyo, Japan,9Fukuo National Hospital, Fukuo, Japan

20 Characteristics Of Adolescents With Undiagnosed Asthma In Rural Counties In Georgia
Dr. Poneh Davoodi, MD,1 Dr. Dennis Ownby, M.D, FAAAAI2, Ms. Suzanne Havstad, M.A.3,4, Dr. Jennifer Waller, PhD, Dr. Christine L.M. Joseph, PhD1 and Dr. Martha Tingen, PhD1, Georgia Regents University, Augusta, GA,1Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI,2Georgia 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. Shaghayeghshad Nourani hassankiaede, birjand university of medical sciences

22 An Evaluation Of The Thai-Translated Version Of The Childhood Asthma Control Questionnaire (C-AC) 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, MD,1,2GlaxoSmithKline,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 Javaid, M.Phil., University of Health Sciences, Lahore, Pakistan

25 Infectious Asthma Trigger, Acq Score and Miniqolq Score Correlations Support The One Airway Hypothesis
Dr. Amy Virojanapa, MD,1 Ms. Phoebe Shah2, Mr. Arthur Omondi3 and Dr. Efren L. Rael, MD, FAAAAI4,1Penn State, Hershey Medical Center, Hershey, PA,2UC San Diego, Vista, CA,3Allergy/Immunology, Penn State University College of Medicine, Hershey, PA

Primary Antibody Deficiencies

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

26 Comprehensive Immunological and Clinical Features Of Common Variable Immunodeficiency (CVID)
Dr. Varaz Bozoglanian, MD1, Sudhanshu Agrawal, MS2 and Sudhir Gupta, MD, PhD, FAAAAI1,1University of California, Irvine, Irvine, CA,2University of California, Irvine
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. Yesin Yilmaz-Demirdag, MD1, Prof. Sami L. Bahna, MD DrPH FAAAAI1 and Dr. Roshini S. Abraham, PhD FAAAAI1, 3Mayo Clinic, Rochester, MN, 3Mayo Clinic and Foundation, Rochester, MN, 4Columbia University, New York, NY, 4LA State University Health Sciences Center, Shreveport, LA

CD19+/CD27+/CD43+/CD70+ B-1b Cells In Children With Specific Antibody Deficiency, Specific Antibody Deficiency With Decreased IgG, and Common Variable Immunodeficiency

Dr. Kathryn D. Conners, MD1, 2, Barbara Kuriuki, MPH1 and Dr. Alan Knutsen, MD, FAAAAI1, 2, 1Saint Louis University School of Medicine, Saint Louis, MO, 2Cardinal Glennon Children’s Medical Center, Saint Louis, MO

A Devastating Outcome In Undiagnosed X-Linked Agammaglobulinemia— A Call For Earlier Screening

Dr. Karen Elizabah 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

Genetic Basis Of CVID-Like Disease

Dr. Kate Welch, MD, Mt. Sinai Medical Center, Dr. Elena Reznick, MD, Mount Sinai School of Medicine, New York, NY and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI, Mt. Sinai Medical Center, New York, NY

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

Common Variable Immunodeficiency In The Very Old

Dr. Katherine E. Gundling, MD, UCSF, San Francisco, CA

Clinical Predictors Of Granulomatous Disease In Common Variable Immunodeficiency

Dr. Anna R. Wolfson and Dr. Anna Kovalski, Beth Israel Deaconess Medical Center, Boston, MA

Jacobsen Syndrome With Combined Variable Immunodeficiency (CVID)

Dr. Armando C. Porto Neto, MD, PhD, FAAAAI, Dr. Julio Mella Pierezan, Student, Dr. Joao Paulo Bordin, Student, Dr. Juliana Noschang, Dr. Juliana Gotardo, Student, Dr. Shahnaz Fatteh, Larkin Community Hospital, South Miami, FL

Factors Predicting Long-Term Hypogammaglobulinemia In Lymphoma Survivors

Dr. Huiyang Lu, MD, PhD, UT MD Anderson Cancer Center, Houston, TX and Dr. Xerxes Pundole, UT MD Anderson Cancer Center

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

Pneumococcal Titer Levels: Comparison Of Patients Receiving Intravenous Immunoglobulin Vs. Subcutaneous Immunoglobulin

Dr. Pamela Abghari, MD1, 2, Dr. Elizabeth A. Secord, MD, FAAAAI1, 2 and Dr. Pavadee Fosowuttikul, MD1, 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

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

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

High Prevalence Of Bronchiolitis In Children With Primary Immunodeficiencies

Dr. Celia Pinto Fernandez1, 2, Dr. Maria Dolores Gurbindo Gutierrez3, 1Dr. Jose Manuel Zubeldia Ortonu, MD, PhD1 and Dr. Maria Elena Seoane Reula1, 2Gregorio Marañón University Hospital, Madrid, Spain, 3Hospital Gregorio Maranon, Madrid, Spain

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

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

A Rare Case Of Helicobacter Cellulitis In a Patient With X-Linked Agammaglobulinemia

Dr. Nina Lakhani, MD1, Dr. Linda R. Taggart2, Dr. Henry Jakuvovic1, Dr. Stephen D. Betsehel, MD1 and Dr. Zafrir Hussain1, 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

Neuropathy In Patients With Underlying Immunodeficiency Syndrome

Dr. Robyn Kriener, MD and Dr. Arye Rubinstein, MD, FAAAAI, Albert Einstein College of Medicine, Bronx, NY

Asthma Epidemiology, Risk Factors, and Public Health I

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

Allergic Sensitization and Environmental Exposures In Amish and Hutterite Children

Dr. Mark Holbreich, MD, FAAAAI1, Ms. Michelle Stein, MS2, Ms. Rebecca Anderson, MS1, Dr. Nervana Metwali, PhD1, Dr. Peter S. Thorne, PhD3, Dr. Donata Vercelli, MD2, Dr. Erika Von Mutius, MD, MSc4 and Dr. Carole Ober, PhD5, 1Allergy and Asthma Consultants, Indianapolis, IN, 2University of Chicago, Chicago, IL, 3University of California, San Francisco, CA, 4University of Arizona, Tucson, AZ, 5University Children’s Hospital, Munich, Germany

Association Between Asthma-Related Emergency Department Visits, Tree Pollen, Pollution and Humidity In The Bronx, 2001 - 2008

Dr. Jennifer Toh, MD1, Dr. Milti Shum, MD2, 3, Dr. Gabriele De Vos, MD4, Tulsil Desai5, Priyanka Patel6, Dr. Sunilt 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, NY
Association Of Wheezing Illness With Respiratory Viruses In Hospitalized Jordanian Children

Ojaimeko Fadugba, MD1, Eva Kathryn Miller, MD2, Najwa Khuri-Bulos, MD, FIDSA, CIC3, Samir Faouri, MD4, Asem Shehadi, PhD5, Christopher Fonnesbeck, PhD1, Li Wang, MS1, John V. Williams, MD1 and Natasha Halasa, MD, MPH1, Vanderbilt 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

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, FAAAAI1 and Dr. Jason W. Caldwell, DO, FAAAAI1, Wake Forest University Baptist Medical Center, Winston Salem, NC, 2Saint Louis University School of Medicine, St. Louis, MO

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-Bronson, 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

Urban Residence Modifies The Association Between Atopy and Wheeze

Dr. Pablo F. Endara1, Dr. Phil J. Cooper2,3, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI1, Lisa J. Workman, BA4, Maritza Vaca5, Dr. Martha Chico6, Mauricio L Barreto, PhD7 and Prof. Laura Rodrigues7, Universidad San Francisco de Quito, 8St. George’s University, London, United Kingdom, 9Pontificia Universidad Catolica del Ecuador, 10Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, 11Laboratorio de FEPIS, Quinindé, Esmeraldas Province, Ecuador, 12Laboratorio de Investigacion FEPIS, 13Instituto de Salud Coletiva, UFBA, Salvador, BA, Brazil, 14London School of Hygiene and Tropical Medicine

Allergic Inflammation and Health Outcomes Of Comorbid Asthma and Obesity In Inner-City Black and Hispanic Schoolchildren

Dr. Perdita Permal, MD1,2, Dr. William J. Sheehan, MD3,4, Mr. Carter Petry, MA5, Dr. Sachin N. Baxi, MD3,4, Dr. Jonathan M. Gaffin, MD, MMSc3,4, Dr. Lianne S. Kopel, MD1,2,3, Dr. Watcharoot Kanchongkittiphon, MD2, PhD2,3, Mrs. Chunxia Fu, MS4, Dr. Diane R. Gold, MD, MPH4,2,4 and Dr. Wanda Phipatanakul, MD, MS, FAAAAI3,4, 5Division 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

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

Maternal Allergy and Asthma and Their Association With Breastfeeding In Inner-City Mothers In A Birth Cohort Study (URECA)

Katy F. Jaffe, MS1, Dr. Cynthia Visnes, 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

Genetic Determinants Of Allergic Sensitization To Cockroach Allergen In Children

Priya Tripathi, PhD1, Xiamei Hong, PhD2, Deanna Caruso, MS2, Peisong Gao, MD, PhD3 and Dr. Xiaobin Wang, MD, MPH ScD3, 1Division of Allergy & Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, 2Johns Hopkins University School of Public Health, Baltimore, MD

Exhaled Nitric Oxide (FeNO) and Dust Mite (Der pI) Exposure Are Significantly Higher In Asthmatic Children Living In Humid Environments

Dr. Miguel J. Lanz, MD, FAAAAI1, Benjamin Elaw2, Mirna Gonzalez2 and Dr. Ronald J. Harbeck, PhD2, 1AAADRS Clinical Research Center, Coral Gables, FL, 2National Jewish Health, Denver, CO

Aerobiology I

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

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

Culture Of The House Dust Mite Euroglyphus Maynei To Produce Allergen Material

Dr. Larry G. Ariian, PhD FAAAAI, DiAnn L. Vyszenski-Moher, MS, Dr. Marjorie S. Morgan, PhD and Jacqueline Neal, MS, Wright State University, Dayton, OH

Emergency Department Visits For Asthma As a Function Of Pollen and Mold Spore Counts

Dr. Stacey Galowitz, DO1,2, Dr. Christopher Chang, MD, PhD, FAAAAI1 and Mr. Michael R. McDowell1, 1Alfred I duPont Hospital for Children, Wilmington, DE, 2Thomas Jefferson University Hospital, Philadelphia, PA, 3Air Quality Management, New Castle, DE

Daily Ragweed Pollen Forecasting

Estelle Levetin, PhD FAAAAI and Lauren Howard, B.S.1,2, 1University of Tulsa, Tulsa, OK, 2University of Oklahoma, Oklahoma City, OK

Conditions Affect Dust Mite Infestation Of Flour Samples In Tropical Area

Dr. Theerapan Songnun, Allergy and Immunology Division, Chulalongkorn University Medical School, Bangkok, Thailand

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.D1, 1Childrens Mercy Hospital, 2Children’s Mercy Hospital, Kansas City, MO, 3Children’s Mercy Hospital & Clinics, Kansas City, MO

Influence Of Meteorological Conditions On Mountain Cedar Pollen

Landon Bunderson, PhD1,2, Peter Van De Water, PhD3, Jeffrey Luvall, PhD3 and Estelle Levetin, PhD FAAAAI2, Iowa State University, Ames, IA, 1University of Tulsa, Tulsa, OK, 2California State University, Fresno, Fresno, CA, 3NASA Marshall Space Flight Center, Huntsville, AL

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, BSE1, Mr. Terry Walker, BA1, Mr. Barnaby Hobsbawn1, Mrs. Jenny Thiele, MSc2 and Dr. Anne K. Ellis, MD, MSc FAAAAI1,2, 1Allergy Research Unit, Kingston General Hospital,
Insect Hypersensitivity/Anaphylaxis

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Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

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. Wabel, MD, FAAAAI1 and Dr. Michael S. Tankersley, MD, FAAAAI4, Wilford 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

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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

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

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Anaphylaxis Management Before and After Implementation Of Guidelines In The Pediatric Emergency Department
Dr. Shilpa Desai1, Dr. Rhett Lieberman2, Stephen Wisniewski, PhD2 and Dr. Todd David Green, MD, FAAAAI1, Children’s Hospital of Pittsburgh of UPMC, Pittsburgh, PA, 1University of Pittsburgh

Managing Anaphylaxis In Adults: A Review Of All Cases Presenting In A Single Year At An Emergency Department
Dr. Yarden Yanishlevsky, MD1, Dr. Ann Elaine Clarke, MD, MSc2,3, Dr. Sebastian La Vieille, MD4, Dr. Scott Delaney, MD5, Dr. Reza Ali-zadehfar, MD1, Mr. Christopher Mill, BSc1, Dr. Lawrence Joseph, PhD3, Dr. Judy Morris, MD, MSc6, Dr. Yuka Asai, MD7,8 and Dr. Moshe Ben-Shoshan, MD, MSc1, 1Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, 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, 4Division of Emergency Medicine, McGill University Health Centre, Montreal, QC, Canada, 5Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, 6Division of Dermatology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada

Anaphylaxis Cases Presenting To Primary Care Paramedics In Quebec
Ms. Nofar Kimchi1, Dr. Ann Elaine Clarke, MD, MSc2,5, Jocelyn Moisan4, Colette Lachaine5, Dr. Sebastian La Vieille, MD6, Dr. Yuka Asai, MD7,8, Dr. Lawrence Joseph, PhD3, Dr. Moshe Ben-Shoshan, MD, MSc9,10, 1Technion American Medical Students Program, Israel, 2McGill University Health Centre, Montreal, QC, Canada, 3Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 4Services préhospitaliers d’urgence de l’Outaouais, Quebec, Canada, 5Division adjointe de services préhospitaliers d’urgence, MSSS, Quebec, Canada, 6Food Directorate, Health Canada, Ottawa, ON, Canada, 7Division of Dermatology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 8Department of Epidemiology and Biostatistics, McGill University, Montreal, Canada, 9Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, 10Montreal Children’s Hospital, Montreal, Canada
78 Characteristics Of Anaphylaxis In a Pediatric Emergency Unit
Natasha Sidhu, MD, Stacie M. Jones, MD, Elizabeth Storm, MD, Maria Melguizo Castro, Todd Nick, and Tonya Thompson, MD.
1 University of Arkansas for Medical Sciences, Little Rock, AR, 2 Arkansas Children’s Hospital, 3 University of Arkansas for Medical Sciences and Arkansas Children’s Hospital, Little Rock, AR, 4 Arkansas Children’s Hospital Research Institute, Little Rock, AR, 5 Arkansas Children’s Hospital, Little Rock, AR

79 Anaphylaxis Management In A Pediatric Emergency Department
Beatriz Ameiro, MD, Blanca Noguerado, MD, Gabriela Zambrano, MD, Cristina Morales, MD, Miguel Guzmán, MD, María L. Baeza, MD, PhD, and Alberto Alvarez-Perea, MD.
1 Hospital General Universitario Gregorio Marañón, Allergy Department, Madrid, Spain, 2 Hospital General Universitario Gregorio Marañón, Allergy Department, Madrid, Spain, 3 Hospital 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, Dr. Julie Lapointe, Dr. Sebastien La Vieille, MD, Dr. Harley Eisman, MD, Dr. Reza Alizadehfar, MD, Ms. Emma Perkins, BSc, Mr. Christopher Mill, BSc, Dr. Lawrence Joseph, PhD, Dr. Ann Elaine Clarke, MD, MSc, and Dr. Moshe Ben-Shoshan, MD, MSc.
1 Department of Emergency Medicine, Hôpital du Sacré-Cœur, Montreol, QC, Canada, 2 University of Montreal, Montreal, QC, Canada, 3 Food Directorate, Health Canada, Ottawa, ON, Canada, 4 Montreal Children’s Hospital, Montreal, QC, Canada, 5 McGill University, Montreal, QC, Canada, 6 Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Center, Montreal, QC, Canada, 7 Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 8 Division 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 Sweene, 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, Hanunda 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. Buka, Richard J. Crossman, Cathryn Derbridge, Aarnoud P. Huissoon, Scott Hackett, Matthew W. Cooke, Susan Dorian and Mamidipudi T. Krishna, Birmingham Heartlands Hospital, Birmingham, United Kingdom, 2 University 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 Blaziene, Dr. Neringa Butereviute, Viktorija Palatarickiene and Prof. Lawrence M. DuBuske, MD, FAAAAI, Vilnius University Medical School, Lithuania, 2 Vilnius university Medical School, Lithuania, 3 George 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, MS, Dr. Ray A. Wolf, PharmD, Paul Cavanaugh, Jr, PhD, Aylin Altan Riedel, PhD and Tim Bancroft, PhD, TOP-TUM, Prairie Eden, MN, 1 Mylan Specialty L.P., New Hope, PA, 2 Mylan Specialty, Basking Ridge, NJ

89 Food-Induced Anaphylaxis: Recognition and Response In Ohio Schools
Dr. Erica Glancy, MD, Dr. Peter J. Mustillo, MD, FAAAAI, Dr. Christine B. Cho, MD, Dr. Rekha Raveendran, MD and Dr. Daniel Scherer, MD, Cleveland Clinic, Cleveland, OH, 2 Nationwide Children’s Hospital, Columbus, OH, 3 National Jewish Health, Denver, CO, 4 Asthma and Allergy Center LLC, Washington, DC

90 Availability and Utilization Of Epinephrine In Utah Schools For The Management Of Anaphylaxis
Benjamin L. Wright, MD, Michelle Fogg, BS, Catherine Sparks, MSN, RN, NC, Brian P. Vickery, MD, FAAAAI, Dr. Joseph L. Roberts, MD, PhD, Yumini Virkud, MA and Mandy Allison, MD, MSpH, Med Ed, 1 Duke University, Durham, NC, 2 Utah Food Allergy Network, Salt Lake City, UT, 3 Utah Department of Health, Salt Lake City, UT, 4 University of North Carolina, Chapel Hill, NC, 5 Duke University Medical Center, Durham, NC, 6 University 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 Catolica de Chile, Santiago, Chile, Dr. Pamela S. Morales, MD, Pediatric Rheumatology, Allergy and Immunology Unit, Division of Pediatrics, School of Medicine, Pontificia Universidad Catolica de Chile, Santiago, Chile, Dr. Veronica Mezzano, MD, Department of Rheumatology and Clinical Immunology, School of Medicine, Pontificia Universidad Catolica 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 Trypsin 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, MD, Erin Buysman, MS, Dr. Ray A. Wolf, PharmD, Paul Cavanaugh, Jr, PhD, Aylin Altan Riedel, PhD
Epicure (Epinephrine Pen Investigation: Compliance and Recommendations)
Dr. Nisha S. Patel, MD, Thomas Jefferson University, Philadelphia, PA, Dr. Christopher Chang, MD, PhD, FAANAA, Alfred du Pont Hospital for Children, Wilmington, DE and Dr. Gang Ye, PhD, Nemours, Orlando, FL

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

Chlorhexidine Impregnated Central Venous Lines: A Potentially Avoidable Cause Of Severe Perioperative 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

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, Taejon, South Korea, Dr. Sun Young Young, MD, Department of Pediatrics, Taejeon, South Korea and Dr. Hye Young Han, MD, Department of Pediatrics, School of Medicine, Chungnam National University, Taejon, South Korea

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

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, Taejon, 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, Taejon, South Korea

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, FAANAA, New York Downtown Hospital, New York, NY; Weill Cornell Medical College, New York, NY

Idiopathic Capillary Leak Syndrome
Dr. Carl B. Lauter, MD, FAAAAI, William Beaumont Hospital

Comprehensive Metabolomic Analysis Of Uric Acid As A Critical Mediator Of Peanut Sensitization
Mr. Joshua Kong1, Dr. Kenneth Chalcraft, PhD2, Dr. Rodrigo Jimenez-Saiz, PhD3, Mrs. Tina Walker-Fattouh4, Dr. Susanna Goncharova, MD5, Dr. Brian McCary, PhD6 and Dr. Marel Jordana, MD7. 8McMaster Immunology Research Centre (MIRC), McMaster University, Hamilton, ON, Canada, 9McMaster University, Hamilton, ON, Canada

Pharmacokinetics Of Berberine, A Bioactive Compound In Brucea and 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

Sensitization To Recombinant Allergens Of Hevea Brasiliensis In Patients With Latex Anaphylaxis
Dr. J.M. Escobar Montalvo, MD1, Ms. A. Gómez Infante, MD2, Dr. Silvia Martínez Blanco, MD2 and Dr. R. Vives Conesa, MD3, 4Hospital Universitario 12 de Octubre, Madrid, Spain, 5Hospital Universitario 12 de Octubre, Spain

Patients Monosensitised 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. Luís 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 São Paulo, Sao Paulo, Brazil

HAE and Angioedema
2207
Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

Home Treatment With Conestat Alfa In Attacks Of Hereditary Angioedema Due To C1-Inhibitor Deficiency
Henriette Farkas, MD, PhD DCsc1, Dr. Etika Szabo1, Dr. Dorottya Csuka, PhD2, Dr. Kinga, Viktória Kohalmi1, Dr. Zsuzsanna Zöller1 and Dr. Lilian Varga, PhD1, 2Semmelweis University, Budapest, Hungary, 3Hungarian HAE Center, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary

Comparison Of Plasma Kallikrein Inhibition By The Mono- clonal Antibody Inhibitor DX-2930 To Endogenous C1-INH
Daniel Sexton, Jon Kenninston, Ryan Faucette, Andrew Nixon, Christopher TenHoor, Yung H. Chyung and Burt Adelman, Dyax Corp.

The Prophylactic Use Of C1 Esterase Inhibitor (Berinert®) In HAE Patients Undergoing Invasive Procedures
Rachel Harrison, BSc1, Stephanie Santucci, RN2, Genevieve Gavigan, MAsc, MD3 and William H. Yang, MD1, 2Allergy and Asthma Research Corp., Ottawa, ON, Canada, 3University of Ottawa Medical School, Ottawa, ON, Canada

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, MD1, 2Allergy and

and Tim Bancroft, PhD1, 2OPTUM, Prairie Eden, MN, 3Mylan Specialty L.P., New Hope, PA, 4Mylan Specialty, Basking Ridge, NJ

Recurrence Rates Of Anaphylaxis In Children
Dr. Andrew O’Keefe, MD1, 2, Dr. Yuka Asai, MD3, 4, Mr. Christopher Mill, BSc1, Dr. Harley Eisman, MD1, 2, Dr. Sebastian La Vieille, MD6, Dr. Reza Alizadefar, MD7, 2, Ms. Emma Perkins, BSc1, Dr. Lawrence Joseph, PhD3, Dr. Ann Elaine Clarke, MD, MSc1, 6 and Dr. Moshe Ben-Shoshan, MD, MSc1, 6, 7McGill University, Montreal, Canada, QC, Canada, 8Division of Pediatric Allergy and Clinical Immunology, Montreal Children’s Hospital, Canada, 9Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 10Division of Dermatology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 11Montreal General Hospital, 12Montreal Children’s Hospital, Montreal, Canada

National Institutes of Health, Bethesda, MD, 13Unitat d’Al·lergia. Servei de Neumologia i Al·lergia Respiratoria. Hospital Clinic, Barcelona, Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS.), Barcelona, Spain, 14Servei d’Immunologia, Centre de Diagnostic Biomedic. Hospital Clinic., Barcelona, Spain

Food-Induced Anaphylaxis After Bitten By Domestic Hamster: A Case Report
Dr. Leila Borges, MD, City, NY

Gonzaga da Silva
Dr. Nan Yang, PhD, MS

Rachel Tranquilini Gonçalves, MD
Jordana, MD, PhD

Mme de Neumologia i Al.lergia Respiratoria. Hospital Clinic. Barcelona, Spain
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 FXI Gene Mutation Christiane Steiber1, Camila Veronez2, Nathalia Cagini2, Elisabete Cordeiro3, Dr. Anete S. Grumach1, Rosemeire Constantino-Silva1, Joao Bosco Pesquero2 and Sven Cichon3, 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 Steiber3, Nathalia Cagini2, Rosemeire Constantino-Silva1, Rozana Gonçalves2, Gustavo Fusaro1, Neusa Wandalsen1, Sven Cichon3, 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 Micromas In Hereditary Angioedema Peisong Gao, MD, PhD1, Kenneth Witwer, PhD2, Melissa Mcalexander3, Priya Tripathi, PhD1, Tamara Johnson1 and Dr. Huumin Henry Li, MD, PhD, FAAAAI1, 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, Chever 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, MD1,2, Amal H. Assa’ad, MD, FAAAAI2, Dr. Jonathan A. Bernstein, MD, FAAAAI1 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, MD1,2 and Kelly M. Maples, MD1,2, 1Eastern Virginia Medical School, Norfolk, VA, 2Children’s Hospital of The King’s Daughters, Norfolk, VA
121 HAE-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, MSc1, Dr. Carmen Gómez-Teixeira, MD1, Dr. Anne Aabom, MD1, Prof. Werner Aberer, MD1, Dr. Stephen D. Betschel, MD1, Prof. Anette Bygum, MD2, Dr. Dorottya Csuka, PhD2, Dr. Andrea Zanielli, MD2, Dr. Yu-xiang Zhi, MD2 and Dr. Teresa Caballero, MD, PhD1-3, 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 Venerology, 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 Angioedma, Internal Medicine Department, Grenoble University Hospital, Grenoble, France, 10Denmark HAE Centre, Department of Dermatology and Allergy Centre, Odense University Hospital, Odense, Denmark, 11Hungarian HAE Centre, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary, 12Department of Dermatology, School of Medicine, University of Sao Paulo, Sao Paulo, Brazil, 13Unit of Allergy 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 Allergy–Immunology, Mures County Hospital, Tigu-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, MD1,2, Dave P. Miller2, Ms. Emily Hautamaki, MPH3, Scott Newcomer4, David Fitts1 and Dr. William R. Lunny, MD, FAAAAI4,5, 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, PhD1,2, Dr. Magdalena Julia Camino, MD1, Elia Pérez-Fernández, MSc3, Dr. Carmen Gómez-Teixeira, MD1, Dr. Anne Aabom, MD1, Prof. Werner Aberer, MD1, Dr. Stephen D. Betschel, MD1, Prof. Anette Bygum, MD4, Dr. Dorottya Csuka, PhD2, Henriette Farkas, MD, PhD DSc2, Dr. Anete S. Grumach1, Dr. Vesna Grivcheva-Panovska, MD, PhD1, Dr. Marcel Levi, MD4, Dr. Hilary Longhurst, MD3, Dr. Alejandro Malbran, MD6, Dr. Dumitru Moldovan, MD, PhD7, Dr. Gregor Porebski, MD8, Dr. Avner Reshef, MD9, Dr. Petra Staubach, MD20, Dr. Andrea Zanielli, MD2, Dr. Yu-xiang Zhi, MD2 and Dr. Teresa Caballero, MD, PhD1-3, 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 Venerology, 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 Angioedma, Internal Medicine Department, Grenoble University Hospital, Grenoble, France, 10Denmark HAE Centre, Department of Dermatology and Allergy Centre, Odense University Hospital, Odense, Denmark, 11Hungarian HAE Centre, 3rd Department of Internal Medicine, Semmelweis University, Budapest, Hungary, 12Department of Dermatology, School of Medicine, University of Sao Paulo, Sao Paulo, Brazil, 13Unit of Allergy 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 Allergy–Immunology, Mures County Hospital, Tigu-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

**SUNDAY**
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

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, MD1, Dr. Vincent Fabien, PhD3, Prof. Werner Aberer, MD4, Prof. Laurence Bouillet, MD5, Dr. Andrea Zanichelli, MD1 and Dr. Teresa Caballero, MD, PhD6, 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 Boufleur, MD1, Ms. Luana Delcaro2, Dr. Daniel L. Cordeiro, MD1, Dr. Priscila B. Botelho Palhas, MD1, Dr. Janaina Fernandes de Melo Sousa, MD1, Dr. Thais 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, FAAAAI, 2Ribeirao Preto Medical School, University of Sao Paulo, Ribeirao Preto, Brazil, 1School 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, Pharmacing 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 Machning3 and Dr. Timothy J. Craig, DO, FAAAAI4, 1University of Mainz, Mainz, Germany, 2Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, 3CBL 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. Dimitrius 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 Aldosteron System

Prof. Laurence Bouillet, Grenoble university hospital, Grenoble, France, Dr. Bernard Flocard, 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-Than, 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. Vehg, MD, FAAAAI,1 Ms. Marni Sellers2, Ms. Nancy Boyden1 and Ms. Jennifer Vegh2,1 University of Washington, Tacoma, WA,1,2none, Tacoma, WA

136 Evaluation Of DX-88 (Ecallantide) For Treatment Of Angiotensin Enzyme Inhibitor Induced Angioedema In The Emergency Department

Dr. Joseph Moellman, MD, Dr. Jonathan A. Bernstein, MD, FAAAAI, Ms. Kimberly Hart1, Dr. Sean Collins2 and Dr. Christopher Lindsell1,1 University of Cincinnati, Cincinnati, OH,2Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH,1Vanderbilt 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, Ldsdowne, VA

138 BCX4161, An Oral Kallikrein Inhibitor: Safety and Pharmacokinetic Results Of A Phase I Study In Healthy Volunteers

Prof. Dr. Phil Collins1, Dr. Melanie Comprost1, Dr. Jo Collier2, 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 Seoune, MD, Maria Elisa Caralli, MD, Sarah Micozzi, MD, Marta Elena Rodriguez-Mazariego, MD and Maria 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

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

Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

Population, Health in Asthma

2208

Aerochambers and Asthematics: Do No Harm?

Dr. Jack Leon-Max Mutnick, MD, Stevens Community Medical Center, Morris, MN

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, PhD, Dr. Jon Campbell, PhD, Dr. Vahram Ghushchyyan, PhD, Dr. Gary Globe, PhD, Dr. Jeff Lange, PhD and Dr. J Michael Woolley, PhD, Regis University, University of Colorado Denver, Amgen, Inc., Thousand Oaks, CA

Impact Of Asthma On Child and Family Activities Among a Rural Cohort

Dr. Allison J. Burbank1,2, Mallikarjuna Retiganti, PhD1,2, Paige Fisher, BA3 and Tamara T. Perry, MD, Tulane University School of Public Health, Philadelphia, PA

Inhaled Asthma Medications: Highlighting The Differences In Formulations and Use

Dr. Lachara Livingston Livingston, University of South Florida Morris College of Medicine, Dr. Gregory Michael Cowan, MD, University of South Florida Morris College of Medicine and Dr. Richard F. Lockey, MD, Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida Morris College of Medicine and James A. Haley Veterans’ Affairs Hospital, Tampa, FL

1Biocyst Pharmaceuticals, Inc, Birmingham, AL, 2BioCryst Pharmaceuticals, Durham, NC

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Dr. Lachara Livingston Livingston, University of South Florida Morris College of Medicine, Dr. Gregory Michael Cowan, MD, University of South Florida Morris College of Medicine and Dr. Richard F. Lockey, MD, Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida Morris College of Medicine and James A. Haley Veterans’ Affairs Hospital, Tampa, FL

Population, Health in Asthma

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153 Deprivation Is Longitudinally Associated With Incident Childhood Asthma
Dr. Elinor Simons, MD, MS, FAAAAI1,2, Dr. Sharon Dell, MD2,3, Dr. Rahim Moineddin, PhD4,5 and Dr. Teresa To, PhD1,5. 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

2209 Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

156 An Assessment Of Infection Rates and Health Resource Use Among Primary Immunodeficiency Disorder (PIDD) 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 (PIDD) 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 (PIDD) 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, MS7, Dr. Josephine Li-McLeod, PhD8 and Dr. Richard I. Schiff, MD, PhD9. 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

2210 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 Noren1 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 Polen-Related Allergic Rhinitis Dr. Paolo Matricardi, MD1, Dr. Giovanna Stringari2, Prof. Carlo Caffarelli2, Dr. Riccardo Asero, MD3, Dr. Arianna Dondi3, Dr. Salvatore Tripoli4 and The Italian Pediatric Allergy Network5, 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.

163 Randomized Evaluation Of Ten Allergy Skin Prick Test Devices Dr. Yohalakshmi Chelladurai, MD, MPH1, Prof. Robert G. Hamilton, PhD2,3 ABMLI FAAAAI1 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, MMBS, PhD4, Dr. John B. Hagan, MD, FAAAAAI2 and Hirohito Kita, MD3, 2Division of Allergic Diseases, Mayo Clinic, Rochester, MN, 3Mayo 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 Kim2 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 Zak2, Prof. Eman Osman3, Dr. Eman Ezzat1 and Dr. Eman Ahmed4, 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. M. Teresa Gallego and Dr. Jerónimo Camnés, Laboratories LETI, Tres Cantos, Spain

168 Modified Shuffled Blo t S Recombinant Allergen From Bliomia 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, PhD3. 1Federal University of Uberlandia, Uberlandia, Brazil, 2Federal University of Triangulo Mineiro, Uberaba, Brazil
Oral Immunotherapy

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, PhD, Dr. Adebola Ogguniyyi, PhD, Mr. Alex Ma, Ms. Alisa K. Brennan, B.S., Ms. Theadora Swenson, BA, Mr. Agustin Calatroni, MA MS, Dr. James Moon, PhD, Dr. J. Christopher Love, PhD and Wayne G. Shreffler, MD, PhD, FAAAAI. 1,2 1Harvard Medical School, Boston, MA, 1Allergy and Immunology, Massachusetts General Hospital, Boston, MA, 2Massachusetts Institute of Technology, Cambridge, MA, 3Massachusetts General Hospital, Charlestown, MA, 4Rush Medical College, Chicago, IL, 5Massachusetts General Hospital, Boston, MA, 6Rho, Inc., Chapel Hill, NC, 7Harvard Medical School, Charlestown, MA

170 De Novo Generation Of Gastrointestinal Regulatory T Cells In Response To OIT and EPIT
Letícia Tordesillas, PhD, Lucie Mondolet, PhD, Pierre Henri Benhamou, MD, Hugh A. Sampson, MD, FAAAAI and M. Cecilia Berin, PhD, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2DBV Technologies, Bagneux, France, Pediatrics, 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, MD, Dr. Vincent Dioszeghy, PhD, Mrs. Emilie Puteaux, Mrs. Mélanie Liguois, Mrs. Véronique Dheft, Mrs. Camille Plaque, Prof. Christophe Dupont, MD, PhD and Lucie Mondolet, PhD, 1DBV Technologies, Bagneux, France, 2Hospital 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, PhD, Lucie Mondolet, PhD, Mrs. Véronique Dheft, Mrs. Mélanie Liguois, Mrs. Emilie Puteaux, Mrs. Camille Plaque, Prof. Christophe Dupont, MD, PhD and Pierre Henri Benhamou, MD, 1DBV Technologies, Bagneux, France, 2Hospital Necker Enfants Malades, Paris, France

173 Anaphylactic Reactions After Peanut Oral Immunotherapy
Noam Berlin, Dr. Amanda Jagdis, Carly Barron, Sean Maclachlan, Mohana Giriparajah, Nathan Leader, Dennis Penna and Dr. Gordon L. Sussman, FAAAAI, University 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, 5MasitCell Pharmaceuticals, Inc., Raleigh, NC

174 Evaluation Of The Immunomodulatory Mechanisms Involved In The Efficacy Of Sublingual Immunotherapy With Ltp (Prn p 3) In Allergic Patients Sensitized To Food By Ltps
Dr. Francisca Gomez, MD, PhD, Dr. Enrique Gomez, MD, PhD, Dr. Maria J Torres, MD, PhD, Mrs. Luisa Galindo, RN, Ms. Maria Dolores Ruiz, Dr. Immaculada Doña, MD, PhD, Mrs. Gador Bogas, Dr. Paloma Campo, MD, PhD, Dr. Teresa Posadas, Dr. Miguel Blanca, MD, PhD and Dr. Cristina Mayorga, PhD, 1Allergy Service, Carlos Haya Hospital Spain, 2Research Laboratory, Carlos Haya Hospital-FIMABIS, Spain, 3Allergy Service, Carlos Haya Hospital, Malaga, Spain, 4Research Laboratory, Carlos Haya Hospital-FIMABIS, Malaga, Spain

175 Changes In IgE and IgG4 Epitopes After Milk Oral Immunotherapy (OIT)
Belen de la Hoz Caballero, MD, PhD, Mrs. Cristina Vlaicu, Immaculada Cerecedo Carballo, MD, PhD, Mónica Rodríguez-Alvárez, MD, Dr. María Carmen Díez Pérez, Pastor, MD, Montserrat Fernández-Rivas, MD, PhD and Javier Martínez-Botas, PhD, 1Hospital Universitario Ramón y Cajal, Instituto Ramón y Cajal para la Investigación Sanitaria, Madrid, Spain, 2Hospital del Sureste, Arganda del Rey, Spain, 3Hospital Clinico San Carlos, Spain, 4Hospital Universitario 12 de Octubre, Spain, 5Hospital Clinico 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

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, PhD, Takao Kobayashi, PhD, Kenichiro Hara, MD,2, Gail Kephart3 and Hirohito Kita, MD, 1Mayo Clinic, Rochester, MN, 2Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan

177 IL-17 Enhances TNFα-Induced, But Not IL-1β-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 D1 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., FAAAAI, Vanderbilt University School of Medicine, Nashville, TN

179 Local Administration Of CCL28 Is Sufficient To Drive Airway HyperResponsiveness 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, MD,1 Koji Iijima, PhD, Takao Kobayashi, PhD, Dr. Satoshi Seno,1 Dr. Ichiro Togima,1 Gail Kephart, Dr. Manabu Ueno,1 Dr. Toshitaka Maeno,1 Dr. Masahiko Kurabayashi1 and Hirohito Kita, MD,2 Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan, 3Mayo Clinic, Rochester, MN, 4Shiga University of Medical Science, Otsu, Shiga, Japan

181 Surrogate Biomarkers Of Eosinophilic Airway Inflammation In Asthma: Quantiﬁcation Of Major Protein-B1 and Charcot-Leyden Crystal Protein/Galectin-10 In Induced Sputum
Dr. Sharmilee M. Nyenhuis, MD, FAAAAI, and Dr. Kenji Matsumoto, MD, PhD, 1Mayo Clinic, Rochester, MN, 2University 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 PhD, 1Ms. Janice Layhadi, BSc( Hons)2, Mr. Alan Perera-web, BSc( Hons)2, 3, Ms. Rachel Yan, RN2 and Prof. Stephen R. Durham, MA MD FRCP3, 1Imperial College London, South Kensington, United Kingdom, 2Imperial College London, 3Medical Research Council and Asthma UK Cen-
tre for Allergic Mechanisms of Asthma, UK, Imperial College London, United Kingdom, Imperial College London, London, United Kingdom

183 Th2 Cytokines Inhibit Toll-Like Receptor 2 Mediated Epidermal Barrier Repair
Takeshi Yoshida, PhD1, I-Hsin Kuo, PhD2, Anna De Benedetto, MD, FAAAAI1, Donald Y.M. Leung, MD, PhD, FAAAAI2 and Lisa A. Beck, MD, FAAAAI1, University of Rochester Medical Center, Rochester, NY, National Jewish Health, Denver, CO

184 Epicutaneous Sensitization To Food Allergens Induce IL-4-Producing Cells and T Follicular Helper (Th) Cells In An IL-6 and IL-1-Dependent Manner
Ritobrata Goswami, PhD, MD, 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 Rasta-Sallehy, BSc1, Dr. Ilan Asher, MD1, Delia Heroux, BSc1 and Judah Aryeh Denburg, MD, FRCP, FAAAAI2, McMaster University, Hamilton, ON, Canada, Division 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 Moskovich2 and Mrs. Danielle Karo-Atar3, Department of Clinical Microbiology and Immunology, The Sakshler School of Medicine, Tel-Aviv University, Tel Aviv, Israel, Tel-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, MD1,2, Ling-Ling Xian, MD, PhD3, Yufeng Zhou, MD, PhD3, Beverly Plumkett, MS1, Xu Cao, PhD1, Mei Wan, MD, PhD3 and Peisong Gao, MD, PhD3, Division of Allergy & Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD, Department of Respiratory Medicine, Southern Medical University, Guangzhou, China, Department 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 Charlesworth1,2, Dr. Guy W Scadding, MD1,2, Dr. Aafir Eifan, MD2, Ms. Rachel Yan, RN2, Ms. Andrea Goldstone, RN2, Dr. Moises A. Calderon, MD1,2, Prof. Stephen R. Durham, MA MD FRCP1,2 and Dr. Mohamed H. Shamji, BSc, MSc PhD3, Medical Research Council and Asthma UK Centre for Allergic Mechanisms of Asthma, United Kingdom, Imperial College London, United Kingdom, Imperial College London, London, United Kingdom, Medical Research Council and Asthma UK Centre for Allergic Mechanisms of Asthma, London, United Kingdom, Imperial College London, South Kensington, United Kingdom

190 Respiratory Syncytial Virus Induces IL-25 and IL-33 Production In The Lungs
Matthew T. Sites1, Kasia Golieniwkska2 and R. Stokes Peebles1,2, Department of Pathology, Microbiology, and Immunology, Vanderbilt University School of Medicine, Nashville, TN, Allergy, 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. Twardy, MD, Baylor College of Medicine, Houston, TX

192 Differential Promoter Usage and Regulation Of The Human Interleukin-5 Receptor alpha (IL-5Ralpha) 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 Multipotent 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, 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 Carson, MD3, Dr. Luz S. Fonacier, MD, FAAAAI4 and Dr. Iryna Voloshyna, PhD2, Section of Allergy and Clinical Immunology, Department of Medicine, Winthrop University Hospital, mineola, NY, Winthrop Research Institute, Department of Medicine, Winthrop University Hospital, Mineola, NY, Division of Rheumatology, Allergy and Immunology, Department of Medicine, Winthrop University Hospital, Mineola, NY, Section 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. Hirotoki Tamiya1, Dr. Yasuharu Kojima1, Dr. Hisanao Yoshihara2, Dr. Michio Kuramochi2, Dr. Hide-nori Arai1, Dr. Hirokiy Nagase4 and Dr. Ken Ohba1,2, Teikyo University School of Medicine, Tokyo, Japan, National 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, Dr. 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

SATURDAY
2213
Saturday, March 1st, 2014, 9:45 AM - 10:45 AM

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, MD1,2, Dr. Jun Fu, PhD1, Ms. Paige Adeli, RN3 and Dr. Larry L. Thomas, PhD1, Rush 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 Agandra 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, PhD, 2Dr. A.S. Murashko 2, Dr. Andrei Y. Hanchare 1, Dr. N.A. Golovnya 1, Dr. E.I. Kolomiets 1 and Prof. Lawrence M. Dubuske, MD, FAAAAI 1, 3Republican Scientific and Practical Center for Epidemiology and Microbiology, Minsk, Belarus, 4Republican Scientific And Practical Center for Epidemiology and Microbiology, Minsk, Belarus, 5George Washington University School of Medicine, DC, 6University of Texas Medical Branch, Galveston, TX

202 Worldwide Impact Of LAD2 Mast Cell Line On Mast Cell Biology
Arnold S. Kirshenbaum, MD, FAAAAI 1, Amy Petrik, PhD 2, Rosemary Walsh, PhD 2, Sury Vepa, PhD JD 1 and Dean D. Metcalfe, MD, FAAAAI 1, Laboratory of Allergic Diseases, NIAMD, NIH, Bethesda, MD, 2Technology Transfer and Intellectual Property Office, NIAMD, NIH, Bethesda, MD, 3Office of Technology Transfer, NIH, Rockville, MD

203 Non-e-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 Waters 2, Mrs. Colleen Dunn 2, Zoe Davies 2, Dr. Rabindra Tirouvanziam 2, Mrs. Cassie Everson 2, Dr. John Tamasevicius 2, Prof. Leonore Herzenberg 4 and Dr. Richard B. Moss, MD 2, 3Highland Hospital, San Francisco, 2Stanford University School of Medicine, Stanford, CA, 4Emory University School of Medicine, Department of Pediatrics, Atlanta, GA, Stanford, School of Medicine, Stanford, 3Stanford University School of Medicine, Palo Alto, CA

206 Exosomes Secretion By Eosinophils: A Possible Role In Asthma Pathogenesis
Victoria Del Pozo, PhD 1, Carla Mazzeo 1, Ainar Rodriguez Marco 2, Mar Del Mar EJERNANDEZ-NIETO 1, Maria Paz Zaffra 1, Veronica Sanz 1 and Prof. Joaquin Sastre, MD, PhD, FAAAAI 2, 3IIS-FJD and CIBERES, 4IIS-FJD, 5Fundacion Jimenez Diaz, Madrid, Spain, 6IIS-Fundacion Jimenez Diaz

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 Desai 1, Geethani Bandara, PhD 1, Alasdair M. Gillfillan, PhD 1, Dr. Michael Beaven, PhD 2, Dr. Ana Oliveira, PhD 1, and Dean D. Metcalfe, MD, FAAAAI 1, Laboratory of Allergic Diseases, NIAMD, 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 Aguiera-Aguire, 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 Hypo-responsive By Antigen/IgE-Mediated Activation and Desensitization
Prof. Pedro Giavina-Bianchi, MD, PhD, FAAAAI 1, Dr. Matthieu Picard, MD 2, Dr. Joana Caiado, MD 2, Dr. Veronica Mezzano, MD 2 and Dr. Mariana C. Castells, MD, PhD, FAAAAI 2, 3Clinical Immunology and Allergy Division, University of Sao Paulo, Boston, MA, 4Division 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 Gaudenzio 1, Mr. Regis Joulia 2, Prof. Salvatore Valitutti 2 and Dr. Eric Espinosa 5, Stanford University, Stanford, CA, 6INERM 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. Moldaver 1, Dr. Mantej S. Bharhani 1, Ms. Jennifer Watte 1, Ms. Tarandeep Singh 1, Ms. Melissa Bahra 1, and Dr. Marianne van Hage, MD 2, Dr. Mark D. Inman, MD, PhD 1 and Dr. Mark Larché, PhD 1, 3McMaster 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, MD 1, Dr. Chia-Lin Hsu, PhD 2 and Dr. Paul Bryce, PhD 2, 3Ann & 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 Legrand 1, Dr. Renad Tomasevic 2, Mrs. Michelle Makiya 1, Dr. Christopher Bebbington 1 and Dr. Amy D. Klion, MD 1, 2National Institutes of Health, Bethesda, MD, 3Allakos

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, MD 1, Ms. Crystal Uvalle, BS 2, Mr. John Trudea, BA 1 and Sally E. Wenzel, MD, FAAAAI 1, 2The University of Pittsburgh Asthma Institute at UPMC and the University of Pittsburgh School of Medicine, Department of Pulmonary, Allergy
and Critical Care Medicine, The 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 Nabe, Mr. Hiroki Wakamori, Ms. Anna Takiguchi, Mrs. Haruka Kida, Prof. Susumu Ohyu, Dr. Nobuaki Mizutani, Prof. Shin Yoshino and Prof. David Chaplin, Kyoto Pharmaceutical University, Kyoto, Japan, Kobe Pharmaceutical University, Kobe, Japan, University 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, MS, Jennifer A. Hass, MS, Erika Buell, Dr. Desire Hunter, Dr. Dorothy S. Cheung, MD, FAAAAI and Dr. Mitchell H. Grayson, MD, FAAAAI, Froedtert Hospital, Milwaukee, WI, Medical 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, PhD, Dr. Hajime Karasuyama, MD, PhD, Dr. Mindy Tsai, DMS, and Dr. Stephen J. Galli, MD, Stanford University School of Medicine, Stanford, CA, Tokyo Medical and Dentistry Graduate School, Tokyo, Japan

222 Functional Phenotype Of CD49d-Expressing Neutrophils Dif-
eres 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 Kaido, Robert T. Reid, Anthony Montgomery and Richard Reid, The Banck Center, San Diego, CA, University of California San Diego, San Diego, CA

224 Expression Of The Transcription Factor E4BP4 In Human Bas-
opils
Dr. Bettina M. Jensen, Mrs. Maria Goehr and Prof. Lars K. Poulsen, PhD FAAAAA, 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 Inhibit-
or-1 Via TGF-51
Dr. Seong Ho Cho, MD, Dr. Sun Hye Lee, PhD, Dr. Atsushi Kato, PhD, Dr. Tetsuji Takabayashi, MD, Dr. Soon Shin and Dr. Robert P. Schleimer, PhD, FAAAAAI, Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL, Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL.

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 Immune Deficiency Disease
Amanda Skosiekiewicz, 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; and 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 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 CCRC, Jaime Ross, RN, Hugh A. Sampson, MD, FAAAAA and Dr. Julie Wang, MD, FAAAAA, Icahn School of Medicine at Mount Sinai, New York, NY, The Icahn School of Medicine at Mount Sinai, New York, NY, Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL, Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL.

228 School Experience With Food Allergy Reactions Highlight The Need For Training and Availability Of Epinephrine
Mrs. Katherine A. Schmeissing, MS, RN, Christine Sychlin-
ski, APN, CPNP, Dr. Jacqueline Pongracic, MD, FAAAAA and Dr. Anne Marie Singh, MD, Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Division of Allergy & Immunology, Department of Pediatrics, 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 Ciclesi-
nide 200 Mcg Qd: Open Trial In Mexican Population
Francisco Javier Saynes-Marin, Arcarel Arelano-Plancarte, Jazmin Chiu-Ugalde, Estefania Torres-Medina, Jose Antonio Vargas-Romero and Juan Carlos Lopez-Alvarenga, Hospital Angeles Metropolitano, Mexico City, Mexico, Medical Department, Takeda Mexico S.A. de C.V., Edo. de Mex., Mexico, Dirección de Investigación, Hospital General de México “Eduardo Liceaga”, Mexico City, Mexico

230 Viral Induced Ibuprofen Sensitivity Leading To Anaphylaxis In Pre-School Aged Children
Mrs. Jodi A. Shroba, RN MSN CPNP and Ms. Kathryn Choj-
acki, Children’s Mercy Hospital

231 Anthropomorphic Variations According To Clinical Pattern In Cow’s Milk Allergic Children
Ms. Diana Colson, Prof. Nicolas Kalach, MD, PhD, Ms. Pascale Soulainnes and Prof. Christophe Dupont, MD, PhD, Nutrition Clinic, Saint Ouen, France, Hospital Saint Vincent de Paul, Groupement des Hopitaux de l’Institut Catholique de Lille (IHUCL), Lille, France, Hospital Necker Enfants Malades, Paris, France, DBV Technologies, Paris, France

232 Development and Piboting Of A Food Allergy Education Program For Parents Of Young Children
Ms. Catherine Gillespie, RN MN CAE, Ms. Nancy Ross, RN CAE, Dr. Nestor F. Cisneros, MD FRCPC and Dr. Allan Becker, MD FRCPC, Children’s Hospital, Winnipeg, MB, Canada, University of Manitoba, Winnipeg, MB, Canada, University 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, MD, Jung-Ha Mok, MD, Seung-Eun Lee, MD, Mi-Hyun Kim, MD, Kwangha Lee, MD, PhD, Ki-Uk Kim, MD, PhD, Min-Ki Lee, MD, PhD and Hye-Kyung Park, MD, PhD, Department of Internal Medicine, Pusan National University School of Medicine, Busan, South Korea, Department of Internal Medicine, Pusan National University Yangsan Hospital, Yangsan, South Korea

234 The Natural History Of Wheat Hypersensitivity In Thai Chil-
dren
Dr. Nuthana Siripattanamongkol, 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
Novel Genetic Factors in Asthma

2601
Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

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, FAAAAI1 and Dr. Julie Wang, MD, FAAAAI1. The Icahn School of Medicine at Mount Sinai, New York, NY; 5University of Arkansas for Medical Sciences, Little Rock, AR, 6Division of Allergy and Immunology, Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, Chicago, IL, 5Slot 512-13, University of Arkansas for Medical Sciences, Little Rock, AR, 7Ann & 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 Sanchez-Machín, MD1, Dr. Paloma Poza Guedes2, Dr. Claudio J. Flisser3, Dr. Yvelise Barrios, MD, PhD4 and Dr. Javier A. Mendez, MD1. Dr. Javier A. Mendez, MD1,2, University of Puerto Rico School of Medicine, San Juan, PR.

238 Aerobiology Of Texas Panhandle and Efficiency Of AHPCO Technology As Air Purifier, Surface Sterilizer In Food Processing
Dr. Natalia Stancu, Dr. Yevgeniy Lytvyn, Dr. Josephine Rousseau, Dr. John Spano, Dr. Cynthia Armstrong. AIR OASIS, Amarillo, TX, 2Allergy ARTS ACCR, Amarillo, TX, 3AIR OASIS, Amarillo, TX.

244 The Utility Of Anti-Pneumococcal Antibody Measurement In Patients With Primary Immunodeficiency Receiving Pneumococcal Vaccine
Dr. Jeff Bennert, PhD CTN1,2, Dr. Constantine K. Saadeh, MD, FAAAAI1,3, Dr. Yvelise Barrios, MD, PhD4, 5Hospital de Tórax-Ofra, Sta Cruz de Tenerife, Spain, 6Hospital of Texas Panhandle, Amarillo, TX.

245 Diagnostic Immunization With Bacteriophage ΦX 174 In Patients With Common Variable Immunodeficiency/Hypogammaglobulinemia
Dr. Laura Smith, MD1, Dr. Patricia L. Lugar, MD, MS2, Dr. John S. Potempa, MD, PhD3,4 and Dr. Andrew W. Deans, MD, PhD2. Dr. Laura Smith, MD1, 2Department of Pediatrics, Duke University Medical Center, Durham, NC, 3Duke University Medical Center, Durham, NC

247 Rule Of Different Memory Cells In Common Variable Immunodeficiency and Specific Antibody Deficiency
Amer M. Khajah, MD, Umm Al Qura University, Makkah, Saudi Arabia; Inova Fairfax Hospital for children, Fall Church, VA, 1ORAL, Alpharetta, GA, and Prof. Lawrence M. DuBuske, MD, Professor of Immunology, Boston Children’s Hospital, Harvard Medical School, Boston, MA.

248 Evaluation of a Novel Mismatch 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, 2Fellowship in Immunology, Massachusetts General Hospital, Boston, MA, 3Department of Pediatrics, Children’s National Medical Center, Washington, DC.

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
Minji Kim, MD, Ph.D., Fei Ji, Ph.D., Ameera Bukhari, MS, Taif University, Saudi Arabia.

L.K. Znamenskaya, MD, Ph.D., FAAAAI, 2Crimean State Medical University, Ukraine, 3George Washington University School of Medicine, DC.
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, FAAAAI1, Dr. Lynda C. Schneider, MD, FAAAAI1, Dr. Amy Paller, MD1, Dr. Gloria David, PhD2, Ms. Katherine Monti1, Mr. Brett Jepson1 and Dr. Adriana Weinberg, MD1, National Jewish Health, Denver, CO, 1University of Rochester Medical Center, Rochester, NY, 2Oregon Health & Science University, Portland, OR, 3Boston Children’s Hospital, Boston, MA, 4Northwestern University Feinberg School of Medicine, Chicago, IL, 5Rho, Inc., Chapel Hill, NC, 6University 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, PhD2, Dr. Adrian Lowe, PhD1,3, Dr. Jennifer Koplin, PhD1, Prof. Shyamali Dharmage, MD, PhD1,2, Prof. Lyle Gurrin, PhD1,2, Prof. Mimi L. K. Tang, MD, PhD, FAAAAI1, Prof. Anne-Louise Ponsonby, PhD2, Dr. Melanie Matheoson, PhD3, Dr. David Hill, MBBD, FRACP4 and Prof. Katrina Jane Allen, MD, PhD, FAAAAI1,5, 6Murdoch Childrens Research Institute, Victoria, Australia, 7University of Melbourne, Victoria, Australia, 8The University of Melbourne, Melbourne, Australia, 9Royal 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, FAAAAI1, Lisa A. Beck, MD, FAAAAI1, Dr. Candelaria I. Vergara, MD, PhD1, Dr. Mark Boguniewicz, MD, FAAAAI1, Dr. Tissa Hata, MD1, Dr. Lynda C. Schneider, MD, FAAAAI1, Dr. Jon M. Hanifin, MD, FAAAAI1, Dr. Richard Gallo, MD, PhD1, Dr. Li Gao, MD, PhD1, Dr. Ingo Ruczinski, PhD6, Dr. Rasika A. Mathias, ScD1 and Dr. Kathleen C. Barnes, PhD FAAAAI1, Division 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. Klaflky, 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 Beaupre, Mr. Nicholas Ventrelli 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, Ph.D2, 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. Eren R. Rue, 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 Bunyanvich, MD, MPH1,2, Ms. Sheryl Rifas-Shiman, MPH1, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI1, Dr. Diane R. Gold, MD, MPH1, Dr. Carlos
Camargo Jr, MD, DrPH, Dr. Emily Oken, MD, Dr. Matthew Gilman, MD, SM, and Dr. Augusto A. Litonjua, MD, MPH, 1 Channing Division of Network Medicine, Brigham and Women’s Hospital, MA, 2 Division of Pediatric Allergy & Immunology, Department of Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, 3 Harvard Medical School, Boston, MA, 4 Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, 5 Channing Laboratory, Brigham and Women’s Hospital, Boston, MA, 6 Department of Emergency Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, 7 Harvard Medical School, 8 Channing Division of Network Medicine, Brigham and Women’s Hospital, Boston, MA.

Unrecognized Allergic Rhinoconjunctivitis and Allergic Sensitization Among Latino Youth (GALA II Study)

Ulysses Burley, MPH 1, Dr. Joy Hsu, MD, MSC 1, Duanny Alva, MD-IMG, MPH 1, Ms. Elizabeth Nguyen, BS 2, Ms. Lindsey Roth, MA 2, Dr. Joshua Galanter, MD 2, Dr. Sam Oh, PhD, MPH 2, Ms. Celeste Eng, BS 2, Mr. Fred Lurmann, MS 2, Dr. Rajesh Kumar, MD, MS, FAAAAI 2, Dr. Harold J. Farber, MD, MSPH 2, Dr. Denise Serbisky, MD 2, Dr. Luisa Borrell, DDS, PhD 3, Dr. Saunak Sen, PhD 2, Dr. William Rodriguez-Cintron, MD 2, Dr. Jose Rodriguez-Santana, MD 2, Dr. Esteban Gonza Burchard, MD, MPH 2 and Prof. Pedro C. Avila, MD, FAAAAI 4, Feinberg School of Medicine, Northwestern University, Chicago, IL, 5 Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 6 Department of Medicine, University of California, San Francisco, California, San Francisco, CA, 7 Department of Medicine, University of California, San Francisco, San Francisco, CA, 8 Sonoma Technology, Inc., Petaluma, CA, 9 Pediatric allergy, Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 10 Baylor College of Medicine and Texas Children’s Hospital, Houston, TX, 11 Pediatric Pulmonary Division, Jacobi Medical Center, Bronx, NY, 12 Department of Health Sciences, Graduate Program in Public Health, Lehman College, City University of New York, Bronx, NY, 13 Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA, 14 Veterans Caribbean Health Care System, San Juan, PR, 15 Centro de Neumologia Pediátrica, San Juan, PR

Mechanisms of Steroid and Arachidonic Acid Pathways in Allergic Disease

Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

Unrecognized Allergic Rhinoconjunctivitis and Allergic Sensitization Among Latino Youth (GALA II Study)

Local Allergic Rhinitis and Non-Allergic Rhinitis

The Nasal NO Response To External Acoustic Energy: A Pilot Study

Dennis Shusterman, MD, MPH, University of California, San Francisco, Richmond, CA

Flagellin/Toll-Like Receptor 5 Induces Interleukin-17C In Human Nasal Epithelia

Dr. Hyun Jin Min 1, Dr. Tae-Hoon Kim 2, Su-Yeon Choi 2, Prof. Jou-Heon Yoon 1,2 and Prof. Chang-Hoon Kim 1,3, Department of Otorhinolaryngology, Yonsei University College of Medicine, Seoul, South Korea, Research Center for Human Natural Defense System, Yonsei University College of Medicine, Seoul, South Korea, The Airway Mucus Institute, Yonsei University College of Medicine, Seoul, South Korea

266 Phenotyping Non-Allergic and Local Allergic Rhinitis

Dr. Carmen Rondon, MD, PhD 1, Dr. Paloma Campo, MD, PhD 1, Dr. Esther Barrionuevo Sanchez, MD 1, Ms. Cristina De Leiva Molina 1, Dr. Leticia Herrero Lifona, MD, PhD 1, Ms. Maria Auxiliadora Guerrero 1, Dr. Francisca Gomez, MD, PhD 1, Dr. Natalia Blanca-Lopez, MD, PhD 2, Dr. Gabriela Canto, MD, PhD 2 and Dr. Miguel Blanca, MD, PhD 1, Allergy Service, Carlos Haya Hospital, Malaga, Spain, Allergy Service, Infanta Leonor Hospital, Madrid, Spain

Role Of Basophil Activation Test For Identifying Subjects With Local Allergic Rhinitis

Dr. Paloma Campo, MD, PhD 1, Dr. Carmen Rondon, MD, PhD 1, Dr. Enrique Gomez, PhD 2, Dr. Esther Barrionuevo Sanchez 1, Mrs. Luisa Galindo, RN 2, Dr. JA Huertas 1, Dr. Cristobalina Mayorga, PhD 2 and Dr. Miguel Blanca, MD, PhD 1, Allergy Service, Carlos Haya Hospital, Malaga, Spain, Research Laboratory for Allergic Diseases, Hospital Regional Universidad de Malaga - IBIMA, Malaga, Spain

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

Saturday, March 1st, 2014, 2:00 PM - 3:15 PM

 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, 1 Harvard Medical School, Boston, MA, 2 Brigham and Women’s Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA

Predictors Of Response To Glucocorticoids In Hypereosinophilic Syndromes

Panez Khouroy, MD 1, Anassline Abiodun, RN 1, Kelli Williams, MD, MPH 1, JeanAnne Ware, CRNP 1, Nicole Holland-Thomas, MSN, RN 2, and Dr. Amy D. Klion, MD 3, National Institutes of Health, Bethesda, MD, 1 SAIC-Fredrick Inc., Bethesda, MD

Differential Proteomic Analysis Of Eosinophils From Patients With Glucocorticoid Responsive Or Resistant Hypereosinophilic Syndrome

Konrad Pazdruk, MD, PhD 1, Panez Khouroy, MD 2, Kizhake V. Soman, PhD 1, Nicole Holland-Thomas, MSN, RN 2, Mrs. Michelle Makiya 2, Christof Straub, PhD 1, Zheng Wu, PhD 1, Dr. Amy D. Klion, MD 2 and Alexander Kurosky, PhD 2, University of Texas Medical Branch, Galveston, TX, National Institutes of Health, Bethesda, MD, 1 SAIC-Fredrick Inc., Bethesda, MD

Glucocorticoid Receptor-a-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, MPH 1, Dr. Xiangying Xue, MD 1, Prodoy Chatterjee, PhD 1, Dr. Madhu Gupta, MBBS 1, Dr. Vincent R. Bonagura, MD, FAAAAI 1 and Christine Metz, PhD 1, Feinstein Institute for Medical Research, Manhasset, NY, Allergy and Immunology, North Shore-LIJ Health System, Great Neck, NY, Feinstein Institute for Medical Research, NY, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY

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 1,2,3,4, Dr. Derrick Thibault 1,2,3,4, Dr. Benjamín A. Raby, MD, MPH 1, Dr. Andrea Baccarelli, MD, MPH 1, Dr. Neil Bhattacharyya, MD 1,2,3,4, Dr. Joshua A. Boyce, MD, FAAAAI 1,2 and Dr. Tanya M. Laidlaw, MD, FAAAAI 1,2,3,4, Brigham and Women’s Hospital, Division of Rheumatology, Immunology and Allergy, Boston, MA, 1 Harvard Medical School, Boston, MA, 2 Brigham and Women’s Hospital, Boston, MA, 4 Harvard School of Public Health, Boston, MA
Bronchoprovocation and Asthma Comorbidities

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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. Sindhuha Gogineni, MD, Dr. Joseph Espiritu and Dr. Aditya Uppalapatni, MD, St. Louis University School, 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, MS2, Ms. Elena Deych, MS2 and Dr. William Shannon, PhD2, 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 Misiasz, MD, M.D.1, Dr. Maria Talamo2, Ms. Caitlin Campion1, Julie McDaniel1, Dr. Jun Fu, PhD1 and James N. Moy, MD, MS1, 1 Rush 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, MD1, 1Albert Einstein/Montefiore Medical Center, New York, NY

278 Psycho Social Stresses and Asthma Morbidity In Children
Dr. Ezej Youssef, MD FAAAAI Marshallfield Clinic, Marshallfield, WI; Marshallfield Clinic, Marshallfield, WI

279 Does The Sinusitis Affect Bronchial Hyperresponsiveness In Asthmatic Children ?
Chikako Motomura, Dr. Hiroshi Odajima, Yuko Amimoto, Rintaro Ono, Keisuke Watamuki, Yoko Murakami, Naohiko Tab, Sa-toshi Honjo 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, MD1, Eun-Jung Jo, MD1, Dr. Young Ho Kim, MD1, Dr. Hyung Young Kim, MD1, Dr. Ju-Hee Seo, MD1, Byoung-Ju Kim, MD, PhD2, Dr. Hyo-Bin Kim, MD, PhD3, Prof. So Yeon Lee, MD, PhD2, Prof. Dae Jin Song, MD, PhD3, Prof. Woo Kyung Kim, MD, PhD3, Dr. Gwang Cheon Jung, MD, PhD4, Prof. Jung Yeon Shim, MD, PhD5, Prof. Jinho Yu, MD, PhD4, Prof. Soo-Jong Hong, MD, PhD4 and Dr. Ji-Won Kwon, MD5, 1Department of Pediatrics, Seoul National University Bundang Hospital, Seongnam, South Korea, 2South Korea, 3Childhood Asthma Ateopy Center, Department of Pediatrics, Asian Medical Center, University of Ulsan College of Medicine, Seoul, South Korea, 4Department of Pediatrics, Kosin University Gospel Hospital, Kosin University College of Medicine, Seoul, South Korea, 5Department of Pediatrics, Korea Cancer Center Hospital, Seoul, South Korea, 6Department of Pediatrics, Haeundae Paik Hospital, Inje University College of Medicine, Busan, South Korea, 7Department of Pediatrics, Inje University Sngayye Paik Hospital, Seoul, South Korea, 8Department of Pediatrics, Hal-lyn University College of Medicine, Seoul, South Korea, 9Department of Pediatrics, Korea University Guro Hospital, Seoul, South Korea, 10Department of Pediatrics, Seoul Paik Hospital, Inje University College of Medicine, Seoul, South Korea, 11Department of Pediatrics, National Health Insurance Corporation Ilsan Hospital, Seoul, South Korea, 12Department of Pediatrics, Kangbuk Samsung Hospital, Sungkyunkwan University College of Medicine, Seoul, South Korea, 13Research Center for Standardization of Allergic Disease, University of Ulsan College of Medicine, Seoul, South Korea, 14Department of Pediatrics, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, South Korea

282 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 Shime, CHRU Strasbourg, France

283 Nocturnal Asthma In Latino Children Is Associated With Severe Disease and Allergenic Triggers (GALA II Study)
Dr. Geeta Bhargave, MD1, Dr. Joy Hsu, MD, MS1, Ms. Elizabeth Nguyen, BS2, Ms. Lindsey Roth, MA3, Dr. Joshua Galanter, MD3, Dr. Sam Oh, PhD, MPH1, Ms. Celeste Eng, BS1, Mr. Fred Lurmann, MS1, Dr. Harold J. Farber, MD, MSPH1, Dr. Denise Serbrisky, MD, MD, Dr. Luisa Borrell, DDS, PhD1, Dr. Saunak Sen, PhD1, Dr. William Rodriguez-Cintron, MD2, Dr. Jose Rodriguez-Santana, MD1, Dr. Esteban Gonza Burchard, MD, MPH1 and Prof. Pedro C. Avila, MD, FAAAAI1, Feinberg School of Medicine, Northwestern University, Chicago, IL, 1Department of Medicine, University of California, San Francisco, California, San Francisco, CA, 2Department of Medicine, University of California, San Francisco, San Francisco, CA, 3Sonoma Technology, Inc., Pet-aluma, CA, 4Baylor College of Medicine and Texas Children’s Hos-pital, Houston, TX, 5Pediatric Pulmonary Division, Jacobi Medical Center, Bronx, NY, 6Department of Health Sciences, Graduate Pro-gram in Public Health, Lehman College, City University of New York, Bronx, NY, 7Department of Epidemiology and Biostatistics, University of California, San Francisco, San Francisco, CA, 8Veterans Caribbean Health Care System, San Juan, PR, 9Centro de Neumología Pediatrica, San Juan, PR
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, MD1, D1, 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, 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, MD1,2, Jamie H Kiehm, MD1, Caitlin M Campion1, Dr. Larry L. Thomas, PhD1 and James N Moy, MD1,2, 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, MD1,2, Dr. Eun Lee, MD1,3, Dr. Song I Yang, MD1,4, Dr. Hyung Young Kim, MD5,6, Dr. Ju-Hee Seo, MD6,7, Dr. Ji-Won Kwon, MD6,8, Dr. Byoung-Ju Kim, MD, PhD8,9, Dr. Hyo-Bin Kim, MD, PhD9,10, Prof. So Yeon Lee, MD, PhD10,11, Prof. Dae Jin Song, MD, PhD10,11, Prof. Woo Kyung Kim, MD, PhD10,11, Dr. Gwang Cheon Jang, MD, PhD10,11, Prof. Jung Yeon Shim, MD, PhD10,11 and Dr. Soo-Jong Hong, MD, PhD10,11, 1Childhood Asthma Atoyto 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, 3Department of Pediatrics, Asan Medical Center, Seoul, South Korea, 4Department of Pediatrics, Kosin University Hospital, Busan, South Korea, 5Department of Pediatrics, Korea Cancer Center Hospital, Seoul, South Korea, 6Department of Pediatrics, Chungnam National University College of Medicine, Daejeon, South Korea, 7Department of Pediatrics, Hallym University College of Medicine, Busan, South Korea, 8Department 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, MD1,2, Dr. Bruce Luxon, PhD1, Dr. Wendy Baker, PhD1, Dr. Heidi Spratt, PhD1, Dr. Rohit Divakar, MBBS, PhD2, Emily Aaron1 and Dr. William J. Calhoun, MD, FAAAAAI, 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, MD1,2, Dr. Hyun Ju Cho, MD1, Dr. Ji-Won Kwon, MD2,3, Dr. Song I Yang, MD1,2, Dr. Eun Lee, MD1,4, Dr. Hyung Young Kim, MD1,2, Dr. Ju-Hee Seo, MD6,7, Dr. Byoung-Ju Kim, MD, PhD8,9, Dr. Hyo-Bin Kim, MD, PhD9,10, Prof. So Yeon Lee, MD, PhD10,11, Prof. Dae Jin Song, MD, PhD10,11, Prof. Woo Kyung Kim, MD, PhD10,11, Dr. Gwang Cheon Jang, MD, PhD10,11, Prof. Jung Yeon Shim, MD, PhD10,11 and Prof. Soo-Jong Hong, MD, PhD10,11, 1Childhood Asthma Atoyto 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, Seoul, South Korea, 4Research Center for Standardization of Allergic Diseases, Seoul, South Korea, 5Department of Pediatrics, Seoul National University Bundang Hospital, Seoul, South Korea, 6Department of Pediatrics, Inje University College of Medicine, Busan, South Korea, 7Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, 8Department of Pediatrics, Inje University College of Medicine, Seoul, South Korea, 9Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, 10Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, 11Department of Pediatrics, National Health Insurance Corporation Ilsan Hospital, Seoul, South Korea, 12Department of Pediatrics, Kangbuk Samsung Hospital, Sungkyunkwan University College of Medicine, Seoul, South Korea

Reference Values and Determinants Of Fractional Concentration Of Exhaled Nitric Oxide (FeNO) In Healthy Children
Dr. Young Ho Jung, MD1,2, Dr. Hyun Ju Cho, MD3, Dr. Ji-Won Kwon, MD2,3, Dr. Song I Yang, MD1,2, Dr. Eun Lee, MD1,4, Dr. Hyung Young Kim, MD2,3, Dr. Ju-Hee Seo, MD6,7, Dr. Byoung-Ju Kim, MD, PhD8,9, Dr. Hyo-Bin Kim, MD, PhD9,10, Prof. So Yeon Lee, MD, PhD10,11, Prof. Dae Jin Song, MD, PhD10,11, Prof. Woo Kyung Kim, MD, PhD10,11, Dr. Gwang Cheon Jang, MD, PhD10,11, Prof. Jung Yeon Shim, MD, PhD10,11 and Prof. Soo-Jong Hong, MD, PhD10,11, 1Childhood Asthma Atoyto 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, Seoul, South Korea, 4Research Center for Standardization of Allergic Diseases, Seoul, South Korea, 5Department of Pediatrics, Inje University College of Medicine, Seoul, South Korea, 6Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, 7Department of Pediatrics, National Health Insurance Corporation Ilsan Hospital, Seoul, South Korea, 8Department of Pediatrics, Kangbuk Samsung Hospital, Sungkyunkwan University College of Medicine, Seoul, South Korea, 9Department of Pediatrics, Kosin University Hospital, Busan, South Korea, 10Department of Pediatrics, Korea Cancer Center Hospital, Seoul, South Korea, 11Department of Pediatrics, Korea Cancer Center Hospital, Seoul, South Korea, 12Department of Pediatrics, Inje University College of Medicine, Seoul, South Korea, 13Department of Pediatrics, Inje University College of Medicine, Seoul, South Korea, 14Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea, 15Department of Pediatrics, National Health Insurance Corporation Ilsan Hospital, Seoul, South Korea, 16Department of Pediatrics, Academic Medical Center, University of Ulsan College of Medicine, Seoul, South Korea
Improvement Of FENO In Youth With Asthma After Attending An Asthma Summer Camp

Dr. Jonathan A. Olsen, DO, Dr. Mark Stevens, MD, Mr. Patrick Foster, B.S. and Dr. Russell Hopp, DO, FAAAAI, Creighton University Medical Center, Omaha, NE, American Lung Association, Omaha, NE, Creighton University School Medicine, Omaha, NE

Exhaled Nitric Oxide (FeNO) and T-Helper 2 Cell Biomarkers: Can They Predict Treatment Response To Dulamaba, An IL-4Ro Antibody, In An Eosinophilic Asthma Population?

Brian N. Swanson, PhD, Lin Wang, PhD, Jeffrey Ming, MD, Jennifer D. Hamilton, PhD, Ariel Teper, MD, Thomas Dicioccio, PhD, Yongtao Li, PhD, Dr. Neil Graham, MD, Dr. Gianluca Pirozzi, MD, PhD and Sally E. Wenzel, MD, FAAAAI, Sanofi, Bridgewater, NJ, Regeneron Pharmaceuticals, Inc., Tarrytown, NY, University of Pittsburgh Medical Center NW, Pittsburgh, PA

Asthma Management Costs With Feno In Addition To Standard Reimbursement Principles, Highlands Ranch, CO

Developmental Assessment Of Serum Periostin As An Asthma Biomarker In Children

Dr. Halie M. Anderson, Dr. Robert F. Lemaske Jr., MD, FAAAAI, Joseph R. Arron, Cecil Holweg, Ms. Victoria Rajamanickam, Dr. James E. Gern, MD, FAAAAI and Dr. Daniel J. Jackson, MD, University of Wisconsin, Madison, WI, University of Wisconsin School of Medicine and Public Health, Madison, WI, Genentech, Inc., South San Francisco, CA, Genentech, Inc, South San Francisco, CA, University of Wisconsin Hospitals and Clinics, Pediatrics, 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

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. Jintack 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

Increased Blood Th2-Like Invariant Natural Killer T Cells In Patients With Asthma

Prof. Young-H Koh, MD and Jae-Uoong Shim, Chonnam National University Medical School

Establishment and Treatment Of a Steroid Resistant Asthma Model By Adoptive Transfer Of Helper T Cell Clones

Dr. Akio Mori, MD, PhD, Mr. Satoshi Koyama, MSc, Ms. Miyako Yamaguchi, Ms. Yo Iijima, Dr. Jun Itoh, Dr. Hiroaki Hayashi, MD, Dr. Takafumi Minami, MD, Dr. Kentaro Watari, MD, Dr. Chihiro Mitsui, MD, Dr. Chiyaok Oshikata, MD, Dr. Hidenori Tanimoto, MD, Dr. Yuma Fukutom, MD, Dr. Kiyoshi Sekiya, MD, Dr. Takahiro Tsuburai, MD, PhD, Dr. Masami Taniguchi, MD, PhD, Dr. Yuji Maeda, MD, Dr. Mamoru Ohomo, MD, Dr. Maki Hasegawa, MD, PhD, Dr. Kazuo Akiyama, MD and Dr. Osamu Kaminuma, PhD, National Hospital Organization, Sagamihara National Hospital, Sagamihara, Japan, Tokyo Metropolitan Institute of Medical Science, Tokyo, Japan

CD4+ T Cells From Nasal Polyp Explants Contain Abundant Th2 Cells Expressing Functional Interleukin-25 Receptors Together With Th17 Cells

Mrs. Emily Lam, MSc, Dr. Harsha H. Kariyawasam, MD, PhD, Prof. Stephen R. Durham, MA MD FRCP, Ms. Joanne Rimmer, FRCS(ORL-HNS), Dr. Valerie J. Lund, MD, Dr. David Cousins, PhD and Dr. Stephen Till, MD, PhD, King’s College London, London, United Kingdom, Royal National Throat, Nose & Ear Hospital London, University College London, London, United Kingdom, Imperial College London, London, United Kingdom

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

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 Pureza, King Saud University, Riyadh, Saudi Arabia, Dr. Qutayba Hamid, MD, PhD, FAAAAI, McGill University Health Centre, Montreal, QC, Canada and Dr. Rubil Halwani, PhD, King Saud University, college of Medicine, Riyadh, Saudi Arabia

A Comparison Of Asthma Prevalence and Severity Among Urban and Rural African American Teenage Youth

Dr. Dennis Owiny, M.D. FAAAAI, Dr. Martha Tingen, PhD, Ms. Suzanne Havstad, M.A., Dr. Jennifer Waller, PhD, Dr. Christine Cole Johnson, PhD MPH FAAAAI and Dr. Christine L.M. Joseph, PhD, Division of Allergy-Immunology and Rheumatology, Georgia Health Sciences University, Augusta, GA, Georgia Regents University, Augusta, GA, Department of Public Health Sciences, Henry Ford Hospital, Detroit, MI

Interleukin-4 and Transforming Growth Factor-Beta Single Nucleotide Genes Polymorphisms Confer Susceptibility To Atopic Dermatitis

Dr. Nima Rezaei, MD, PhD, Ms. Zahra Aryan, Dr. Nasrin Behniafard, MD, Ms. Elham Farhadi, MSc, Dr. Soheila Sotoudeh, MD, Dr. Mojdeh Khaledi, MD, Dr. Maryam Mahmoudi, MD, Prof. Ashgar Aghamahmoudi, Prof. Ali Akbar Amirzargar, PhD and Dr. Mohammad Gharagozlou, MD, Research Center for Immunodeficiencies, Children’s Medical Center, Tehran University of Medical Sciences, Tehran, Iran, Molecular Immunology Research Center; and Department of Immunology, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, Student Scientific Research Center (SSRC), School of Medicine, Tehran University of Medical Sciences, Tehran, Iran, Children’s Medical Center, Tehran University of Medical Sciences, Tehran, Iran, Hematology Department, School of Allied Medical Science, Tehran University of Medical Sciences, Tehran, Iran, Growth and Development Research Center, Tehran University of Medical Sciences, Tehran, Iran, School of Nutrition and Dietetics, Tehran University of Medical Sciences, Tehran, Iran, Research Center for Immunodeficiencies, Children’s Medical Center, Tehran University of Medical Sciences, Tehran, Iran

A Comparison Of Regulatory T-Cell Receptor VB (3.5) Expression In Patients With Food Allergy and Atopic Dermatitis

Benjamin Prince, MD, Kristin A. Erickson, Christine Szychinski, APN, CPNP, Miao Cai, MS and Dr. Anne Marie Singh, MD, Northwestern University Feinberg School of Medicine, Chicago, IL, Division of Allergy & Immunology, Ann & Robert
Correlation Between Fractional Exhaled Nitric Oxide and Asthma Exacerbation

Dr. Nawinda Mahawichit, MD, Mahidol University, Bangkok, Thailand

Effect 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, PhD1,2, Ms. Sarah Mah, BSc2, Mr. Andrew G. Day, MSc3, Dr. Michael Kobor, PhD4,5 and Dr. Anne K. Ellis, MD, MSc6, FAAAAI1,2,3.

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. Oetgen, MD, PhD, FAAAAI1,2, Dr. Mindy Tsai, DMSc1, Dr. Martin Metz, MD, PhD3 and Dr. Stephen J. Galli, MD4, Stanford University School of Medicine, Stanford, CA, 5Boston Children’s Hospital, Boston, MA, 6Charité Campus Mitte, Berlin, Germany

CD4+ and CD8+ T Cells Bearing Naive and Memory Markers In Blood Of Immigrants To Brooklyn Who Develop Asthma and Allergic Disease

Dr. Ashlei Mathew, MD1,2, Dr. Irina Katalyeva, MD1,3, Seto Chice, MS1,4, Dr. Stephan Kohlhoff, MD1,3, Dr. Rauno O. Joks, MD, FAAAAI1,2, Dr. Helen G. Durkin, PhD1,4, and Dr. Maria-Anna Vastagi, MD1,3, Center 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

IL-17b-Estradiol Increases IL-17A Protein Expression From Mouse CD4+ Th17 Differentiated Cells

Jacqueline-Yvonne Cephus, BS2, Dr. Dawn C. Newcomb Baker, PhD2, Madison Boswell, MD, FAAAAI1,2, and Dr. Ray Peebles, MD, FAAAAI1,2, Vanderbilt University School of Medicine, Nashville, TN, 3Division of Allergy, Pulmonary and Critical Care Medicine, Vanderbilt University School of Medicine, Nashville, TN, 4Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, Ten, 5Allergy, Pulmonary, and Critical Care Medicine, Department of Medicine, Vanderbilt University School of Medicine, Nashville, TN

Allergic Sensitization and Determination Of Serum Eosinophil Cationic Protein and Triptase In Preschool Population In Hermosillo, Sonora, Mexico

Dr. Claudia Gallego-Corella1,2, Dr. Guadalupe Corella2, Ms. Andrea Romo3, Dr. Antonio Rascón1 and Mr. Pablo Martínez1, 1Medicine Faculty, Xochicalco University, Tijuana, Mexico, 2Health, Nutrition and Environment, Department of Chemical and Biological Sciences, University of Sonora, Hermosillo, Mexico, 3Department of Chemical and Biological Sciences, University of Sonora, Sonora, Hermosillo, Mexico, 4Health, Nutrition and Environment, Department of Chemical and Biological Sciences, University of Sonora, Hermosillo, Mexico

Fungal Cross-Allergenicity In Specific IgE Testing

Dr. Mercedes C. Amado, MD, FAAAAI1, Dr. Jay M. Portony, MD, FAAAAI2 and Dr. Charles Barnes, PhD2, 1Children’s Mercy Hospital, Shawnee Mission, KS, 2Children’s Mercy Hospital, Kansas City, MO

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

IL-4 Receptor Alpha and STAT6 Single Nucleotide Polymorphisms Are Associated With Increased Risk Of Asthma In A Saudi Arabian Population

Dr. Rabih Halwani1,2, Dr. Alejandro Vazquez-Tello1, Mr. Amer Jamhawi2, Dr. Hamdan Jadhali1 and Dr. Saleh Al-Muhisen, MD3, 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, MD, 1Dr. Harshna Mehta, MD, 1 and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI, 2The Icahn School of Medicine at Mount Sinai, New York, NY, 3Mt. Sinai Medical Center, New York, NY

325 Frequency Of Cellular and Humoral Immunodeficiencies In Di-george Syndrome Patients Seen At New York Presbytery Colum-bia Between 2006-2012

Dr. Collette Spalding, MD, 1Dr. Kyung Hwa Jung, PhD, 1Dr. Rachel L. Miller, MD, FAAAAI, 1 and Dr. Yesim Demirdag, MD, 1Division of Pulmonology, 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, MD, 1Christina S.K. Yee, MD, PhD, 1Mr. Wayne Bainter, BS, 1Dr. Luigi D. Notarangelo, M.D, 2Dr. Suleiman M. S.E. Al-Hammadi, MD, FAAAAI, 3 and Raif S. Ghea, MD, 1Division of Immunology, Boston Children’s Hospital, Harvard Medical School, Boston, MA, Stem Cell Institute, Boston, MA, 2FMHS, UAE University, Al-Ain, United Arab Emirates

327 Coronin-1A Oligomerization Is Critical For Host Defense Against Viral Pathogens

Christina S.K. Yee, MD, PhD, 1Ozden Sanal, MD, 2Janet S. Chou, MD, 2Raif S. Ghea, MD, 1Deniz Ayyaz, MD, 1Cancer Aytiken, MD, 3 and A Nurten Akarsu, MD, PhD, 4Division of Immunology, Boston Children’s Hospital, Harvard Medical School, Boston, MA, 2Department of Pediatrics, Hacettepe University Ihsan Dogramaci Children’s Hospital, Ankara, Turkey, 4Department of Pediatric Immunology, Dr Sami Ulus Maternity and Children’s Research and Educational Hospital, Ankara, Turkey, 3Department 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, MD, 1Emily Phillips, RN BSN CCRC, 1Travis Henry, PhD, 1 and Dr. Mary Beth Fasano, MD, FAAAAI, 2University of Iowa, 3C42-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, 1Dr. 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. Bo Geng, MD, 1Dr. Maria Garcia-Lloret, MD, FAAAAI, 2Dr. Yen Tun Wang, MD, 3Dr. Ki-Young Yoo, MD, 4Dr. Raymond Barnhill, MD, 5Dr. Derek Wong, MD and Dr. E. Richard Stehmel, MD, FAAAAI, 2UCLA, Los Angeles, CA, 3Division of Allergy and Immunology, Department of Pediatrics, David Geffen School of Medicine at UCLA, Los Angeles, CA, 1UCLA, 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, MD, 1Dr. Stephanie Albin, MD, 1Dr. Harshna Mehta, MD, 1 and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI, 2The Icahn School of Medicine at Mount Sinai, New York, NY, 3Mt. Sinai Medical Center, New York, NY

333 Immunologic Profile Of Single Ventricle Survivorship Participants: Risk Factors For Clinically Significant Immunologic Dysfunction

Dr. Megan Morshemer, 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, MD, 1Niti Y. Chokshi, MD, 2Dr. Jordan Orange, MD, PhD, FAAAAI, 3Dr. I. Celine Hanson, MD, FAAAAI, 3 and Dr. Lisa R. Forbes, MD, 2Baylor College of Medicine and Texas Children’s Hospital, Section of Immunology, Allergy and Rheumatology, Houston, TX, 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

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-V A 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 Shilozberg, 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 Airways Dysfunction

Prof. Park Choon Sik, Mr. Bae Da-jeong, Park Jang-jook and Dr. Jang An Soo, Soonchunhyang University Bucheon Hospital, Gyeonggi-Do, South Korea

339 Dust Mite Allergens 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 Dr. Luis M. Acosta, MD, 1 Prof. Inge Goldstein, DrPH, 1 Prof. Andrew Rundle, DrPH, 1 Omar Oliendo, 4
Adnan Divijan, Dr. Beihzhan Yan, Prof. Judith Jacobson, DrPh, Dr. Rachel L. Miller, MD, FAAAAI, Dr. Steven Chirrudd and Prof. Matthew S. Perzanowski, PhD, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, Department of Pediatrics, College of Medicine, Korea University, Seoul, South Korea, Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY. Department 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, Dr. Young Wook Lee and Dr. Hae-Sun Yoon, Allergy & respiratory research laboratory, Inje University College of Medicine, Seoul, South Korea.

341 Effect Of Duration Of Residence In Brooklyn On IgE Responses Of Immigrants

Dr. Edward Kleiman, MD, Dr. Maria-Anna Vastardi, MD, Dr. Irina Katayeva, MD, Dr. Helen G. Durkin, PhD and Dr. Rauno O. Joks, MD, FAAAAAI, SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY, Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY, Lutheran Medical Center, Brooklyn, NY.

342 Impact Of Energy Expenditure On Ozone-Induced Inflammation

Dr. Krista Todoric, MD, Dr. Michelle L. Hernandez, MD, Dr. Haibo Zhou, PhD and Dr. David B. Peden, MD, MS, FAAAAAI, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, NC. University 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. Hirotoshi Unno, MD, 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. Nygaard, Dr. Mari Samuelsen, Dr. Nina Vinje, Mrs. Monica Andreassen, Prof. Martinus Lovik and Dr. Johanna Bodin, Norwegian Institute of Public Health, Oslo, Norway, GenOk - Centre for Biosafety, Tromso, Norway.

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, BS, Prof. Matthew S. Perzanowski, PhD, Eva Ronmark, PhD, Bo Lundback, MD, PhD, Jillian Roper and Thomas A.E. Platts-Mills, MD, PhD, FAAAAAI, University of Virginia, Charlottesville, VA, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY. Karolinska Institutet, Stockholm, Sweden. Division 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, PhD, Dr. John Ainkney, Dr. Lars Pedersen, Dr. Taruna Khurana, PhD, Dr. Jay E. Slater, MD, Ms. Jill Glesner, Dr. Anna Pones, PhD FAAAAAI and Dr. Robert London, National Institute of Environmental Health Sciences, NIH, Research Triangle Park, NC.

349 Antigenic Analysis Of The Major Cockroach Allergen Bla g 5 and Its Dust Mite Homolog Der p 8

Ms. Jill Glesner, Dr. Geoffrey Mueller, PhD, Dr. Lars Pedersen, Dr. Martin D. Chapman, PhD FAAAAAI and Dr. Anna Pones, PhD FAAAAAI, Indoor Biotechnologies, Inc., Charlottesville, VA, National 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 Vrielink, 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, PhD, Dr. Amanda Buskirk, PhD, Dr. M. Travis Goldsmith, Ms. Angela Lemons, Dr. Justin Hettick, Dr. Michael Kashon, PhD, Ms. Amy Cumpston, Mr. Jared Cumpston, Mr. Howard Leonard, Mr. Walter McKinney, Dr. David Frazer, PhD, Dr. Donald H. Beezhold, PhD FAAAAAI and Dr. Brett J. Green, PhD, CDC/NIOSH/ACIB, Morgantown, WV, West Virginia University, Morgantown, WV, CDC/NIOSH/PRPB, Morgantown, WV, CDC/NIOSH/BEB, Morgantown, WV.

352 Cross-Reactivity Between Recombinant Tropomyosin From Chortoglyphus and Natural Tropomyosin Of Other Extracts

Dr. Jeronimo Carmes, Dr. M. Angeles Lopez Matas, Dr. Manuel Boquete, MD, Dr. Raquel Moya and Dr. Victor Miguel Iraola, Laboratorios LETI, Tres Cantos, Spain, Hospital Xeral de Calde, Lugo, Spain.

353 Identification Of The Cysteine Protease Amb ex A As A Novel Major Allergen From Short Ragweed Pollen (Ambrosia artemisiifolia)

Dr. Philippe Moinegon, PhD, Julien Bouley, PhD, Maxime Le Mignon, PhD, Veronique Baron-Bodo, PhD, Veronique Bordas, PhD, Laetitia Bussieres, Marie-Noelle Courlet, Aurelie Laurrette, PhD, Thierry Batard, PhD, Rachel Gromeo, Henri Chabre, PhD and Emmanuel Nony, Stallergenes SA, Antony, France, Stallergenes, France, Stallergenes, Antony, France.

354 Characterization Of The Allergenic Activity Of Tropomyosin From Aedes Aegeypti

Mr. Jose F. Cantillo, Complutense University of Madrid, Spain, Immunotec S.L., Alcalá de Henares, Spain, Prof. Leonardo Puerta, Institute for Immunological Research/University of Cartagena, Cartagena, Colombia, Dr. Enrique Fernandez-Caldas, Immunotec, S.L., Spain and Dr. Sylvie Lafosse-Marin, Cabinet de Immunologie, Fort de France, Martinique.
355 Allergy To Ferret
Mr. Ignacio Esteban Gorgejo1, Javier Cuesta Herranz1, Carlos Pastor2, Aroa Sanz Maroto2, Mr. David Gonzalez2 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, FRCPC, Inflamx 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 Arachil Study
Prof. Christoph Duport, MD, PhD1, Dr. Thierry Bourrier2, Prof. Frederic de BLAY3, Dr. Lydie Guènard-Bilbault1, Dr. Christine Sauvage4, Dr. Marie-Odile Cousin4, Dr. Gisèle Kanny, MD, PhD5, Dr. Sophie Jarlot6 and Dr. Chantal Karila, MD6, 1Hôpital Enfants Malades, Paris, France, 2Lenval Hospital, Nice, France, 3CHRU Strasbourg, France, 4Saint Vincent de Paul Hospital, Lille, France, 5CHU Nancy Hospital Central, Nancy, France, 6Hôpital 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, Dr. Jason Lee, MD, FAAAAI1, Dr. Mitchell R. Lester, MD, FAAAAI, 1,2Dr. Louis M. Mendelson, MD, FAAAAI1, 1,2Dr. Glenda Nouman, MD1 and Dr. Jeffrey M. Factor, FAAAAI, 1,2New England Food Allergy Treatment Center, West Hartford, CT, 1,2Connecticut 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-C, Janet S. Kamilaris, RN3, Edwin Kim, MD, MS4, Brian P. Vickery, MD, FAAAAI, 1,2Dr. Audrey Dunny Gallivan6 and A. Wesley Burks, MD, FAAAAI1, 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, PhD2, Pamela H. Steele, MSN CPNP AE-C, Edwin Kim, MD, MS3, Brian P. Vickery, MD, FAAAAI1 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, 1University 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, FAAAAI, 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. Sugarman, MD, FAAAAI, DallasAllergyImmunology, Dallas, TX

Ms. Dena M. Pence, RT, Mrs. Angela R. Hague, PA-C, Dr. Richard L. Wasserman, MD, PhD, FAAAAI, Dr. Robert W. Sugarman, 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. Sugarman, MD, FAAAAI and Dr. Richard L. Wasserman, MD, PhD, FAAAAI, DallasAllergyImmunology, Dallas, TX

367 Secondary Eosinophilic Reactions During ORAL Immunotherapy
Prof. Yitzhak Katz, MD, FAAAAI, 1,2 Dr. Michael Goldberg, MD, PhD, Dr. Liat Nachshon, MD2, Dr. Marc E. Rothenberg, MD, PhD, FAAAAI1, 1, 2Dr. Miguel Leon Stein, MD, FAAAAI1, 1, 2Dr. Elfrat Broide1, 2, Dr. Gratiana Hermann1, 2, Dr. Arnon Elizur, MD1, 2 and Dr. Michael B. Levy, MD, FAAAAI, 1, 2Tel Aviv University, Tel Aviv, Israel, 3Assaf Harofeh, Zerifin, Israel, 1, 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, 1, 2Children’s Hospital Medical Center, Cincinnati, OH, 3Assaf Harofeh Medical Center, Rehovot, Israel, 4Assaf Harofeh Medical Center, Israel, 5Tel-Aviv university

368 Rate of Anaphylaxis Caused By Oral Immunotherapy In Children With Cow’s Milk Allergy
Prof. Giovanni B. Pajno, MD, FAAAAI, 1, 2 Dr. Giuseppe Crisafiulli1, 2, Dr. Giuseppina Salzano1, 2, Dr. Roberta Vadala1, 2, Dr. Stefania Arasi1, 2, Dr. Salvatore Barberi1 and Dr. Lucia Caminiti1, 2, 1University of Messina, Messina, Italy, 2Dept of Pediatrics, Allergy Unit, University of Messina, 2 Pediatric Clinic, San Paolo Hospital, University of Milan, Milan, Italy

369 Long-Term Follow Up In Cow’s Milk Anaphylaxis After Successful Rush Oral Immunotherapy
Mrs. Paloma Pozza-Guèdes, 1, 2 Dr. Ruperto González-Pérez, 2 Dr. Inmaculada Sánchez-Machín, MD and Dr. Victor Matheu, MD, Hospital del Tórax-Ofra, Sta Cruz de Tenerife, Spain

370 Milk Oral Immunotherapy, Standard Versus Personalized Protocols: Efficiency and Safety
Alberto Alvarez-Pereza, MD, Dr. Elena Alonso-Lebrero, PhD, Fernanda 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, FAAAAI, 1, 2 Dr. Liat Nachshon, MD, 3, Dr. Michael Goldberg, MD, PhD, 1, 2 Dr. Arnon Elizur, MD, 3, 4 and Prof. Yitzhak Katz, MD, FAAAAI1, 2, 4Assaf Harofeh, Zerifin, Israel, 1, 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, 1, 2Children’s Hospital Medical Center, Cincinnati, OH, 3Assaf Harofeh Medical Center, Rehovot, Israel, 3Assaf Harofeh Medical Center, Israel, 5Tel-Aviv university

372 Long Term Follow Up Of Children Who Incorporated Exensively Heated (baked milk) In The Diet
Dr. Anna H. Nowak-Wegrzyn, MD, FAAAAI, 1, 2 Mrs. Beth D. Strong, RN CCRC3, Ms. Diane Ananos1 and Hugh A. Sampson, MD, FAAAAI, 1, 2Icahn School of Medicine at Mount Sinai, New York, NY, 3Icahn School of medicine at Mount Sinai, New York, NY, 4Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY
373 Baked Milk Oral Immunotherapy For Severe IgE-Mediated Cow’s Milk Protein (CMP) Allergic Patients: Interim Results
Dr. Michael Goldberg, MD, PhD1, Dr. Lia Nachshon, MD1, Dr. Arnon Elizur, MD2, Dr. Moshe Appo3, Dr. Michael B. Levy, MD, FAAAAAI4 and Prof. Yitzhak Katz, MD, FAAAAAI1,2,4, Assaf Haroeh, Zerifin, Israel, 2Department of Pediatrics, Sackler School of Medicine, Tel Aviv, Israel, 3Assaf Haroeh, Israel

374 Progression Towards Increasing Tolerance To Less Extensively Heat-Denatured Milk Products
Hugh A. Sampson, MD, FAAAAAI1, Dr. George N. Konstantinou, MD, PhD, MSc2,3, Jacob Daniel Kattan, MD4, Madhan Masilamani, PhD5, Mrs. Beth D. Strong, RN CCRN6, Mrs. Tee Bahnson, BS, MPH6, Ms. Katie Fernandez2 and Dr. Anna H. Nowak-Wegrzyn, MD, FAAAAAI, Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, 7424 General Military Training Hospital, Thessaloniki, Greece, 1First Pediatric Department, Aristotle University of Thessaloniki, Hippokration General Hospital, Thessaloniki, Greece, 3Icahn School of Medicine at Mount Sinai, New York, NY, 3Icahn school of medicine at Mount Sinai, New York, NY, 6Rho Federal Systems Division, Inc., Chapel Hill, NC, 2Rho 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, Altun, 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, FAAAAAI, Saint Louis University School of Medicine, Saint Louis, MO

377 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, FAAAAAI, National Jewish Health, Denver, CO

378 Variability Of Major Allergens In Commercially Available Peanut Extracts For Skin Prick Testing
Dr. Yong Luo, MD, PhD, Dr. Vincent R. Bonagara, MD, FAAAAAI and Dr. David Rosenthal, DO, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY

379 Ara h 2 and The Relative Risk Of Other Sensitizations
Dr. James Thompson, Fellow-In-Training, 1Evans, GA, Dr. Daniel Duquette, PhD, UW La Crosse, La Crosse, WI and Dr. Brock Williams, PhD, U. of Missouri Medical School, Olathe, KS

380 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, Mount Sinai School of Medicine, New York, NY and Dr. Julie Wang, MD, FAAAAAI, The Icahn School of Medicine at Mount Sinai, New York, NY

381 Does Peanut Allergen Conjunctival Provocation Test Reflect Specific IgE Levels To Peanut?
Helene Lindvik, MD1, Petter Mowinckel, M.Sc.2, Jesinha Navaratnam, MD3, Prof. Karin Cecilia Ledrup Carlsen, MD, PhD4,5, Prof. Magnus Borres, Md, PhD, FAAAAAI2, Dr. Bente Kvenshagen, MD3 and Prof. Kai Hakon Carlsen, MD, PhD4,5,1 Department of Paediatics, Oslo University Hospital, Oslo, Norway, 2Oslo University Hospital, Oslo, Norway, 1Department of Ophthalmology, Oslo University Hospital, Oslo, Norway, 4The Faculty of Medicine, University of Oslo, Oslo, Norway, 2Department of Women’s and Children’s Health, Uppsala University, and Thermo Fisher Scientific, Uppsala, Sweden

382 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, FAAAAAI1,1Icahn School of Medicine at Mount Sinai, New York, NY, 2University of Tennessee, Memphis, TN, 1Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY

383 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 Odajima1, 1Department of Pediatrics, Fukuoka National Hospital, Fukuoka, Japan, 2Fukuoka National Hospital, Fukuoka, Japan

384 Variability Of Major Allergens In Commercially Available Peanut and Cashew Allergens
Si-Yin Chung, PhD1, Christopher P. Mattison, PhD1, Shawndrika Reed1, Dr. Richard L. Wasserman, MD, PhD, FAAAAAI2 and Wendy A. Desormeaux1, 1USDA-ARS-SRRC, New Orleans, LA, 2Allergy/Immunology Research Center of North Texas, Dallas, TX

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 Brandstrom, MD1, Prof. Magnus Borres, Md, PhD, FAAAAAI2, Prof. S. G. O. Johannson, MD, PhD, FAAAAAI1, Ms. Agneta Jansson Roth1, Ms. Ann-Charlotte Sundqvist1, Dr. Gunnar Lilja, MD, PhD2, Dr. Anna Nopp, PhD2 and Dr. Caroline Nilsson, MD, PhD3, 1Department of Clinical Science and Education, Sodersjukhuset, Karolinska Institutet and Sachs’Childrens Hospital, Sodersjukhuset, 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 Allergic Properties Of Peanut and Cashew Allergens
Maria Luisa Macias1, Dr. Francisca Gomez, MD, PhD2, Araceli Diaz1, Dr. Cristobalina Mayorga, PhD2, Dr. Ana Aranda, PhD2, Miguel Gonzalez2, Dr. Natalia Blanca-Lopez, MD, PhD1, Dr. Gabriela Canto, MD, PhD4, Ms. Miriam Oorio1, Dr. Maria Garrido, PhD3, Dr. Maria J Torres, MD, PhD2 and Dr. Miguel Blanca, MD, PhD3, 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

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, FAAAAAI, University of Colorado Denver, Aurora, CO

389 Basophil Response To Storage Proteins and Oleosins From Sunflower Seed
Maria Luisa Macias1, Dr. Francisca Gomez, MD, PhD2, Araceli Diaz1, Dr. Cristobalina Mayorga, PhD2, Dr. Ana Aranda, PhD2, Miguel Gonzalez2, Dr. Natalia Blanca-Lopez, MD, PhD1, Dr. Gabriela Canto, MD, PhD4, Ms. Miriam Oorio1, Dr. Maria Garrido, PhD3, Dr. Maria J Torres, MD, PhD2 and Dr. Miguel Blanca, MD, PhD3, 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, MD2,3, Dr. Lisa M. Bartnikas, MD2,3, Mr. Carter Petty, MA1, Dr. Lynda C. Schneider, MD, FAAAAAI2,3 and Dr. Wanda Phipatanakul, MD, MS, FAAAAAI2,3, 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 Nawes, MD, Nilstor Fergaard, MD, Nasim Samandari, MD, Klaus Bønnelykke, MD and Dr. Hans Bisgaard, MD DMSc, Danish Pediatric Asthma Centre, Gentofte, Denmark
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

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

Prediction Of Tolerance To Food Allergens By The Allergen-Specific IgE/Total IgE Ratio Ms. Claudia Lau1, Dr. Ruchi Gupta, MD, MPH1,2, Dr. Aaron Donald, MD1, Prof. Robert G. Hamilton, PhD D.ABMLI FAAAAI3 and Dr. Kelly Newhall, MD1, Ann and Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 1Northwestern University Feinberg School of Medicine, Chicago, IL, 2Chicago Family Asthma & Allergy, Chicago, IL, 3Johns Hopkins University School of Medicine, Baltimore, MD

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 Szylchinski, 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

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, MS1, Ms. Christine Szylchinski, APN, CPNP3 and Dr. Anne Marie Singh, MD1, 1Department of Pediatrics, Northwestern University Feinberg School of Medicine, Ann and 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

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

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, Sagamihara National Hospital, Kanagawa, Japan, 2Department of Biostatistics, Clinical Research Center Chiba University

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 Ronon, MD, PhD3, Dr. Natalia Blanca-López, MD, PhD3, Dr. Gabriela Canto, MD, PhD3, Dr. Maria J Torres, MD, PhD3, Dr. Cristina Valmaseda, MD, PhD1, Dr. Miguel Blanco, 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, Málaga, Spain

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. Nélida Gerecz2 and Prof. Juan Carlos Copioli1, 1FAC CS MED UNC, Cordoba, Argentina, 2FAC CS MED UNC, Córdoba, Argentina

Detection Of Peanut Allergens In Breast Milk and Saliva Dr. Kelli M. Rose, MD1, Christian Plaisance2, Casey C. Grimm, PhD2, Hsiaoop Cheng, M.S.3, Tsyeena Charles, MS4, Saeed A. Jortani3 and Soheila J. Maleki, PhD2, 1Tulane University, New Orleans, LA, 2USDA-ARS-SRRC, New Orleans, LA, 3University of Louisville, Louisville, KY

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, FAAAAI1, Dr. Savas Savatianos, MD3, Dr. Nikolaos G. Papadopoulos, MD, FAAAAI1, Dr. Joan Bartra, MD, PhD1, Dr. Montserrat Fernandez-Rivas5, Joe L. Baumert1, Steve L. Taylor, PhD1 and Prof. E.N. Clare Mills, BSc PhD1, 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 Clinic San Carlos, IISCC, Madrid, Spain

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, PhD3, 1USDA-ARS-SRRC, New Orleans, LA, 2Allergy/Immunology Research Center of North Texas, Dallas, TX

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 Tokuda1,2, Dr. Keigo Kainuma, MD1 and Dr. Takao Fujisawa, MD, FAAAAI1, 1Institute for Clinical Research, Mie National Hospital, 2Tokuda Family Clinic

Food-Specific IgE Panel Testing Commonly Results In Misdiagnosis and Inappropriate Dietary Exclusion Dr. Maryam Sayf, MD, University of Texas Southwestern Medical Center, Dallas, Mrs. Maria G. Crain, CPNP AE-C, Children’s Medical Center Dallas, Dallas, TX, Dr. Pooja Varshe, MD, Dell Children’s Medical Center, Specially for Children, Austin, TX and Dr. J. Andrew Bird, MD, FAAAAI, UT Southwestern Medical Center, Dallas, TX

Epitope Mapping The Peanut Panallergen Ara h 8 Barry K. Hurlburt, PhD1, Hsiaoop Cheng, M.S.3, Dr. Lesa Offermann2, Dr. Maksymilian Chruszcz, PhD1, Dr. Alexandra F. Santos, MD, MSc3, Prof. Gideon Lack, MD FRCPCH1 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

Simulated Roasting Affects Patient IgE Binding To Ara h 2 Tsyeena Charles, MS1,2, Casey C. Grimm, PhD2, Jane McBride3, Samuel Landry, PhD2 and Soheila J. Maleki, PhD2, 1Tulane University Health Sciences Center, New Orleans, LA, 2USDA-ARS-SRRC, New Orleans, LA

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. Faud Shihab, MD,
Urticaria

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409 Outcome Measures Of Challenge Testing In Patients With Physically Induced-Urticaria
Dr. Dean D. Metcalf, MD1, Sarah Arceo, RN2, Michael L. Young, RN MPh1, Celeste Nelson, NP3 and Dr. Hirsh D. Komarow, MD4, 1NIH/NAID/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 Astleria I, Astleria II and Glacial Studies
Dr. Sarbjit S. Saini, MD, FAAAAI1, Dr. Karin Rosen, MD, PhD2, Dr. Hsin-Ju Hsieh, PhD3, Ms. Patricia M. Sterba, MS4,5, Mr. JohnPaul Courneya, MS5, Dr. Henry Hulter6 and Dr. Hubert Chen7, 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 Astleria I, Astleria II, and Glacial Studies
Dr. Jonathan A. Bernstein, MD, FAAAAI1, Dr. Sarbjit S. Saini, MD, FAAAAI1,2, Prof. Marcus Maurer, MD3, Dr. Hsin-Ju Hsieh, PhD3, Dr. Hubert Chen7, Dr. Janice Canvin, MD, FRCPC6, Dr. Thomas B. Casale, MD, FAAAAI1, Dr. Allen P. Kaplan, MD, FAAAAI1 and Dr. Karin Rosen, MD, PhD6, 1Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, Cincinnati, OH, 2Johns Hopkins University, Baltimore, MD, 4Department of Dermatology and Allergy, Charité – Universitätsmedizin, Berlin, Germany, 5Genentech, Inc., South San Francisco, CA, 6Novartis Pharmaceuticals UK Limited, Horsham, West Sussex, United Kingdom, 7University Of South Florida Morsani College of Medicine, Tampa, FL, 8Medical University Of South Carolina, Charleston, SC

412 Angioedema and Angioedema Management From Astleria I and Astleria 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 Astleria I & II: Phase II 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

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. Rio, MD1, Dr. P. Palao, MD2, 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. Quince, MD, PhD1 and Dr. T. Caba llero, 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 (SRCU)
Carly Barron1, Dr. Gordon L. Sussman, FAAAAI1,2, Dr. Jacques Hébert, MD3,1,4, Jiayi Bian4, Stephanie Laflamme1 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 Aryan1, 2, Dr. Marzieh Takavol1-4, Prof. Ali Akbar Amizargar, PhD5, Prof. Masoud Movahedi1, Dr. Ali Alireza Zare bido1, Dr. Mohamad Gharagozloo1, MD, Prof. Asghar Aghamohammadi1, Dr. Mohammad Nabavi1, Mr. Alireza Ahmadvand1, Dr. Nasrin Behniafard, MD3, MS, Ms. Kimia Heidari6, Ms. Sama nehr Soltani1 and Dr. Nima Rezaei, MD, PhD2, 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, 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

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, MS, 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. Yurie Zgherara, 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. Denis Faerstaoaaru, 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. Rosenstreih, MD, FAAAAI, Albert Einstein/Montefiore Medical Center, Bronx, NY

422 Relationship Of Clinical Characteristics Of Chronic Urticaria In Children To Treatment Outcome
Lisa Newman, B.S., and Prof. Miles M. Weinberger, MD, FAAAAI, University of Iowa, Iowa City, IA
Clinical Characteristics Of Elderly Chronic Urticaria
Dr. Ga Young Ban, MD, Ji Hye Kim, MD, Mi-Yea Kim, MD, Dr. Hye-Soo Yoo, MD, Dong-Ho Nahm, MD, PhD, Dr. Young Min Min Ye, MD, Yoo Seob Shin, MD, PhD, and Prof. Hae-Sim Park, MD, PhD1. Department of Allergy & Clinical Immunology, Ajou University School of Medicine, Suwon, South Korea, 2Department of Internal medicine, Konyang University College of Medicine, Daejeon, South Korea

Decreased Serum Vitamin D Level In Patients With Chronic Spontaneous Urticaria
Dr. Tadech Boonpiyathad, MD, Dr. Panitan Pradapongs and Dr. Atik Sangasapaviriya, Phramonkutkla Hospital, Bangkok, Thailand

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

Clinical and Laboratory Features Of Chronic Urticaria
Dr. Koji Masuda, Kyoto Prefectural University of Medicine, Kyoto, Japan

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

Basophil Receptor Profiles In Chronic Idiopathic Urticaria
Dr. Eric Oliver, MD, Ms. Patricia M. Sterba, MS and Dr. Sabhjit S. Saini, MD, FAAAAI, Department of Medicine, Division of Allergy and Clinical Immunology, Johns Hopkins University School of Medicine, Baltimore, MD

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

Predicting Clinical Responsiveness To Dapsone In The Treatment Of Chronic Idiopathic Urticaria (CIU)
Dr. Ryan A. Steele, DO, MS, Dr. Janelle Sher, MD, Dr. Mark Davis-Lorton, MD, FAAAAI, Dr. Marcella R. Aquino, MD, FAAAAI and Dr. Luz S. Fonacier, MD, FAAAAI. Allergy & Immunology, Winthrop University Hospital, Mineola, NY. Winthrop University Hospital, Allergy & Immunology, Mineola, NY, Section of Allergy and Clinical Immunology, Department of Medicine, Winthrop University Hospital, Mineola, NY

Chronic Urticaria/Angioedema and Auto-Immunity: Diagnostic Profile Among Patients Attending a Reference Clinic In Brazil
Dr. Daniel L. Cordeiro, MD, Dr. Janaina Fernandes de Melo Sousa, MD, Dr. Karine Boufleur, MD, Dr. Priscila Botelho Palhas, MD, Dr. Thais Mendonça, MD, Dr. Janaina Michele de Lima Melo, MD and Dr. Luisa Karla P. Arruda, MD, PhD, FAAAAI, 1Ribeirao Preto Medical School, University of Sao Paulo, Ribeirao Preto, Brazil, 2School of Medicine of Ribeirao Preto, Ribeirao Preto, Brazil

Chronic Spontaneous Urticaria-The Saskatchewan Experience and Questionnaire Survey
Ms. Natasha Gatley, University of Saskatchewan, Saskatoon, SK, Canada

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

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

Assessment Of Acute Urticaria In Pediatric Emergency Department
Dr. Raquel Reis Pitchon, Clinical Research, Dr. Daniel Reis, Medical Student, Ms. Adriana Reis, Medical Student, Dr. André Chuster, Medical Student, Prof. Teresa Mohallen, Professor, Dr. José Ribeiro, Pediatrician, Dr. Nívea Claret, Pediatrician, Dr. Giane Chaves, Pediatrician, Dr. Virgílio Aleixo, Pediatrician, Dr. Maria do Socorro Fernandes, Pediatrician and Dr. Fausto Pacheco, Pediatrician, 1Mater Dei Hospital, BELO HORIZONTE, Brazil, 2Universidade Federal de Minas Gerais, BELO HORIZONTE, Brazil, 3Faculdade de Ciencias Medicas, BELO HORIZONTE, Brazil, 4Hospital Mater Dei, BELO HORIZONTE, Brazil

OTC Pills and Severe Urticaria
Ivan Cherrez1, Enrique Loayza2, Leonardo Greiding3, Jose M. Vilema4, Juan Calderon5, Erick Calero5 and Gabriela Martiñetti4, 1Respiralab - Hospital Kennedy, Guayaquil, Ecuador, 2Respiralab - Hospital Luis Venzara, Guayaquil, Ecuador, 3Instituto Argentino de Alergia e Imunologia, Buenos Aires, Argentina, 4Respiralab, Guayaquil, Ecuador

Hypocomplementemic Urticarial Vasculitis With Elevated Immunocomplexes and Nasal Polyposis
Dr. Khrystyna Lishchuk-Yakymovych, MD, Medical University, Lviv, Ukraine, Dr. Roman Pukalyak, Danylo Halysyky Lviv National Medical University, Ukraine and Prof. Lawrence M. DuBuske, MD, FAAAAI, George Washington University School of Medicine, DC
Health Information Technology

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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM
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.

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, MD,3 and Dr. Mariana C. Castells, MD, PhD, AAAAI1,3 Brigham and Women’s Hospital,1 Harvard Medical School,1 Brigham & Women’s Hospital, Chestnut Hill, MA,3Division of Rheumatology, Allergy and Immunology, Department of Medicine, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA

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 Salapatak, PhD, Inflamx Research, Mississauga, ON, Canada.

Feasibility and Acceptability Of A Novel Asthma Self-Management Smartphone Application For Children and Adolescents Nabeel Farooqui, MD1,2, Gary Phillips, M.A.S.3, and David R. Stukus, MD, AAAAI1,2, Nationwide Children’s Hospital, Columbus, OH, 2Wexner Medical Center at The Ohio State University, Columbus, OH.

Experience In The Development Of A Mobile Diagnosis Support System For Asthma: Intimus
Prof. Silvia Vanick Sarinho Sr., Prof. Dr.,1 Prof. Júlio Venâncio Menezes Júnior,1 Prof. Cristine Gusmão1 and Nilza R S Lyra, MD,2,1 Universidade Federal de Pernambuco, 2Universidade Federal de Pernambuco, Recife PE, Brazil.

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, MD2, Raoul L. Wolf, MD, FAAAAI2 and Ves Dimov, MD,1 Internal 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, 1University of Chicago Medicine, Chicago, IL.

Chronic Rhinosinusitis and Polyps
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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM
The Differences Of TNF-α, Interleukins-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

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-II Lee, Dankook university, South Korea

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, MD3 and Dr. Lawrence B. Schwartz, MD, PhD, FAAAAI1, Virginia Commonwealth University, Richmond, VA, 2Baylor College of Medicine, Houston, TX

Pediatric Allergic Fungal Otomastoiditis Improved With Anti-IgE Therapy
Dr. Diana K. Bayer, DO1, Dr. Ankhi Dutta, MD, MPH2,3, Dr. Robert Williamson, MD2, Dr. Andrew deJong, MD,3 Dr. Keith Paull, MD,4,5 Dr. I. Celine Hanson, MD, FAAAAI1 and Dr. Lisa R. Forbes, MD4,5, Baylor 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 Pauli Allergy and Asthma Clinic, Bryan, TX

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

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 Poposki, MS1, Dr. Sarah Peterson, MD1, Ms. Lydia Suh, BS1, Mr. James Norton, MS1, Dr. Anju T. Peters, MD, FAAAAI1, Dr. Kathryn E. Hulse, PhD2, Dr. Leslie C. Grammer,
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, PhD, Dr. Guangqian Chen, MD, PhD, Dr. Stephanie Shintani-Smith, MD, Dr. David Conley, MD, Dr. Robert P. Schleimer, PhD FAAAAI, 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

Expression of Hypoxia-inducible Factor 1alpha in Regulatory T Cells Is Associated With Nasal Polyposis

Prof. Yong Min Kim, 1 Dr. Jun Jin, 2 Dr. Dong-yeop Chang, 3 Sung Ha Kim 4 and Ki-sang Rha 5, 6 Chungnam National University School of Medicine, Daejeon, South Korea, 7 Chungnam National University School of Medicine, 8 Laboratory of Immunology and Infectious Diseases, Graduate School of Medical Science and Engineering, KAIST, Daejeon, South Korea, 9 Chungnam National University School of Medicine, South Korea

Prognostic Factors for Olfaction After Endoscopic Sinus Surgery in Chronic Sinusitis With or Without Allergy

Dr. Byung Guk Kim, 1 Ji hyun Shin, 2 Chan Soon Park, 2 Dr. Soo Whan Kim, 3 JUN Myung Kang 4 and So Young Park, 5 The Catholic University of Korea, Seoul, Korea, 6 The Catholic University Of Korea, Seoul, Korea, 7 The Catholic University of Korea

Rhinitis

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 Abbasazadegan, 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 Shirkani, MD, Bushehr University of Medical Science, Mashhad, Iran, Mrs. Hadis Yousefzadeh, allergy Research Center. Mashhad University of Medical Science, mashhad, Iran and Ms. Atena Man souri, buoshar university, Iran

Impacts of Adolescents’ Allergic Rhinitis On School Achievement and Quality Of Life

Prof. Sun-Hee Choi, MD, PhD, 1 Dr. Kyung Suk Lee, MD, PhD 2 and Prof. Yeong-Ho Rha, MD, PhD, 2 Gangdong Kyung Hee University Hospital, Seoul, South Korea, 3 Kyung Hee University Hospital

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, MRCP, SRCOG, Research In Real Life, Cambridge, United Kingdom

Short and Long-term Safety of MP29-02 in The Treatment of Allergic Rinitis

Dr. William Berger, MD, Allergy & Asthma Associates, Germantown, TN and Prof. David Price, FRCGP, MRCP, SRCOG, Research In Real Life, Cambridge, United Kingdom

The Prevalence of AERD in a Tertiary Care Center

Dr. Whitney Wyatt Stevens, MD, PhD, 1 Dr. Anju T. Peters, MD, FAAAAI, 1 Dr. Kathyn E. Hulse, PhD 2, Dr. Leslie C. Grammer, MD, FAAAAI, 1 Dr. Joy Hsu, MD, MSC1, Prof. Pedro C. Avila, MD, FAAAAI, 1 Mr. James Horton, MS, 1 Ms. Lydia Suh, BS, 1 Dr. Rakesh Chandra, MD, 2 Dr. David Conley, MD, 2, 3 Dr. Robert C. Kern, MD, 2, Dr. Bruce K. Tan, MD 3 and Dr. Robert P. Schleimer, PhD FAAAAI, 1, 7Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 4Northwestern University, Chicago, IL, 5Northwestern University Feinberg School of Medicine, Chicago, IL, 6Northwestern University Feinberg School of Medicine, Chicago, IL, 7Northwestern University Feinberg School of Medicine, Chicago, IL, 8Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

460 A Method for Assessing Regional Determinants of Eosinophils in Chronic Rhinosinusitis

Dr. Bruce K. Tan, MD, 1 Ms. Erin Roci, BS, 2, Dr. Kent Lam, MD, 3, Ms. He Huang, MS, 1 Ms. Lydia Suh, BS, 1 Mr. Avesh Thuluvath, BA, 1 Dr. Alcina K. Lidder, BS, 2, Dr. Rakesh Chandra, MD, 2, 3 Dr. David Conley, MD, 2, 3 Dr. Robert P. Schleimer, PhD FAAAAI, 2, 4Department of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, 5Loyola University Stritch School of Medicine, Chicago, IL, 6Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 7Northwestern University- Feinberg School of Medicine, Chicago, IL, 8Northwestern University, Chicago, IL, 9Division 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, PhD, 1 Dr. Anju T. Peters, MD, FAAAAI, 1 Dr. Kathyn E. Hulse, PhD 2, Dr. Leslie C. Grammer, MD, FAAAAI, 1 Dr. Joy Hsu, MD, MSC1, Prof. Pedro C. Avila, MD, FAAAAI, 1 Mr. James Horton, MS, 1 Ms. Lydia Suh, BS, 1 Dr. Rakesh Chandra, MD, 2 Dr. David Conley, MD, 2, 3 Dr. Robert C. Kern, MD, 2, Dr. Bruce K. Tan, MD 3 and Dr. Robert P. Schleimer, PhD FAAAAI, 1, 7Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 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
Mechanisms of Lymphocyte Function

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Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

GATA3-Expressing ILC2 Are Selectively Enriched In Allergic Eosinophilic Nasal Polyposis
Dr. Hannah H. Walford, MD1, Dr. Andrew A. White, MD, FAAAAI1, Dr. Christopher Bergeron, MD3, Dr. Jacob Hassman, MD4, Dr. Kelly Bethel5, Ms. Rachel Baum, B.S.6, Mr. Sean Lund, B.S.6, Naseem Khorram, M.S.7, Dr. David R. Scott, M.D.7, Dr. David H. Broide, MB ChB FAAAAI8 and Dr. Taylor A. Doherty, MD, FAAAAI1, 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, 7Medicine, University of California, San Diego, San Diego, CA

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

Aspergillus Fumigatus May Promote Th2 Activation By Suppression Of Interferon Signaling
Dr. Tetsuya Homma, MD1,2, Mr. Bharat Bhushan1,3, Dr. Atushi Kato, PhD3, Mr. James Norton, MS1, Ms. Lydia Sub, 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

Heterogeneity Of Specific CD4+ T Cell Responses To Peanut Allergic Components: Prospects For Specific Immunotherapy
Dr. Erik R. Wambre, PhD, Benaroya Research Institute at Virginia Mason, Seattle, WA, William W. Kwok, PhD, Benaroya Research Institute at Virginia Mason Medical Center

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

Distinct Patterns and Magnitude Of T Cell Responses Are Associated With Seasonal Exposure To Timothy Grass Allergens
Dr. Pearl Bakhru1, Carla Oseroff2, Dr. Veronique M. Schulten1, Dr. Denise Hinz1, Victoria Triple1, Rafeul Alam, MD, PhD, FAAAAI1, Dr. David H. Broide, MB ChB FAAAAI1, Dr. April Frazier1, John Sidney1, Dr. Bjorn 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

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 Hong2, Nam Goo Kim1 and Young Min Ahn3, 1Sungkyunkwan University School of Medicine, 2Eulji University School of Medicine

FOXp3 Epigenetic Signature To Distinguish Between Thymic and Peripherally-Derived Regulatory T Cells During In Vivo Induction Of Immune Tolerance
Dr. Philippe B and Peripherally-Derived Regulatory T Cells During In Vivo Induction Of Immune Tolerance
Dr. Philippe B

468 Anti-Allergic Effect Of Intrasal 1.25-Dihydroxyvitamin D3 Treatment In Atypical Rhinitis Mouse Model
Dr. Dong-Young Kim, Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL, Department of otolaryngology, Seoul national university college of medicine, Seoul, Korea and Dr. Jae-Min Shin, Department of Otolaryngology-Head and Neck Surgery, Soon Chun Hyang University Hospital, Seoul, South Korea

469 B-Cells In Allergic Airways Disease: Inhibition Of Epsilon Transcription By Oilmalumab
Dr. Marylin Desjardins, MD1,2, Dr. Jean-Philippe Drolet, MD3, Ms. Marianne Beland1, Dr. Sam Daniel, MD1 and Dr. Bruce D. Mazer, MD, FAAAAI1,2, 1Montreal Children’s Hospital, Montreal, QC, Canada, 2Meikins-Christie Laboratories, Montreal, QC, Canada, 3Centre Hospitalier Universitaire de Quebec, Quebec, QC, Canada, 4Meikins-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, PhD1,2, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, 3University 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, Japan

473 Efficacy Of MP29-02 In The Treatment Of Nasal and Ocular Symptoms Of Seasonal Allergic Rhinitis (SAR)
Dr. Paul H. Ratner, MD, FAAAAI, Sylvania 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, PhD3, Prof. Kyu-Earn Kim, MD, PhD2 and Prof. Hae-Ran Lee, MD, PhD1,1Hallym University Kangnam Sacred Heart Hospital, Seoul, South Korea, 2Department of Pediatrics, Severance Children’s Hospital, College of Medicine, Yonsei University, Seoul, Korea, 3Hallym University Sacred Heart Hospital, Anyang-si, Gyeonggi-do, South Korea

476 GATA3-Expressing ILC2 Are Selectively Enriched In Allergic Eosinophilic Nasal Polyposis
Dr. Hannah H. Walford, MD1, Dr. Andrew A. White, MD, FAAAAI1, Dr. Christopher Bergeron, MD3, Dr. Jacob Hassman, MD4, Dr. Kelly Bethel5, Ms. Rachel Baum, B.S.6, Mr. Sean Lund, B.S.6, Naseem Khorram, M.S.7, Dr. David R. Scott, M.D.7, Dr. David H. Broide, MB ChB FAAAAI8 and Dr. Taylor A. Doherty, MD, FAAAAI1, 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, 7Medicine, University of California, San Diego, San Diego, CA
Pedi atric Allergy and Immunology, 5Centre Hospitalier Universitaire Ste-Jean te, Montreal, QC, Canada, 2Epiontis GmbH, Berlin, Germany, 3San Raffaele Telethon Institute for Gene Therapy (HSR-TIGET), Milan, Italy, 4Pediatric 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, MPH2, Seto M Chice, MS3, Ankuri Desai, BS1, Dr. Tamar A. Smith-Norowitz, PhD3, Mark Stewart, MD, PhD4, Dr. Rauno Joks, MD3 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 Dimeloe1, Mun Pear Nyron2, Imran Haq3, James Irving3, James McDonnell1, Bibek Gopu2,2, Claudia Kemper4 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. Fabiola E. Garcia, MD2 and Prof. Dircceu Sole, MD, PhD3, 1Federal University of Sao Paulo, Sao Paulo, Brazil, 2Federal University of Sao Paulo, Sao Paulo, Brazil, 3Federal University of Sao Paulo, Sao 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, 1Department of Pediatrics, McGill University Health Centre, Montreal, QC, Canada, 2Division of Allergy, Pulmonary, and Critical Care Medicine; The University of Queensland, Brisbane, Australia, 3University of Newcastle, Newcastle, Australia, 4John Hunter Hospital, Newcastle, Australia, 5The University of Queensland

488 Effect Of siRNA Inhibition Of Sialyltransferases and Fucosyltransferases On Siglec-F Ligand Expression By Epithelial Cells In Vitro
Dr. Maho Suzukawa, MD, National Hospital ORanization, 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

489 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. Mazier, MD, FAAAI, 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

490 Mouse Bone Marrow Derived Mesenchymal Stem Cells Suppress Airway Inflammation In Both Chronic and Acute Murine Asthma Model
Dr. Tunc Akkok, PhD1, Mr. Ismaill Ogultur, MSc, Ms. Gulben Gurhan1, Ms. Ayka Aksoy, MSc2, Dr. Gokhan Durusu, PhD2, Dr. Deniz Filinte, MD2, Dr. Erdal Karaz, PhD3, Marmara University Division of Pediatric Allergy-Immunology, 1Kocaeli University Center for Stem Cell and Gene Therapies Research and Practice, 2Marmara University Department of Pathology

491 Anti-Viral Innate Immunity Varies Across Different Asthma Inflammatory Phenotypes
Prof. John W. Upham, MD, PhD, FAAAI1, Mrs. Melanie Carroll, BSc2, Prof. Peter Gibson, MD/PhD2,3, Prof. Ian A. Yang, MBBS (Hons) (PhD)1 and Dr. Jodie Simpson, PhD, 1University of Queensland, Brisbane, Australia, 2University of Newcastle, Newcastle, Australia, 3John Hunter Hospital, Newcastle, Australia, 4The University of Queensland

492 Role of Structural Cells in Mechanisms in Health and Disease
Sunday, March 2nd, 2014, 9:45 AM - 10:45 AM

493 Airway Epithelial Cells Exposed To Alternaria Release IL-18 Independent Of NALP3/Caspase-1 Pathway By Inducing Autophagy and NF-Kb Activation
Hi roki Mura1, MD, PhD1, Shintaro Okazaki, MD1, Hisako Hayashi1, MD1, Akiko Kawakita1, MD1, Motoko Yasutomi, MD, PhD1, Mitsufumi Mayumi, MD, PhD1, PhD2, Prof. Sanjiv Sur2, MD and Yusei Obshima, MD, PhD1, 1University of Fukui, Fukui, Japan, 2University of Texas Medical Branch, Galveston, TX

494 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, PhD2, Dr. Charles Steven Smith, MD, FAAAI2, 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, 4Allergy, Pulmonary, and Critical Care Medicine; Department of Medicine; Vanderbilt University School of Medicine, Nashville, TN

495 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

496 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
498 Macrophage-Derived Chemokine In Nasal Washes Is Associated With Asthma Exacerbations and Infections With Rhinovirus In Children
Carolyn R. Word, MD,1,2 Holliday T. Carper, BS,1 Patricia Jorge, MD,1 Joshua L. Kennedy, MD,2 Deborah D. Murphy, RN1, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI3 and Peter W. Heymann, MD,1 University 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 Isofast Single Cell Isolation For Analysis Of Pediatric Bal Macrophages
Dr. Neil Alexis, PhD1, Ms. Heather Wells2, Dr. Yogesh Saini, PhD2, Ms. Louisa Brighten2, Dr. Nancy Allbritton, MD, PhD3 and Dr. Marianne Muhlebach, MD3, 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 Extracted From Glycyrhiza Uralensis a Constituent Of ASHITM 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 Zi1, Shuwei Zhang1, Dr. Joseph Goldfarb3, Hugh A. Sampson, MD, FAAAAI1, Dr. Jixun Zhan1 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, 3Ulash 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. Schultman, MD, FAAAAI,2 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, 2University 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 Metonetasone Or Their Combination
Dr. Anthony Szema, MD, FAAAAI, SUNY Stony Brook School of Medicine, East Setauket, NY, Stony Brook University, Stony Brook, NY, Dr. Sayed 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 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

504 Release Kinetics Of Soluble ST2 and Proinflammatory Cytokines In Allergic Rhinitis
Mr. Igor Steini1, Mr. Ralf Baumann1, Mr. Matteaus Rabaszowski1, Dr. Kathrin I. M. Scheckenbach, MD1, Mr. Pascal Werminghaus3 and Dr. Martin Wagenmann, MD, FAAAAI2, 1Department of Otorhinolaryngology, Head and Neck Surgery, Heinrich-Heine-University Dusseldorf, Germany, 2Department of Otorhinolaryngology, Head and Neck Surgery, Heinrich-Heine-University Dusseldorf, 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 Hong1, Sung-Ok Kwon3, Dr. Young Ho Jung, MD, Dr. Eun Lee, MD, Dr. Song I Yang, MD, Dr. Ji-Won Kwon, MD,4 Dr. Hyung Young Kim, MD,5 Dr. Ju-Hee Seo, MD,6,10 Dr. Byung-Ju Kim, MD, PhD1, Dr. Hye-Bin Kim, MD, PhD1,2, Se-Young Oh1, Dr. Soo-Jong Hong, MD, PhD3 and Dr. Bong-Seong Kim, MD1,3, Johns 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 Standardization of Allergic Diseases, Asan Medical Center, University of ulsan College of Medicine, Seoul, South Korea, 8Department of Pediatrics, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Sceognam, 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, Ganganegun Asan Hospital, University of ulsan College of Medicine
Allied Health Oral Abstract Luncheon

3520
Sunday, March 2nd, 2014, 12:15 PM - 1:30 PM

511 Clinical Efficacy Of Subcutaneous and Sublingual Immunother-apy In Asthma and Rhinitis Children Sensitized To House Dust Mite Min-Ju Kim1,2, Eun Lee1,3, Keum-Mi Park1, Keum-Hee Hwang1, Young-Ho Jung1,2, Song-Yi Yang1,2, Jae-Eun Lee2, Hee-Kyong Kim3, Hye-yong Lee4, Jin-ho Yu1 and Prof. Soo-Jong Hong, MD, PhD1,2,1Childhood 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 Si-nus Inflammation
Ms. Alcina K. Lidder, BA1, Dr. Rakesh Chandra, MD2, Dr. David Conley, MD3, Dr. Stephanie Shintani-Smith, MD1, Dr. Anju T. Peters, MD, FAAAAI1, Dr. Leslie C. Grammer, MD, FAAAAI1, Dr. Robert C. Kern, MD1, Dr. Brian Schwartz, MD12,3 and Dr. Bruce K. Tan, MD1,3, 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, PharmD1, 1University of South Florida, Tampa, FL, 2CSL Behring, LLC, King of Prussia, PA

514 Anaphylaxis During Obstetric Surgery In Latex Allergic Pa-tients
Dr. Nana Jinjolava, MD1, Dr. *Mili Shum, MD2, Dr. Keshav Achar1, Dr. Ren Zhen1 and Dr. Elina Jerschow, MD, M.Sc1, 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 Schylinski, APN, CPNP1, Mrs. Katherine A. Schmeissig, MS, R.N.2, Dr. Jacqueline Pongracic, MD, FAAAAI2 and Dr. Anne Marie Singh, MD1, 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

3601
Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

516 Socio-Demographic and Environmental Correlates Of Exhaled Nitric Oxide Levels
Dr. Lakiera S Weight, 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 Inter-leukin-13 and Bronchial Hyperresponsiveness In Asthmatic Children: Periostin and Squamous Cell Carcinoma-Related Antigens
Prof. Heysung Baek, MD, PhD1, Prof. Kenji Izuhashi, MD, PhD2 and Dr. Jeong-Suh 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. Chrouros, MD, PhD3 and Dr. Angela Hazkun, 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, FAAAAI1, 1Silesian Medical University, Katowice, Poland, 2Silesian Medical University, Poland, 3George Washington University School of Medicine, Washington, DC

Immune Mechanisms in Atopy

3602
Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

521 Peripherally Induced Fosp+ Regulatory T Cells Mediates The Immunomodulatory Effect Of Intravenous Immunoglobulin In An Experimental Model Of Allergic Airway Disease
Dr. Amir Hossein Massoud, PhD1,2, Mr. Gabriel N. Kaufman, MSc1-3, Dr. Ciriaco Piccirillo, PhD2 and Dr. Bruce D. Mazer, MD, FAAAAI1,2, 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 Pedersen, PhD2, Dr. Matthew Strand, PhD1, Mrs. Lindsay Munoz, BA1, Dr. Michaela Scheidel, PhD3, 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, Anilalee Abiodun, RN, Paneez Khoury, MD and Dr. Amy D. Kilon, 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 Matsuoka2,3, Ms. Rachel Yan, RN1, Prof. Stephen R. Durham, MA MD FRCP4 and Dr. Mohamed H. Shamji, BSc MSc PhD4, 1Imperial College London, 2King’s College London, 3National Institute of Allergy and Infectious Diseases, 4Imperial College London
Leonard Bernstein Session on Occupational Allergic Diseases

Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM

Endotoxin In Size-Specific Airborne Particles Induces Differential Nitric Oxide Stress In Human Bronchoepithelial Cells

Component Resolved Diagnosis In Baker's Asthma

Endotoxin Exposure May Protect Against The Development Of Rhinconjunctivitis and Respiratory Symptoms In Non-Atopic Individuals With Occupational Exposure To Mice

Sensitization To Occupational Allergens and Allergic Diseases In Workers Of 5 Havana Bakeries

Drug Allergy

Oral Immunotherapy for Food Allergy
537 Basophil Hyporesponsiveness To Peanut Following Immunotherapy May Be Transient and Correlates With Clinical Response
Dr. Mark Gorelik, MD,
Dr. Satya Narisety, MD,
Kristin Chichester, MS,
Anja Bieneman, BS,
Corinne Keet, MD, MS,
Robert A. Wood, MD, FAAAAI
Dr. John T. Schroeder, PhD
and Pamela Frischmeyer Guerrerio,
1 Johns Hopkins University School of Medicine,
2 Johns Hopkins University Medical Center, Baltimore, MD

538 Safety Of Pediatric Oral Immunotherapy Is Complicated By High Adverse Event Rates
Yamini Virkud, MD, MA,
Brian P. Vickery, MD, FAAAAI,
Pamela H. Steele, MSN CPNP AE-C,
Janet S. Kamiaris, RN
and A. Wesley Burks, MD, FAAAAI,
1 Duke University, Durham, NC,
2 University of North Carolina, Chapel Hill, NC,
3 Carolinas 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,
Dr. Michael Goldberg, MD, PhD
Dr. Michael Levy, MD, FAAAAI,
Dr. Liait Nachshon, MD and Prof.
Yitzhak Katz, MD, FAAAAI
Assaf Harofeh, Zerifin, Israel
2 Tel 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. Xin-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

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, DO,
Dr. Pippa Simpson, PhD
M. Tina Bromberger, RN, BSN, AE-C,
Mrs. Melodie Nugent, MA,
Mrs. Sara A. Lowe, NP,
Dr. Juan Ruiz, MD,
Dr. Patricia Marik, PsyD,
Dr. Jacquesyn Smith, PhD,
Dr. Joshua A. Steinberg, MD
Dr. Dorothy S. Cheung, MD,
543 Understanding Asthma Medical Nonadherence In Adult and Pediatric Populations
Joyce Xiang Wu Lee, MD,
Henry Wojtczak, MD,
Allan M. Wachter, MD,
Martin Lee, PhD,
Lisa Burns, RN,
Diana Chen
and Joseph S. Yusin, MD, FAAAAI
1 Allergy/Immunology, VA Greater Los Angeles Health Care System, Los Angeles, CA,
2 Naval Medical Center San Diego, San Diego, CA, Foundation for Asthma Research and Intervention, Phoenix, AZ,
3 UCLA School of Public Health, Los Angeles, CA,
4 VA 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
Gary Phillips, M.A.S.
and Naheel Farooqui, MD
1,2 Wexner Medical Center at The Ohio State University, Columbus, OH
2 Nationwide 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
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, PhD,
Dr. Tahiria Fernández, PhD
Dr. Inmaculada Doña, MD
Dr. Francisca Gómez, MD
Mrs. Luisa Galindo, RN
Ms. Lidia Melendez, Lab. Tech.
Dr. Miguel Blanca, MD, PhD
Dr. Cristobalina Mayorga, PhD
and Dr. Maria José Torres, MD, PhD,
1 Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - IBIMA, Malaga, Spain,
2 Research Laboratory - FIMABIS Foundation, Malaga, Spain
3 Allergy Service, Carlos Haya Hospital, Malaga, Spain
4 Research Laboratory, Carlos Haya Hospital-FIMABIS, Malaga, Spain

547 A Subset Of Novel Timothy Grass Antigens Is Associated With Marked Th1/Th2 Shifts Following Specific Immunotherapy
Dr. Veronique M. Schulten,
Victoria Tripples,
John Sidney
Dr. Jason Greenbaum,
Rafael Alam, MD, PhD
FAAAAI
Dr. David H. Broide,
MB ChB FAAAAI
Dr. Howard Grey
Dr. Bjorn Peters
and Dr. Alessandro Sette
5 Interleukin IL-27+ Dendritic Cells Modulate Ex-Vivo Th2 Responses In a Pdl-1-Dependent Manner and Increase In Vivo Local ‘Protective’ IgG4 Antibodies In Nasal Fluid Are Elevated Following Grass Pollen Immunotherapy
Dr. Tomokazu Matsuoka,
Ms. Rachel Yan, RN
Dr. Guy W Scadding, MD
Dr. Stephen R. Durham, MA MD FRCPh
Dr. Mohamed H. Shamji, BSc MSc PhD
1 Medical Research Council and Asthma UK Centre for Allergic Mechanisms of Asthma, UK
2 Imperial College London, United Kingdom
3 Imperial College London, London, United Kingdom
4 Imperial College London, South Kensington, United Kingdom

548 Local ‘Protective’ IgG4 Antibodies In Nasal Fluid Are Elevated Following Grass Pollen Immunotherapy
Jinjin Zhang
Dr. Esther Steveling
Ms. Rachel Yan, RN
2 Aarif Eifan, MD
2 Rebecca Parkin
3 Dr. Guy W Scadding, MD
2 Dr. Mohamed H. Shamji, BSc MSc PhD
1 Department of Medicine, San Diego, CA

549 Interleukin IL-27+ Dendritic Cells Modulate Ex-Vivo Th2 Responses In a Pdl-1-Dependent Manner and Increase In Vivo Following Grass Pollen Immunotherapy

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, MD
Dr. Aarif Eifan, MD
Dr. Mongkol Lao-Araya, MD
Dr. Martin J. Penagos Paniagua, MD
Ms. Shun Yan Poon
Dr. Esther Steveling
Ms. Andrea Goldstone
Ms. Rachel Yan, RN
Ms. Amy Switzer
Dr. Deborah Phippard
Dr. Mohamed H. Shamji,
BSc MSc PhD
and Dr. Stephen R. Durham, MA MD FRCPh
1 Imperial College London, United Kingdom
2 Imperial College London, United Kingdom
3 Imperial College London, South Kensington, United Kingdom
4 Imperial College London, London, United Kingdom

551 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

Adherence
Sunday, March 2nd, 2014, 2:45 PM - 4:00 PM
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

Dina Pia Reece, PhD1, Dr. Roma Sehmi, PhD FAAAAI1 and Judah Aryeh Denburg, MD, FRCPA, FAAAAI1, 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, PhD2, Dr. Elizabeth Jacobsen, PhD3, Dr. Rachel Condjella, PhD4, Ms. Katie Zellner2, Dr. Serges Ochur, PhD2, Dr. Mui Loui2, Mr. Will LeSuer2, Mr. John Kim, MSc1, Ms. Cheryl Protheroe2, Mr. Ralph Perez2, Dr. James I. Lee, PhD3, Dr. Nancy A. Lee, PhD2 and Dr. Redwan Moqbel, PhD1, FRCPath FAAAAI1, 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-Fattough1, Mrs. Melissa E. Gordon, MSc1, Mr. Waleed S. Ahmed2, Dr. Theodore A. Omachi1

555 The Airway Mucins Muc5b and Muc4 Are Endogenous Ligands For Siglec-F and Induce Mouse Eosinophil Death

Takami Kiwamoto, MD, PhD1, Toshihiko Katoh, PhD2, Christopher Evans, PhD3, Mary E. Brummet, MS1, Sherry Hudson, MS1, Zhou Zhu, MD, PhD1, Michael Tiemeyer, PhD3 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

Analysis Of Severe Asthma Phenotypes By Using High-Resolution Computed Tomography: Relation To Clinical Assessment

Sujeong Kim1, Kwang-Nam Jin2, Chang Hyun Lee3, Prof. So-Hee Lee4, Jae-Won Jung1, Prof. Woo-Jung Song, MD, M.D.1, Prof. Hyer- Ryun Kang1, Kyung-Up Min1 and Prof. Sang Heon Cho, MD, PhD1, 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

557 Associations Between The Expression Of Corticotroster 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, BS2, Baomei Shao, BS2, Zheng Hu, BS2, Dr. Michelle A. Gill, MD, PhD2, Andrew H. Liu, MD2, and Donald Y.M. Leung, MD, PhD, FAAAAI1, 1National Jewish Health, Denver, CO, 2UT Southwestern Medical Center, Dallas, TX

Bronchial Mast Cell Markers and Clinical Asthma Severity In Steroid Refractory Asthmatics

Dr. Mandeep Hundal, M.D.1, 2, Dr. Katherine N. Cahill, MD3, Robert Pedicini4, Allison Crosby-Thompson5, Stefanie Dutile1, Usha Govindarajanju, PhD2, Dr. Karik Shenoy, M.D.3, 1, Dr. Mark Dransfield5, Dr. Emily DiMango6, David J. Erzurum, M.D.7, 1, Dr. Mario Castro, MD, MPH2, Dr. Nizar N. Jarjour, MD8, 1, 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, 1University of Alabama School of Medicine, AL, 1Columbia University, New York, NY, 2Department of Pathobiology, Cleveland Clinic, 3Washington University School of Medicine, St. Louis, MO, 3University of Wisconsin School of Medicine and Public Health, Madison, WI

Antagonistic Effects Of Ozone (O3) Exposure and Glucocorticoid Treatment On Airway Hyperresponsiveness (AHR) and Surfactant Protein D (SP-D) Production In Mice

Moyar Q. Ge1, 1, Monica Sonti2, 1, Imre Redal2, 1, Blerina Kokalari1, Dr. Angela Haczku, MD, PhD, FAAAAI1 and Zhihong Jiang1, 1University of Pennsylvania, Philadelphia, PA, 2National University of Singapore, Singapore, Singapore

Featured Poster Session

Best of ADT

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. Shirinmati Datta, PhD1, Ian T. Lamborn, BSc2, Matthew R. Biancalana, BSc2, Lynne A. Wolfe, CRNP2, Thomas DiMaggio, BSN2, Helen F. Matthews, BSN2, Dr. Sarah M. Kranick, MD1, Dr. Joshua McElwee, PhD2, Dr. Howard F. Freeman, MD2, Dr. Jason D. Hughes, PhD5, Dr. Huseyin Mehmet, PhD5, Dr. Jessica M. Chen, PhD5, Dr. Andrew H. Liu, Dr. Mary E. Brummet, MS1, Dr. Theodore Omachi1 and Dr. Kathleen T. Lamborn, BSc2, 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, 1Laboratory of Clinical Infectious Diseases, NIAID/NIH, Bethesda, MD, 2Neuroimmunology Branch, NINDS/NIH, Bethesda, MD, 3Merck Research Laboratories, Merck & Co. Inc., Boston, MA, 4Sanford 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, 2, Dr. Ida Hsu, MD1, 2, Dr. Christina C. Price, MD1, 2, Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI2 and Dr. Eric Meffre, PhD1, 2. 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 PPARgamma 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, FAAAAI1, Dr. Morna J. Dorsey, MD MMsc FAAAAI1 and Dr. Jennifer M. Puck, MD1, 2 Department 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 Dasud1, 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, MD1 and Dr. Geoffrey Thiele, PhD1, 1University of Nebraska Medical Center, Omaha, NE, 2UNMC, Omaha, NE

568 Antigenic Determinants On Der 1 Identiﬁed By Mutagenesis Analysis Based On The Structure Of Allergen-Antibody Complexes Dr. Anna Pomes, PhD FAAAAI1, Ms. Jill Glesner1, Ms. Lisa D. Vail1, Dr. Wladek Minor, PhD2, Dr. Maksymilian Chruszcz, PhD3 and Dr. Martin D. Chapman, PhD FAAAAI1, 1Indoor Biotechnologies, Inc., Charlotteville, 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, 2Prof. Andrew Rundle, DrPH1, 2Prof. Inge Goldstein, DrPH1, 2Prof. Judith Jacobson, DrPH1, 2Prof. William R. Montfort, PhD2, 2Prof. Greg Freyer, PhD3 and Prof. Matthew S. Perzanowski, PhD3, 2Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University, New York, NY, 3Division of Pediatrics, Department of Medicine, College of Physician & Surgeons, Columbia University, New York, NY, 2Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, 4Department of Chemistry and Biochemistry, University of Arizona, Tucson, Arizona, 5Department 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. Rosina A. Covar, MD1, Mrs. Anna Forssen, MS2, Dr. Stanley J. Szeffler, MD, FAAAAI1, 2, David A. Schwartz, MD1 and Andrew H. Liu, MD1, 2National 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, Takashi Yoshida, PhD1, Sade Fridy1, J-I-Hsin Kuo, PhD1, Donald Y.M. Leung, MD, PhD, FAAAAI2 and Anna De Benedetto, MD, FAAAAI1, 2University of Southern California and Children’s Hospital Los Angeles, Los Angeles, CA

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, MPH1, 2, Prof. Shyamali Dharmage, MD, PhD1, 2, Prof. Lyle Gurrin, PhD2, Dr. Jennifer Koplin, PhD1, 2Prof. Anne-Louise Ponsonby, PhD1, Dr. Adrian Lowe, PhD2, Prof. Mimi L. K. Tang, MD, PhD, FAAAAI1, Dr. Dean Tey, MD1, 2, Dr. David Hill, MBBD, FRACP1, Dr. Marnie Robinson, MBBD, FRACP1, Ms. Helen Czech, B.Nurs1, Ms. Leonie Thiele, MNSc1, Dr. Nicholas Osborne, PhD2 and Prof. Katrina Jane Allen, MD, PhD, FAAAAI1, 2Murdoch Childrens Research Institute, Victoria, Australia, 3University of Melbourne, Victoria, Australia, 4The University of Melbourne, Melbourne, Australia, 5Royal Children’s Hospital, Victoria, Australia, 6Royal Children’s Hospital, Parkville, Australia, 7Royal Cornwall Hospital, Truro, United Kingdom

573 Mendelian Inheritance Of Elevated Tryptase Associated With Atopy and Connective Tissue Abnormalities Dr. Jonathan J. Lyons, MD1, 2, Dr. Guangping Sun, MD1, Dr. Kelly D. Stone, MD, PhD, FAAAAI1, Celeste Nelson, NP1, Laura Wisch, MSN1, Michelle O’Brien, RN, BSN2, Nina Jones, RN, BSN2, Dr. Andrew W. Lindsley, MD, PhD2, Dr. Hirsh D. Komarow, MD2, Yun Bai, MS1, Linda M. Scott, MS, CRNP1, Daly Cantave, MSN2, Dr. Irina Maric, MD1, 2, Dr. J. Pablo Abonia, MD3, Dr. Marc E. Rothenberg, MD, PhD, FAAAAI1, Dr. Lawrence B.
SUNDAY

Best of HEDQ

3805
Sunday, March 2nd, 2014, 4:00 PM - 6:00 PM

A 24-Month Randomized, Controlled Trial Of An Automated Speech Recognition Program To Improve Adherence In Pediatric Asthma

Bruce G. Bender, PhD FAAAAI1, Peter Cvietus3, Glenn Goodrich2, C. Ryan Lowe3, Heather Nuanes2, Susan Shetterly3, Cathy R. Tacin3, Nicole Wagner1, Frederick S. Wamboldt1, Stan Xu1 and David Magid1, 1National Jewish Health, Denver, CO, 2Kaiser Permanente Colorado, Denver, CO

Asthma Carepartners: A Home-Based Asthma Intervention Embedded Within Medicaid Managed Care

Ms. Julie Kuhn, MSW1, Ms. Helen Margellons-Anast, MPH1, Ms. Tala Alhaji Schwid1, MPH1, Ms. Lourdes Reyes2, Ms. Barbara Hay, M.A.2, Ms. Sheena Freeman, B.A.1, and Ms. Gloria Seals1, Sinai Urban Health Institute, Chicago, IL, Family Health Network, Chicago, IL

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 Reynolds3, Mr. Byn Rhodes1 and Dr. Richard W Hendershot, MD1, Swedish University of Agricultural Sciences, Umea, Sweden, 2OSIA Medical, Sandy, UT, 3Database Consulting Group, Orem, UT, 4Intermountain Health Care, Salt Lake City, UT

Allergy Immunotherapy Significantly Reduces Unpatient Services For Allergy and Respiratory Conditions In Patients With Newly-Diagnosed Allergic Rhinitis

Dr. Cheryl L. Hankin, PhD1, Dr. Linda Cox, MD, FAAAAI2, Dr. Amy Bronstone, PhD3 and Ms. Zhoubin Wang, M.S.3, 1BioMedMEdon, LLC, Moss Beach, CA, 2Allergy & Asthma Center, Ft. Lauderdale, FL

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.3, Dr. James Zazzali, PhD1 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

Activation Of TLR4 Induces VEGF Expression Via Akt Pathway In Nasal Polyps

Mrs. Jung-Sun Cho1, Mr. Ju-Hyung Kang1, Ms. In-Hye Han2, Mrs. Ji-Young Um1, Prof. II-Ho Park1 and Prof. Heung-Man Lee2, 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

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, FAAAAI1, Dr. Rakesh Chandra, MD1, Dr. Bruce K. Tan, MD1, Dr. David Conley, MD2, Dr. Robert C. Kern, MD1, 1University of Manitoba, Winnipeg, MB, Canada, 2University of Ottawa and Ottawa Health Research Institute, Ottawa, ON, 3Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 4Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 5Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

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, BS2, Dr. Tetsuya Homma, MD3, Dr. Andrew Choi1, Mr. Roderick Carter, BSc1, Mr. James Norton, MS1, Ms. Lydia Suh, BSc1, Dr. Atsushi Kato, PhD2, Prof. Pedro C Avila, MD, FAAAAI1, Dr. Anju T. Peters, MD, FAAAAI1, Dr. David Conley, MD2, Dr. Rakesh Chandra, MD1, Dr. Bruce K. Tan, MD1, Dr. Leslie C. Grammer, MD, FAAAAI1, Dr. Robert C. Kern, MD2 and Dr. Robert P. Schleimer, PhD FAAAAI, 1Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 2Division of Otolaryngology, Northwestern University Feinberg School of Medicine, Chicago, IL, 3Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL

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, BSc3, Dr. Robert C. Kern, MD1, Dr. David Conley, MD3, Dr. Rakesh Chandra, MD1, Dr. Anju T. Peters, MD, FAAAAI1, Dr. Leslie C. Grammer, MD, FAAAAI1, Dr. Robert C. Kern, MD3 and Dr. Kathleen E. Harris, BSc2, Mr. Roderick Carter, BSc2, Dr. Atsushi Kato, PhD2, Dr. Margrit Urbanek, PhD2 and Dr. Robert P. Schleimer, PhD FAAAAI, 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, Chicago, IL, 5Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL
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 CysteinyI Leukotrienes
Dr. Tao Lin, PhD1,2, Dr. Joshua A. Boyce, MD, FAAAAI1,2, Dr. Tanya M. Laidlaw, MD, FAAAAI1,2 and Dr. Howard Katz, PhD1,2, 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, MD, Dr. Sabina Islam, MD,2, Dr. John Leung, MD,2, Wayne G. Shreffler, MD, PhD, FAAAAI1,2 and Dr. Andrew D. Luster, MD, PhD,1,2, 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 Cmrf-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, PhD, 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, MS1, Ms. Kim E. Mudd, RN MSN CCRP, Ms. Sarah D. Knorr, RN MPH CCRP and Robert A. Wood, MD, FAAAAI, 1Johns Hopkins University School of Medicine, Baltimore, MD, 2Johns Hopkins University School of Medicine, Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD, 3Geisinger Community Medical Center, Scranton, PA, 4Johns 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, Josh 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, MD,1 Mark DeVries, Mr. Christopher J. Tisher, MT2, Ms. Victoria Rajanamickam,2 Dr. James E. Gern, MD, FAAAAI2, Dr. Robert F. Lemanske Jr., MD, FAAAAI and Dr. Daniel J. Jackson, MD, University of Wisconsin Hospitals and Clinics, Madison, WI, University of Wisconsin School of Medicine and Public Health, Madison, WI, University of Wisconsin Hospitals and Clinics, Pediatrics, 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, MPH1,2, Ashley Sullivan, MPH, MS1, Stuart Turner, BPharm, MPH1,2, Susan Massaro, PharmD, MPH1,2 and Dr. Carlos Camargo Jr., MD, DrPH1,2, 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 Orellana,1 Dr. Telma Varela2, Dr. Ana Romero Boni, Dr. Ofelia Milto1, Dr. Estela Pautasso1, Dr. Susana Rivolta1, Dr. Ramón Pogonza1 and Dr. Juan Carlos Muino, MD, PhD, FAAAAI, 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
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. Ozanur Ababoglu, MD, Cumburijey University 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 University Faculty of Medicine, Antalya, Turkey, Prof. Arif Cimrin, MD, Dokuz Eylul University Faculty of Medicine, Izmir, Turkey, Prof. Hakan Gunen, MD, Sureyyapasa Pulmonary Diseases Hospital and Research Center, Istanbul, Turkey, Prof. Zeynep Misirfirigil, MD, Ankara University Faculty of Medicine, Ankara, Turkey, Prof. Tefzik Ozturk, MD, Karadeniz Teknik University Faculty of Medicine, Trabzon, Turkey, Prof. Mecit Suarez, MD, Selcuk University Faculty of Medicine, Konya, Turkey and Prof. Esra Urazlan, MD, Bursa University Faculty of Medicine, Bursa, Turkey

600 Risk Factors For Acute Asthma In The City Of Esmeraldas, Ecuador
Dr. Cristina Arduara-Garcia1, Gisela Oviedo2, Maritza Vaca3, Carlos Sandoval2, Stefanie Menzies2, Lisa J. Workman, BA1, Prof. Matthew S. Perzanowski, PhD4, Maria Jose Rosa5, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI1 and Dr. Phil J. Cooper2,6. 1University of Liverpool, Wellcome Trust PhD Fellow, Liverpool, United Kingdom, 2Laboratorio de FEPI, Quindin, 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. Nermi Gerler, 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 Martinez Blanco, MD,1 Dr. Ana Antón-Laiseca, MD,1 Dr. R. Mielgo Ballesteros, MD,2 Dr. Consuelo Fernández Rodríguez, MD, PhD,1 Dr. Ruth Barranco Jiménez, MD3 and Dr. R. Vives Conesa, MD,3 1Hospital Universitario 12 de Octubre, Spain, 2Hospital Universitario 12 deOctubre, Madrid, Spain

603 Vitamin D Levels As Related To Severity and Ethnicity In Asthmatics
Dr. Patricia H. Stewart, MD,1 Dr. Thomas Pressley, PharmD2, Dr. Deborah Minor, PharmD3 and Prof. Gailen D. Marshall Jr., MD, PhD, FAAAAI1, 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. Joaquín 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, PhD, Jose Adames, BS3, Dr. Andrew A. Wiznia, MD4, Dr. David L. Rosenstreich, MD, FAAAAI1 and Dr. Gabriele De Vos, MD1, 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, FAAAAI1 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, PhD3, Dr. Michael D. Evans, MS4, 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

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, MD2, Dr. Jadranka Milosevic, PhD3, 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

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, PhD3, Dr. Haejin Kim, MD3, Kimberley J. Woodcroft, PhD1, Dr. Edward M. Zoratti, MD, FAAAAI1 and Ganesa Wegienka, PhD3, 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 Diagnostic 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, PhD1,2, Almut Winterstein, PhD3, Leslie Hendeles, PharmD4, Xiaomin Lu, PhD5, Richard Segal, PhD2 and Abraham Hartzema, PhD5, 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 Naepp 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 Asthematics Contain Viable Fungi
Dr. Rani Maskatia, MD, Cameron Landers, B.S., Dr. Evan Li, M.D., Dr. Roger Rossen, M.D., Dr. Frank M. Orson, MD, FAAAAI and Dr. David B. Corry, MD, 1. Baylor College of Medicine, Houston, TX, 2. Veterans Affairs Medical Center, Houston, TX

614 Proteomic Identification Of S100A8 As a Potential Effector Protein Of Acupuncture In Asthma Treatment
Yu-Dong Xu1,2, Yu Wang3, Ying Wei4, Lei-Miao Yin1, Jun Ran1 and Yong-Qing Yang1,2, 1. Molecular Biology Laboratory, Shanghai Research Institute of Acupuncture and Meridian, Shanghai University of Traditional Chinese Medicine, Shanghai, China, 2. Yue 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 Sangsupsawanich, MD, Prince Songkhla-nagarind hospital, Hatayi, Thailand and Dr. Araya Yuennyongviwat, MD, Prince Of Songkla University, Songkhla, Thailand

617 Defining Severe Asthma In Childhood: A Descriptive Multicenter Study In Turkey
Bulent Enis Sekerci1, Dr. Ozge Soyer2, Fatih Celmeti1, Yakup Canitez1, Ozlem Keskin1, Demet Can1, Ferhat Catal1, Mehtap Kiliç1, Burcin Nalbantoglu1, Nail Yologlu1, Suleyman T. Yavuz3, Belgin Guc1, Fatid Ozturk1, Gulin Karakoc1, Suna Aslisoys1, Mehmet Kiliç1, Cem Razi3, Dost Zeyrek3, Semanur Kanecani3, Hasan Yesküll3, Omer Cevit3, Ayse Yenigun, MD, 1. Department of Pediatrics, Faculty of Medicine, Hacettepe University School of Medicine, Ankara, Turkey, 2. Hacettepe University School of Medicine, Ankara, Turkey, 3. TURPEDAS, 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

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, FAAAAA4, Dr. Jennifer M. Puck, MD5, Sudhir Gupta, MD, PhD, FAAAAA6, Werner Engl1, Dr. Heinz Leibl, PhD2, Dr. Leman Yel, MD, FAAAAA7 and Dr. Richard I. Schiff, MD, PhD8, 1. IMMUNOe Health Centers, Centennial, CO, 2. DallasAllergyImmunology, Dallas, TX, 3. Allergies of the Palm Beaches, North Palm Beach, FL, 4. Albert Einstein College of Medicine, Bronx, NY, 5. Department of Pediatrics, University of California San Francisco and UCSF Benioff Children’s Hospital, San Francisco, CA, 6. University of California, Irvine, Irvine, CA, 7. Baxter BioScience, Vienna, Austria, 8. Baxter BioScience, Westlake Village, CA

622 Health-Related Quality Of Life Of Japanese Patients With Primary Immunodeficiency Diseases Receiving IgPro20, a 20% Liquid Subcutaneous Immunoglobulin (Hizenta®)
Prof. Hirokazu Kanegane, MD, PhD1, Prof. Kohsuke Imai, MD, PhD2, Prof. Masafumi Yamada, MD, PhD3, Prof. Hitotoseki Takada, MD, PhD4, Prof. Tadashi Ariga, MD, PhD5, Prof. Ataru Igarashi, MD6, Prof. Kiichiro Tsutani, MD, PhD7, Dr. Martin Bexon, MD8, Dr. Mikhail Rojavin, PhD9, Ms. Midori Kobayashi, BPharm, MBA10, Dr. John-Philip Lawo, PhD11, Dr. Art Zbrozek, RPh, MSc12, Prof. Shigeki Nonoyama, MD, PhD13, Prof. Toshiro Hara, MD, PhD14 and Prof. Toshio Miyawaki, MD, PhD15, 1. Department of Pediatrics, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan, 2. Department of Community Pediatrics, Perinatal and Maternal Medicine, Tokyo Medical and Dental University, Tokyo, Japan, 3. Department of Pediatrics, Hokkaido University Graduate School of Medicine, Sapporo, Japan, 4. Department of Pediatrics, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan, 5. Department of Drug Policy and Management, Graduate School of Pharmaceutical Sciences, The University of Tokyo, Tokyo, Japan, 6. Clinical Research and Development, CSL Behring AG, Berne, Switzerland, 7. Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, 8. Research and Development, CSL Behring K.K., Tokyo, Japan, 9. CSL Behring GmbH, Marburg, Germany, 10. CSL Behring LLC, King of Prussia, PA, 11. Department of Pediatrics, National Defense Medical College, Tokorozawa, Japan

IVIG and Other Therapeutics

623 Efficacy and Tolerability Of Privigen® In Clinical Practice
Dr. Morma J. Dorsey, MD MMSc FAAAAI1, Viet Ho2, Dr. Mohsen I. Mahallan, MD3, Per Soler-Palaciun4, Nerea Dominguez-Piñilla5, Dr. Robert W. Hellmers, MD, FAAAAA6, Dr. Radha Gandhi Rishi, MD, FAAAAA7, Rahul Rishi8, Dr. Duane W. Wong, MD9, Dr. Mikhail Rojavin, PhD10, Dr. Alphonse Hubsch11 and Dr. Melvin Berger, MD, PhD, FAAAAA12, 1. Department of Pediatrics, University of California, San Francisco, San Francisco, CA, 2. Moffitt Cancer Hospital, FL, 3. Beaver Medical Group, Inc., 4. Department of Allergy and Clinical Immunology, Redlands, CA, 5. Pediatric Infectious Diseases and Immunodeficiencies Unit, Hospital Universitari Vall d’Hebron, Barcelona, Spain, 6. Department of Pediatrics, Hospital 12 de Octubre, Madrid, Spain, 7. Arizona Allergy Associates, Chandler, AZ, 8. Arizona Allergy Associates, Phoenix, AZ, 9. Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, 10. CSL Behring AG, Berne, Switzerland

624 Safety and Tolerability Of An Intravenously Administered Alphal-Proteinase Inhibitor (AIP1) At An Increased Infusion Rate: A Randomized, Rate Control, Placebo-Masked, Cross-over Study In Healthy Adults
Adam Haebeler1, Leочек Ngo1, Neil Inhaber1, David Gelmont1 and Dr. Leman Yel, MD, FAAAAA2, 1. Baxter BioScience, 2. Baxter BioScience, Westlake Village, CA

625 Pharmacokinetic Modeling Predicts Different IgG Exposures Using Different IVIG-SciDose Conversion Factors In Patients With Primary Immune Deficiency
Dr. Jagdev S. Sidhu, PhD1, Dr. Mikhail Rojavin, PhD2, Dr. Melvin Berger, MD, PhD, FAAAAA3, Dr. Martin Bexon4 and Dr. Jonathan M. Edelman, MD5, 1. Clinical Pharmacology & Early Development,
AB336 Abstracts

Flexible Dosing For Hizentra®: Pharmacokinetic Simulations Of Various Subcutaneous Dosing Regimens and Compliance In Patients With Primary Immunodeficiency
Dr. Mikhail Rojavin, PhD1, 2, Dr. Tadashi Ariga, MD, PhD1, 2, Dr. Martin Bexon, MD1, 2, Dr. Jonathan M. Edelman, MD1, 2
1Clinical Research and Development, CSL Behring LLC, King of Prussia, PA, 2Clinical Pharmacology & Early Development, CSL Ltd, Parkville, Australia.

Safety, Tolerability, and Efficacy Of Hizentra® in Japanese Patients With Primary Immunodeficiency Over 48 Weeks
Prof. Kohsuke Imai, MD, PhD1, 2, Prof. Hirokazu Kanegane, MD, PhD1, 2, Prof. Hidetoshi Takada, MD, PhD1, 2, Prof. Tadashi Ariga, MD, PhD1, 2, Ms. Midori Kobayashi, BSPharm, MBA1, 2, Dr. Mikhail Rojavin, PhD1, 2, Dr. Martin Bexon, MD1, 2, Prof. Shigeaki Nonoyama, MD, PhD1, 2, Prof. Toshiro Hara, MD, PhD1, 2, and Prof. Hisashi Nonoyama, MD, PhD1, 2
1Department of Pediatrics, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, Toyama, Japan; 2Department of Pediatrics, Hokkaido University Graduate School of Medicine, Sapporo, Japan.

Effect Of A Novel, Oral Histamine H4R Antagonist On Histamine-Induced Pruritus In Healthy Subjects
Dr. Alexa P. Kollmeier, MD1, 2, Dr. Victor Matheu, MD1, 2, Ms. Vivian E. Cino, MSN ARNP-BC PNP1, 2, Alexander Constantinescu, MD2, 2, Kristina Deeter, MD2, 2, Faina Shenderov, PharmD2, 2, and Dr. Gary I. Kleiner, MD1, 2, 1Department of Pediatrics, National Defense Medical College, Saitama, Japan; 2Parexel International, London, United Kingdom.

Decreasing Risk Of Infection and Severity Of Infections Resulting In Hospitalizations In Patients With Primary Immunodeficiency
Dr. Nima Rezaei, MD, PhD, Research Center for Immunodeficiencies, Children’s Medical Center, Tehran University of Medical Sciences, Tehran, Iran; Dr. Kristyn E. Anthony, MD2, 2, Tulane University, New Orleans, LA; and Dr. Argyri Philippakos, MD2, 2, Albert Einstein College of Medicine, Bronx, NY.

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, 2, Dr. Shahnaz Fatteh2, Dr. Javad M. Khan, DO2, and Dr. Elie Haddad, MD3, 1Medical City Children’s Hospital, Dallas, TX; 2Larkin Community Hospital, South Miami, FL; and 3CHU Sainte-Justine, Montreal, Canada.

Autoinflammatory Disorders

Concomitant FMF and TRAPS Mutation In a Periodic Fever Patient
Dr. Adrienne C. Nettervelt, MD1, 2, Dr. Victoria Dimitriades, MD1, 2, and Dr. Paul D. Niolet, MD2, 2, 1Louisiana State University Department of Pediatrics, New Orleans, LA; 2Allergy Asthma and Immunology, Ocean Springs, MS.

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, 2, Alexander Constantinescu, MD2, 2, Kristina Deeter, MD2, 2, Faina Shenderov, PharmD2, 2, Joan Spiro, PharmD2, 2, and Dr. Gary I. Kleiner, MD, PhD, FAAAAI2, 2, 1Joe Dimaggio Children’s Hospital, Hollywood, FL; and 2Joe Dimaggio Children’s Hospital.

Haptoglobin Deficiency and Autoimmune Manifestations: A Case Series
Dr. Anna Kochin, MD1, 2, Dr. Jenny Shlizberg, MD, FAAAAI1, 2, and Dr. Arye Rubinstein, MD, FAAAAI2, 2, Montefiore Medical Center, Bronx, NY; and 2Albert Einstein College of Medicine, Bronx, NY.

Immune Infiltration Analysis Of Two Anti-TNF (Infliximab vs Etanercept) Therapies In Rheumatologic Patients
Dr. Yvelise Barrios, MD, PhD1, 2, Dr. Victor Matheu, MD2, 2, Dr. Andres Franco, MD1, 2, Dr. Esmeralda Delgado, MD3, 2, and Dr. Sagrario Bustabad, MD3, 2, 1Immunology, Hospital Universitario de Canarias, LA LAGUNA, Spain; 2Allergy Section, Hospital Ofra, Tenerife, Spain; and 3Rheumatology, Hospital Universitario de Canarias, LA LAGUNA, Spain.

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. Drarwa Ahmed, Al-azhar Allergy&Immunology Cr., Cairo, Egypt; and Prof. Mona Alrayes, Al-Azhar Allergy&Immunology Cr., Cairo, Egypt.

Missed Identity: Misdiagnosis Based On Auto-Antibodies In IVIG
Dr. Kristyn E. Anthony, MD2, 2, Tulane University, New Orleans, LA; and Dr. Jane M. El-Dahr, MD, Tulane University School of Medicine, New Orleans, LA.

Th-17 Cytokines In Oral Lichen Planus
Prof. G.N. Dramnik1, 2, Prof. A.I. Kurchenko1, 2, Dr. R.A. Rehuretska1, 2, Dr. A.G. Dramnik2, and Prof. Lawrence M. DuBuske, MD2, 2.
Airborne Allergen Exposures

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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. Florencia 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, PhD5, 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 University, Aarhus

645 Airborne Allergen Exposure As A Quantum Phenomenon
Dr. Gert Dockes, 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, PEng, 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 Shewkhat, PhD2, Ms. Ann Bailey, BA2 and Dr. Wanda Phipatanakul, MD, MS, FAAAAI3, 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 Atopic Living In A Tropical Region
Dr. Beverly K. Di Giorgi, MD, Dr. Sylvestre 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 Immunomodulatory Tests 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. Usamorn Siriwattanakul, 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

FAAAAI1, 1National Medical University, Kiev, Ukraine, 2National medical University, Kiev, Ukraine, 3George Washington University School of Medicine, DC

University, Bangkok, Thailand and Dr. Wisutat Songruang, 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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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. Hirozuki Wakiyuchi3, Dr. Hideki Hasegawa1, Dr. Akira Ainai2, Dr. Komei Shirabe3, Dr. Shioichi Toda1, Dr. Ryo Asa2, Dr. Akihiro Hasegawa2 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, 1Yamaguchi Prefectural Institute of Public Health and Environment, 2Department of Respiratory Medicine, Juntendo University School of Medicine, 3Department 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 Lent1, Eva Estrella1, Dr. Margaret R. Hammerschlag, MD3, Dr. Ranno4, Joks, MD, FAAAAI4, and Dr. Stephan Kohlhoff, MD5, 1SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY, 2Kings County Hospital Center, Brooklyn, NY, 3SUNY Downstate Medical Center, Brooklyn, NY, 4Center for Allergy and Asthma Research, State University of New York Downstate Medical Center, Brooklyn, NY, 5Department of Pediatrics, State University of New York Downstate Medical Center, Brooklyn, NY

656 Human Rhinoviruses/Enteroviruses Associated Wheezing In Children
Aniyat Wannichakorn, MD1, Dr. Wiparat Manuyakorn, MD1, Wasu Kamchaisatian, MD2, Dr. Wasun Chantraitha2, Kanjana Premchaiporn2 and Suwat Benjaponpitak, MD1, 1Division of Pediatric Allergy/Immunology/Rheumatology, Department of Pediatrics, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, 2Division 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, Tasala Dangsawan, MD and Mukda Vangveeraovng, MD, Queen Sirikit National Institute of Child Health(Children Hospital), Bangkok, Thailand

ANYARAT WANNICHAKORN, MD, 1, Dr. WIPARAT MANUYAKORN, MD, WASU KAMCHAI SATIAN, MD, DR. WASUN CHANTHITRA, 2, KANJANA PREMCHAI PORN2 AND SUWAT BENJAPONPITAK, MD, 1, Division 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
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

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, Seoul, 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. Hyeong Yoon Kim, Department of Pediatrics, Bundang Jaeueng 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

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

Effects Of Human Rhinovirus Species On Cytokine Production and Cellular Cytotoxicity In Differentiated Sinus Epithelial Cells
Dr. Kazuyuki Nakagome, MD1,2, Dr. Yury Bochkov, PhD1, Dr. Shamaila Ashraf, PhD1, Ms. Rebecca Brockman-Schneider, MS3 and Dr. James E. Gern, MD, FAAAAI1, 1University of Wisconsin School of Medicine and Public Health, Madison, WI, 2Saitama Medical University, Saitama, Japan

Human Rhinovirus Bronchiolitis Predominant In Very Low Birthweight Infants In Argentina
Dr. Jodell E Linder-Jackson, PhD1, Tatiana E Plachco2, Lucrecia Bossi1, Gabriela Bauer2, Fernando P Polack3, Romina P Libster1 and Eva K Kathryn Miller, MD, MPH1, 1Department of Pediatrics, University of Colorado at Denver, Denver, CO, 2Department of Pediatrics, Montefiore Medical Center, New York, NY, 3Department of Pediatric Allergy, Immunology, and Clinical Research, Shimoshizu National Hospital, Yotsuokado, Japan and Prof. Ichiro Kawakami, MD, PhD, 1Department of Pediatrics, College of Medicine, Korea University, Seoul, South Korea

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

Immune Mediated Skin Diseases
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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, MD5, Dr. Gianluca Pirozzi, MD, PhD5, Warren Brooks, PhD4 and Dr. Marius Ardeleanu, MD3, 1Universitat zu Lubeck, Lubeck, Germany, 2Charite - Universitatsmedizin Berlin, Berlin, Germany, 3Regeneron Pharmaceuticals, Inc., Basking Ridge, NJ, 4Regeneron Pharmaceuticals, Inc., Tarrytown, NY, 5Sanofi, Bridgewater, NJ

A Lipid Plant Extract From Chamaecyparis ObtusaInduces Filaggrin and Human Beta-Defensin -3
Mr. Byung Eui Kim, MD, PhD1, Dr. 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

Identification Of Novel Gene Signatures In Atopic Dermatitis Complicated By Eczema Herpeticum
Dr. Lianghua Bin, MD, PhD1, Dr. Michael G Edwards,2, 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

Topical Application Of Ramapycin Ointment Inhibits Dermatophagoides Fariniae Body (Db) 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. Hiyoyuki Murota3 and Prof. Ichiro Katayama1, 1Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan, Osaka, Japan, 3Osaka University Hospital, Department of Pharmacy, Osaka, Japan, 3Dermatology, Cairo University, Cairo, Egypt, Cairo, Egypt

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 Taek Choung, MD, Korea Univ. Medical Center, Seoul and Dr. Young Yoo, MD, PhD, Department of Pediatrics, College of Medicine, Korea University, Seoul, South Korea

Correlation Between Serum 25-Hydroxyvitamin D Levels and Severity Of Atopic Dermatitis In Children
Dr. Sung Soon, BUSAN MARY, BUSAN, South Korea

Association Between Prenatal and Early Life Vitamin D Levels and Immunological Outcomes in Infants Complicated By Eczema Herpeticum
Dr. Mostafa Attia, Dr. Hiyoyuki Murota and Prof. Ichiro Katayama, 1Department of Dermatology, Course of Integrated Medicine, Graduate School of Medicine, Osaka University, Osaka, Japan, Osaka, Japan, 3Osaka University Hospital, Department of Pharmacy, Osaka, Japan, 3Dermatology, Cairo University, Cairo, Egypt, Cairo, Egypt

Association Between Sun Exposure During The First 6 Months Of Life and The Cumulative Incidence Of Atopic Dermatitis In Infants
Dr. Miwa Shinozura, MD, PhD, Department of Pediatric Allergy and Clinical Research, Shimoshizu National Hospital, Yotsuokado, Japan and Dr. Kenji Matsumoto, MD, PhD, Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan

Dampness In The Water-Damaged Homes Affects The Severity Of Atopic Dermatitis In Children
Prof. Sungchul Seo, BUSAN MARY, BUSAN, South Korea

Association Between Sun Exposure During The First 6 Months Of Life and The Cumulative Incidence Of Atopic Dermatitis In Infants
Dr. Miwa Shinozura, MD, PhD, Department of Pediatric Allergy and Clinical Research, Shimoshizu National Hospital, Yotsuokado, Japan and Dr. Kenji Matsumoto, MD, PhD, Department of Allergy and Immunology, National Research Institute for Child Health and Development, Tokyo, Japan

Dampness In The Water-Damaged Homes Affects The Severity Of Atopic Dermatitis In Children
Prof. Sungchul Seo, BUSAN MARY, BUSAN, South Korea
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, 1Asian Institute for Life Sciences, University of Ulsan College of Medicine, 2Department of Pediatrics, Asan Medical Center, Childhood Asthma Atopic 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. Atushi Yamashita, Dr. Mizuho Nagao, MD, Ms. Kanae Furu-yu, Dr. Junya Hirayama, Dr. Keigo Kaimuna, 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. Kanwaliit K. Brar, MD1, Dr. Rauno O. Joks, MD, FAAAAI2 and Dr. Hamid Moalllem, 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. FAAAAI1 and Dr. Christine Cole Johnson, PhD MPH FAAAAI1, 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 Lee1, Kyung-Yong Jeong2, Kyung-Hee Park1,2, Yoon-Ju Kim1 and Jung-Won Park1,2, 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-Profiling Of Brazilians With Atopic Dermatitis
Lucila Camargo Lopes de Oliveira1, Roberta Faria Camilo-Araujo1, Isabel Rugegen1, Renata R. Cocco2, Dr. Marcia Mallozi, MD1, Prof. Nelson A. Rosario, MD, PhD, FAAAAI3 and Prof. Dircceu Sole, MD, PhD3, 1UNIFESP, 2Federal University of São Paulo, 3Federal University of São 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 Lum 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 Dermatopy and Pediatric Researchers In Severity Scoring Of Atopic Dermatitis (SCORAD) Index In Children
Dr. Rodrigo Hoyos Bachiloglu, 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 Borutzky, 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 Zghereba, 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, MD, 1Wilford Hall Ambulatory Surgical Center, Lackland AFB, TX, 26th 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 Politan, 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, South ern CA Permanente Med Grp, San Diego, CA

688 Preoperative Patch Testing In Patients Undergoing Pectus Excavatum Repair
Dr. Laura Helfner, MD1, Dr. David Rosenthal, DO2, Dr. Blanka M. Kaplan, MD, FAAAAI3 and Dr. Punita Ponda, MD, FAAAAI1, 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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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 Popic3 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, FAAAAI1 and Dr. Xiaobin Wang, MD, MPH ScD3, 1Pediatrics, Johns Hopkins University School of Medicine, Baltimore, MD, 2Johns Hopkins University School of Public Health, Baltimore, MD
MD, 1Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 2Center on Early Life Origins of Disease, Department of Population, Family and Reproductive Health, Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD

692 Orofeco Infections and Risk Of Food Allergy In Children
Dr. Gary Wong, MD1, Dr. Jing Li, MD, MSc2, Dr. Ting Fan Leung, MD FRCPC FAAAAI3 and Prof. Nanshan Zhong3, 4Chinese University of Hong Kong, Shatin, Hong Kong, 5The First Affiliated Hospital of Guangzhou Medical College, State Key Laboratory of Respiratory Disease, Guangzhou Institute of Respiratory Disease, Guangzhou, China, 6Department 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, MPH1, Thomas A.E. Platts-Mills, MD, PhD, FAAAAI1, Lisa J. Workman, BA1, Dr. Joanne Sordillo, ScD1, Dr. Carlos Camargo Jr., MD, DPh1, Dr. Matthew Gillman, MD, SM2, Dr. Diane R. Gold, MD, MPH3 and Dr. Augusto A. Litonjua, MD, MPH4, 5Division of Pediatric Allergy & Immunology, Department of Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, 6Department of Population Medicine, Harvard Pilgrim Health Care Institute, Harvard Medical School, Boston, MA, 7Division of Asthma, Allergy & Immunology, University of Virginia Health System, Charlottesville, VA, 8Channing Division of Network Medicine, Brigham & Women’s Hospital, Harvard Medical School, Boston, MA, 9Department of Emergency Medicine, Massachusetts General Hospital, Harvard Medical School, Boston, MA, 10Channing 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, AAIBDAITN1IH, Bethesda, MD, Dr. Cynthia Visness, 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. Mahkija, MD1,2, Dr. Rachel Gluck Robison1,2, Deanna Caruso, MS1, Miao Cai, MS3, Dr. Xiaobin Wang, MD, MPH ScD4 and Dr. Jacqueline Pongracic, MD, FAAAAI5, 6Ann and Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 7Division of Allergy & Immunology, Department of Pediatrics,Northeastern University Feinberg School of Medicine, Chicago, IL, 8Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 9Johns Hopkins University School of Public Health, Baltimore, MD, 10Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL, 11Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, 12Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL, 13Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL, 14Division of Allergy & Immunology, Department of Pediatrics, Northwestern University Feinberg School of Medicine, Chicago, IL

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, 5Johns Hopkins University School of Medicine, Baltimore, MD, 6The Johns Hopkins University School of Medicine, Baltimore, MD, 7Johns Hopkins School of Public Health, Baltimore, MD, 8Johns 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(Paeds), PhD, EAACI allergy exam (UEMS), Certificate Allergology, FAAAAI1, 2University of Cape Town, Cape Town, South Africa, 3Red Cross War Memorial Children’s Hospital, Cape Town, South Africa

698 Evaluation Of Peanut Allergy In A Birth Cohort
Dr. Hiba Bashir, MD1, Dr. Christopher J. Tisler, MT1, Dr. Elizabeth L. Anderson1, Dr. Theresa Kang, PhD2, Lisa Salazar, BS3, Mr. Michael D. Evans, MS1, Dr. Ronald E. Gangnon, PhD3, Dr. Daniel J. Jackson, MD2, Dr. Robert F. Lemanske Jr., MD, FAAAAI1 and Dr. James E. Gern, MD, FAAAAI1, 2University of Wisconsin School of Medicine and Public Health, Madison, WI, 3Pediatrics, 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 Kilburn3, Ms. Harriet R. Moonesinghe1, Ms. Kellyn Lee1 and Prof. Taraneh Dean1,3, 4University of Portsmouth, School of Health Sciences, Portsmouth, United Kingdom, 5The David Hide Asthma and Allergy Research Center, Isle of Wight, United Kingdom, 6The David Hide Asthma and Allergy Centre, Newport

700 Prevalence Of Fish and Shellfish Allergy: A Systematic Review
Ms. Harriet R. Moonesinghe1, Dr. Sally Kilburn2, Dr. Heather Mackenzie1, Dr. Paul J. Turner, FRACP PhD2, Dr. Carina Venter, PhD RD3, Ms. Kellyn Lee1 and Prof. Taraneh Dean1, 4University of Portsmouth, School of Health Sciences, Portsmouth, United Kingdom, 5The 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. Antonina Cianferoni, MD, PhD3, 1Children’s Hospital of Philadelphia, Philadelphia, PA, 2The Children’s Hospital of Philadelphia, Philadelphia, PA, 3615 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 Sheikhi, MD, FAAAAI2 and Anna Kovalszki, MD3, 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, Dr. Greg Shand, Department of Medicine, Division of Clinical Epidemiology, McGill University Health Centre, 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, FAAAAI, 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. Sabrine Cherkauoi, M.D.1, Ms. Lianne Soller, M.Sc.2, Dr. Moshe Ben-Shoshan, MD, M.S.C.3, Daniel Harrington, MA, Ph.D4, Dr. Sebastien La Vieille, MD,5, Dr. Joseph Fragapane, MD,6, Dr. Lawrence Joseph, PhD,7, Ms. Yvan St-Pierre, M.Sc,8, Prof. Susan Elliott, PhD and Dr. Ann Elaine Clarke, MD, M.Sc9, Division of Internal Medicine, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, 1McMaster University - School of Geography, Hamilton, ON, Canada, 2Food Directorate, Health Canada, Ottawa, ON, Canada, 3McGill University, Dorval, QC, Canada, 4Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 5McGill University, Montreal, QC, Canada, 6Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 7Department of Geophysics, University of Toronto, Toronto, ON, Canada, ON, Canada, 8Applied Health Sciences, University of Waterloo, ON, Canada, 9McGill University Health Centre, Montreal, QC, Canada

707 Food Allergy In Daycare Centers: Prevalence, Management, and Knowledge Of Directors Dr. Lissane Newton, M.D. and Dr. Brian Schroer, MD, Cleveland Clinic, Cleveland, OH

708 Assessment Of Food Insecurity and Health Literacy In a Territory Care Pediatric Allergy Population Dr. Meredith A. Dilley, MD1,2, Ms. G. Lynn Christie, MS RD3, Ms. Mary Price3, Ms. Connelly Weeks, Mallikarjuna Rettiganti, PhD1,2, Maria Melguizo Castro1,2, Dr. Amy M. Scurlock, MD2,4, Dr. Tamara T. Perry, MD2,4, Dr. Robbie D. Pesek1,2, Dr. Matthew C. Bell, MD1,2, Joshua L. Kennedy, MD5, Ms. Erin O’Brien2,5, Ms. Sklar McGrath5, Mr. Jared Hogan5, Megan Patterson5, Julia Aronson1, Dr. Patrick Casey, MD2,4 and Stacie M. Jones, MD5,6,1 University 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, 5University of Arkansas 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, MSc1,2, Ms. Lianne Soller, MSc3, Daniel Harrington, MA, PhD4, Ms. Megan Knoll, MSc5, Dr. Sebastien La Vieille, MD,6, Dr. Joseph Fragapane, MD,7, Dr. Lawrence Joseph, PhD8,9, Mr. Yvan St. Pierre, M.Sc,10, Dr. Kashi Wilson11, Prof. Susan Elliott, PhD1 and Dr. Ann Elaine Clarke, MD, M.Sc12, Division 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 Care Centre, Montreal, QC, Canada, 4McMaster University - School of Geography, Hamilton, ON, Canada, 5Division of Clinical Epidemiology, Department of Medicine, McGill University Health Care Centre, 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 Care Centre, Montreal, QC, Canada, 11Department of Geography, University of Toronto, Toronto, ON, Canada, 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, FAAAAI5 and Dr. Xiaobin Wang, MD, MPH ScD6, 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, Ph.DRD1, Ms. Harriet R. Moonesinghe2, Prof. Hassan Arshad3,4, Prof. Taranesh Dean3,5, Mrs. Jane Grundy3, Mrs. Gill Glassby3 and Dr. Veereh Patil1,4, 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, MD2, David Mark Fleischer, MD, FAAAAI1 and Dr. J. Andrew Bird, MD, FAAAAI2, 1National Jewish Health, Denver, CO, 2UT Southwestern Medical Center, Dallas, TX

716 Food Allergy Survey Among Food Service Workers Bruce M. Prenger, MD,1 John Hollingsworth, PA2, Ron Oliver3 and Linnet Brew, LVN3, 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, FAAAAI1, Melissa Rubes3, Chloe Mullarkey2, Mordechai Ambrose2, Noga Raviv4, Kelley Chuang5, Rachel Annunziato2 and Eyal Shemesh1, 1Mount Sinai School of Medicine, New York, NY, 2Fordham University, NY, 1Icahn 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 Lucioli, MD, FAAAAI, 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, MD1,2, Dr. Michelle F. Hufnaker, MD1,3, Dr. William J. Sheehan, MD1,2, Dr. Watcharot Kanchongkittiphon, MONDAY
Comparison Of Germfree and Conventional Mice For Evaluating The Potential Allergenicity Of Dietary Proteins Using Model Allergenic and Non-Allergenic Proteins

Nathan L. Marsteller1,2, Mr. Kwame Andoh-Kumi1, Daniel A. Peterson1, Richard E. Goodman1 and Joe L. Baumert1. Food Allergy Research and Resource Program, University of Nebraska-Lincoln, Lincoln, NE, 1School of Biological Sciences, University of Nebraska-Lincoln, 2Johns Hopkins School of Medicine, Baltimore, MD

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. Peterson1, Joe L. Baumert1 and Nathan L. Marsteller1,2. Food Allergy Research and Resource Program, University of Nebraska-Lincoln, Lincoln, NE, 1Johns Hopkins School of Medicine, Baltimore, MD, 2School of Biological Sciences, University of Nebraska-Lincoln

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 Song1, Dr. ChangDa Liu1, Dr. Kamal D. Srivastava1, PhD1, Dr. Jia Chen1, ScD1, 2, Dr. Rachel L. Miller, MD, FAAAAAI1 and Dr. Xiu-Min Li1, PhD1, 2Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, 3Prevention, Icahn School of Medicine at Mount Sinai, NY, 4Division of Pulmonary, Allergy and Critical Care Medicine, Columbia University, New York, NY

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 FAAAAAI. Riley Hospital for Children at Indiana University Health, Indianapolis, IN

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. Prapass SuKalart, MD, Prince of Songkla University, Songkhla, Thailand, Dr. Araya Yuanyongvivate, MD, Prince of Songkla University, Songkhla, Thailand and Dr. Pasuree Sangsupawanch, MD, Prince Songkhlanagarind hospital, Hatyai, Thailand

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, PhD1, 2, Amy Perkins, MS1,2 and Kelly M. Maples, MD1,2, 3Eastern Virginia Medical School, Norfolk, VA, 2Children’s Hospital of The King’s Daughters, Norfolk, VA

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 FAAAAAI1, 1Children’s National Medical Center, 2George Washington University School of Medicine

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 FAAAAAI1, 1Children’s National Medical Center, 2George Washington University School of Medicine, 3Children’s National Medical Center, Division of Allergy and Immunology, DC

Banana Allergy In Children Evaluated Using Double Blind Placebo Controlled Food Challenge

Ayse Ingolf, TURFEDAS, Turkey, Dilara Kocakci 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 Olay Yegin, AKDENIZ UNIVERSITY MEDICAL FACULTY DEPT OF PEDIATRIC ALLERGY IMMUNOLOGY, Antalya, Turkey

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. Yoshio Okabe, MD, PhD1, Dr. Yoko S. Adachi, MD, PhD1, Dr. Yuichi Adachi, MD, PhD1, Dr. Kome Ito, MD, PhD2 and Motohito Ebisawa, MD, PhD, FAAAAAI1, 1Department of Pediatrics, University of Toyama, Toyama, Japan, 2Aichi Children’s Health and Medical Center, Obo, Aichi, Japan, 3Clinical Research Center for Allergy and Rheumatology, Sagamihara National Hospital, Kanagawa, Japan

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, PhD1, Dr. Elena Bradaian2, Prof. Alain Lachaux3, Dr. Francois Payot3, Prof. Frederic de BLAY1, Dr. Lydie Guenard-Bilbaud4, 5, Dr. Riad Hatahet2, Dr. Sandra Muller2 and Prof. Christophe Dupont, MD, PhD1, 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, 9Hospital Necker Enfants Malades, Paris, France

Impact Of Formula Containing Docosahexaenoic Acid, Prebiotics, and Beta-Glucan On Allergic Manifestations In Young Children

Dr. Deolinda Scalabrini, MD, PhD1, Suzanne Stolz2, Weihong Zhuang1, Marianna Pontes3, Angela de Mattos1, Indira Almeida2, Carolina Godoy2, Sara Gatto1, Vivian Leal2, Gabriela Cabral2, Terza Ribeiro2 and Hugo Ribeiro2, 1Mead Johnson Nutrition, Evansville, IN, 2Federal University of Bahia, Brazil

Parents’ Perception Of The Likelihood Of Future Life-Threatening Events In Their Children With Food Allergies

Dr. Peter Arkwright, MD, PhD, FAAAAAI1, 2, Ms. Jennifer Ogg1, Dr. Naomi Davis2 and Dr. Ming Wan1, 1University of Manchester, Manchester, United Kingdom, 2Royal Manchester Children’s Hospital, United Kingdom

Can Training Improve Allergists’ Ability To Accurately Identify Anxiety In Children With Food Allergy?

Melissa Rubes1, Anna Podelsky2, Nicole Caso1, Rachel Annunziato1, Dr. Amanda L. Cox, MD1, 2, Dr. Jennifer S. Kim, MD, FAAAAAI1, 2, Dr. Anna H. Nowak-Wegrzyn, MD, FAAAAAI, 3Dr. Jennifer S. Kim, MD, FAAAAAI, 4Dr. Motokazu Nakabayashi, MD, FAAAAAI, 1, 2, 3, 4 and Eyal Shemesh1, 1Fordham University, NY, 2Icahn School of Medicine at Mount Sinai, NY, 3Mount Sinai School of Medicine, New York, NY

Nutritional Status Impairment In Patients With Food Allergies

Dr. Gesmar Segundo, Mrs. Larissa Costa and Mrs. Erica Rezende, Universidade Federal de Uberlandia, Uberlandia, Brazil

Everyday Life Impact On Food Allergy Spanish Children. Carcgivers Perception

Dr. Elena Alonso-Lebreiro, 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 Marañon, Pediatric Allergy Department, Madrid, Spain
Health Care Delivery

4209
Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

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 Sporer, MD, Division of Allergy/Immunology, Departments of Medicine and Pediatrics, Hofstra North Shore-LIJ School of Medicine, Katrina 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

Variability In Measurement Of Allergen Skin Testing Results Among Allergy-Immunology Specialists
Dr. Tiffany Jean1, Dr. Kenny Y. Kwong2 and Dr. Nasser Redjal, MD, FAAAAI, 1Harbor-UCLA Medical Center, 2Harbor-UCLA Medical Center, Torrance, CA

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

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 Shenny, 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

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. Kaptene, PhD, Southern California Permanente Medical Group, Los Angeles, CA

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

Adherence To Labeling Guidelines Of Inhalant Allergen Immunotherapy Parameter 2011 At The University Of Michigan Health Service
Dr. Marilyn Karam, MD1, Kiela Samuels2, Cynthia Hernandez, RN2, Dr. Christine L. Holland, MD3 and Dr. Matthew J. Greenhawt, MD, MBB, MSc, 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

The Prevalence Of Allergic Rhinitis Among High- School Male Military Recruits In Jordan
Dr. Mansour Fuad Karadsheh, MD and Dr. Suleiman Soudi, Royal Medical Services, Madaba, Jordan

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

Assessing Quality Of Life In Patients With AERD After Aspirin Desensitization
Dr. Melissa Iammattco, MD1, Dr. Autumn Chandler Gayer, MD2, Dr. Rebecca Saff, MD, PhD3, Dr. Eric Holbrook, MD4, Dr. Stacey Gray, MD4, Dr. Aidan Long, MD, FAAAAI4 and Dr. Aleena Bane- rji, 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,
Allergen Extracts and Immunotherapy

4210
Monday, March 3rd, 2014, 9:45 AM - 10:45 AM

The Efficacy and Safety Of The Short Ragweed Sublingual Immunotherapy Tablet MK-3641 Is Similar In Asthmatic and Nonasthmatic Subjects Treated For Allergic Rhinitis With/ Without Conjunctivitis (AR/C)

Dr. Jennifer Maloney, MD1, Dr. David I. Bernstein, MD, FAAAAI2, Dr. Jacques Hébert, MD1, Dr. Martha White, MD3, Dr. Robert Fisher, MD4, Dr. Thomas B. Casale, MD, FAAAAI5, Dr. Amaarot Kaur, PhD3, 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

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, MS3, 1University of Colorado, Lakewood, CO, 2University of Colorado - Anschutz Medical Campus, Aurora, CO

Efficacy Of Short Ragweed Sublingual Immunotherapy Tablet (SLIT-T) In Mono-Sensitized and Poly-Sensitized Subjects

Dr. David L. Bernstein, MD, FAAAAI1, Kevin R. Murphy, MD2, Dr. Hendrik Nolte, MD, PhD2, Dr. Amaarot Kaur, PhD3 and Dr. Jennifer Maloney, MD1, 1Bernstein Allergy Group, Cincinnati, OH, 2Boys Town National Research Hospital, Boys Town, NE, 3Merck, Whitehouse Station, NJ

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. Andreassen4, Charles Hawes1 and Dirk Demuth3, 1Charite, Berlin, Germany, 2IMSHealth, United Kingdom, 3Merck & Co, Inc, West Point, PA, 4ALK, Denmark

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, 1Dr. Kathy Abiteboul, PharmD3 and Dr. Robert K. Zeldin, MD1, 1Universitas Ziekenhuis Gent, Ghent, Belgium, 2Larrey Hospital, CHU, Toulouse, France, 3Stallergenes S.A., Antony, France

Allergen Immunotherapy Safety While Using “High Risk” Medication: A Survey Of AAAAAI Members

Dr. Matthew A. Rank, MD, FAAAAI, Mayo Clinic, Scottsdale, AZ, Dr. David W. Haushwirth, 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

VENOM IMMUNOTHERAPY USE WITH CONTRAINDICATED MEDICATION: A SURVEY OF AAAAAI MEMBER’S EXPERIENCE

Dr. David W. Haushwirth, 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

Simultaneous Measurement Of Multiple Proteins In Blatella Germanica Extract Using Antibody-Based Multiplex Assay

Dr. Taruna Khurana, PhD1, Ms. Maggie Collinson1 and Dr. Jay E. Slater, MD2, 1CBER FDA, 2FDA/CBER/IVRR/DFFPAP, Rockville, MD

Characterization and Protein Composition Of Food Allergen Extracts

Dr. Greg A. Plunkett, PhD and Dr. Tricia Moore, PhD, ALK-Abelló, Inc, Round Rock, TX

Stability and Compatibility Of Cat, Dog, Dust Mite, and Cockroach Extracts In Indoor Allergen Mixtures and Dilutions For Immunotherapy

Dr. Silvia Huchner, MD1, Dr. Satyen Manilal Gada, MD, MD2, Dawn Hall, BS1 and Dr. Thomas Grier, MD, 1Evans Army Community Hospital, Fort Carson, CO, 2Walter Reed National Military Medical Center, Bethesda, MD, 3Greer Labs

Interest Of Mass Spectrometry-Based Quantification Of Relevant Allergens To Improve The Standardization Of Allergen Extracts

Thierry Batard, PhD1, Emmanuel Nony2, Christel Dayang, PhD, 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

Baseline Predictors Of Symptom Severity Following Exposure To House Dust Mite In An Antigen Challenge Chamber (ACC)

Daniel Ramirez, MD1, Robert L. Jacobs, MD2, Cynthia Rather, CCRC2, Andrew Carrillo, BS2,3, Weiijing He, MD,2,3, Nathan Harper, BS2,3, Charles Andrews, MD2 and Sunil K. Ahuja, MD2,3, 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

Validation Of Biogenics Research Chamber For Elicitation Of Symptoms To Dust Mite Antigen (Der p1)

Robert L. Jacobs, MD2, Cynthia Rather, CCRC1, Fabio Jimenez, BS2,3, Hernan Martinez, MD2,3, Weiijing He, MD,2,3, Daniel Ramirez, MD3, Charles Andrews, MD2 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

Allergen Extracts and Immunotherapy

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Monday, March 3rd, 2014, 9:45 AM - 10:45 AM
773 Atopic and Non-Atopic Individuals Manifest Partly Concordant Characterization Of Allergic Rhinitis Symptomatology Induced On Levels Of Pollen Exposure
Dr. Hendrik Nolte, MD, PhD1, Prof. Stephen R. Durham, MA MD FRCP2, Dr. Harold S. Nelson, MD, FAAAAAI1, Dr. David I. Bernstein, MD, FAAAAAI1, Dr. Peter S. Creticos, MD, FAAAAAI1, Dr. Ziliang Li, PhD1 and Dr. Jens Andersen, PhD6, 1Merck, Whitehouse Station, NJ, 3Imperial College London, London, United Kingdom, 2National Jewish Health, Denver, CO, 3Bernstein Allergy Group, Cincinnati, OH, 4Johns Hopkins Division of Allergy & Clinical Immunology, 5ALK-Abelló, Horsholm, Denmark

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, FAAAAAI1, Dr. Robert W. Hostoffer, DO1 and Dr. Haig Tcheurekdjian, MD, FAAAAAI1, 2University Hospitals, South Euclid, OH, 3Rainbow Babies and Children’s Hospital, Cleveland, OH, 4Case Western Reserve University School of Medicine, Cleveland, OH, 5Allergy/Immunology Associates, Inc., South Euclid, OH

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 Mirza1,2, 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. Dwain Price, BSc.Hons1, Prof. Leigh Ackland, Ph.D2, A. Wesley Burks, MD, FAAAAAI and Dr. Matthew Knight, Ph.D3, Deakin 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, PhD1, 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, PhD3, Dr. Hans C. Oettgen, MD, PhD, FAAAAAI2, Dr. Martin Metz, MD, PhD1 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 TL.R4/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 Paraña, Brazil and Prof. Nelson A. Rosario, MD, PhD, FAAAAAI, Federal University of Paraña, Curitiba, Brazil

782 Balsam Of Peru, a Common Contact Dermatitis Allergen, Is a CD1a Antigen
Sarah Nicolai, MD1,2, Tan-Yun Cheng, PhD1,2, Elvire A. Bourgeois, PhD1,2, Annemieke de Jong, PhD3 and D. Branch Moody, MD1,2, 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

Mechanistic Insight into Pollens and Other Antigens
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4212 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
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. Klaifky, MD, PhD3 and Thomas A.E. Platts-Mills, MD, PhD, FAAAAI4, 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 Kim1,2, Prof. Chang-Hoon Kim3,4, Dr. Sung-Shik Kim5 and Prof. Joo-Heon Yoon6,6, 1Chang-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. Yoshikiko Sakurai1,2, Dr. Hideo Takatsuka3, Dr. Mutsuzo Takada1 and Dr. Masato Nishino4, 1Nara Prefectural Mimuro Hospital, Sango, Japan, 2Matsubara Tokushukai Hospital, Matsubara, Japan

786 Prevalence Of Toxocariasis In General Population Based On Vitamin D Levels and Sensitization To Indoor Inhalant Allergens
Prof. Hyun Jik Kim1,2, Dr. Brian T. Kelly, MD, FAAAAI, Medical College of Wisconsin, Milwaukee, WI, 1,3Dr. Koenko Nose Infirmary, Seongnam, South Korea, 2Dr. Stacie M. Jones, MD, Milwaukee Children’s Hospital Research Institute, Little Rock, AR, 3Kurten Ryan, PhD, Children's Hospital and Blood Center, Milwaukee, WI

787 Vitamin D Levels and Sensitization To Indoor Inhalant Allergens In Korea
Dr. Kyung-Hwan Lim1,2, Dr. Min-Gyu Kang1,2, Dr. Han-Ki Park1, Prof. So-Hee Lee1, Prof. Min-Suk Yang1,2, Prof. Woo-Jung Song, M.D.1, Prof. Hye-Ryun Kang1, Prof. Heung-Woo Park, MD, PhD1, Prof. Sun-Sin Kim1, Prof. Yoon-Seok Chang1,2, Prof. Sang Heon Cho, MD, PhD1, Prof. Kyung-Up Min, MD, PhD1 and Prof. Sae-Hoon Kim1,2, 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- Reactivity (AHR) To Histamine and Carbachol In Human Airways
Joshua L. Kennedy, MD1, Stacie M. Jones, MD1,2, Ms. Megan Kurten1,3, Ms. Suzanne House1,3 and Richard Kurten, PhD1,3, 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

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 Povootikul, MD1 and Dr. Elizabeth A. Secord, MD, FAAAAI, 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. Lyn G. Scott, MD,3, 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 OfSpirometry 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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795 G Protein-Coupled Receptor Kinase-3 (GRK-3) In Bone Marrow Niche Interactions and Transplantation
Jaime M. Brozowski1,2, Roman Timoshenko1,2, Jessica Koontz3, Janet Rubin1,4, Matthew Billard2 and Teresa K. Tarrant2,3, 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, Polymyocinopathy, X-Linked (IPEX) Syndrome Resolves Enteropathy and Autoimmunity: A Single Institution Experience
Dr. Zeynep Yesim Kucuk1, 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

4601 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 L. Bernstein, MD, FAAAAI2, Ms. Cheryl Koff Bernstein, RN BSN CCRC3, Dr. Patrick Ryan, PhD4, Dr. Jonathan A. Bernstein, MD, FAAAAI2, Ms. Banu Kesavalu5, Dr. Manuel S. Villareal, MD, FAAAAI1,2, Dr. Andrew M. Smith, MD, FAAAAI6, Dr. Peter Lentz7 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, Cincinnati, OH, 73255 Eden Ave., HPB 350, University of Cincinnati Medical Center, Cincinnati, OH, 8The University of Cincinnati Medical Center, 9Allergy Partners of Central Indiana, Indianapolis, IN
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

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

Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

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, MSC7, Sandra Chaves, MD, MS6, Marika Iwane, PhD, MPH, Yang Qiu, ScM3, Christopher Schaffer, BS4, Marty Alvarez-Reeves, MS5, Prof. Tiina Reponen, PhD6, Dr. Gary Adamkiewicz, PhD3, Dr. Patrick Ryan, PhD7, Doug Brugge, PhD6, David Turcotte, ScD7, Fuyuen Yap, PhD, MPH7, Kanta Sircar, PhD, MPH7, Benjamin Blount, PhD7, K. Udeni Alwis, PhD7, Connie Nosnoff, MA3, Peter Ashley, DrPH8, Curtis Hedman, PhD11, Steve Strebel, BS11, Behrozeh Behbod, MBChB, MSc4, ScD5, Matthew Lozier, PhD, MPH8 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

A Systematic Analysis Of Pollen Transcriptomes From Plant Allergens Reveals Conserved Targets Of Immune Responses
Dr. Bjorno Peters1, Dr. Jason Greenbaum1, Dr. Veronique M. Schulten1, Dr. Denise Baker1, Dr. April Frazier1, Dr. Alessandro Sette, Dr. BioL Sc1, Dr. Michael Wallner2 and Mrs. Heidi Hofer2, 1La Jolla Institute for Allergy and Immunology, La Jolla, CA, 2University of Salzburg, Salzburg, Austria

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, MPH1 and Dr. Kari C. Nadeau, MD, PhD, FAAAAI1, 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

Impact Of BMI On Ozone-Induced IL-1ß 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. Pedersen, 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 #545, Campus Box 7310, University of North Carolina at Chapel Hill School Medicine, NC

Group-2 Innate Lymphoid Cells Promote Air-Pollutant Induced Airway Inflammation and Hyperresponsiveness (AIRH)
Dr. Qi Yang, PhD, Moyar 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

Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

Peanut T Cell Epitope Discovery: Ara h1 and Ara h3
Dr. Manish Ramesh, MD, PhD, Madhan Masilamani, PhD2, Dr. George N. Konstantinou, MD, PhD, MS3,4, Jay A. Lieberman, MD5, Hugh A. Sampson, MD, FAAAAI6, Dr. Madhambca Sivakumar1, Dr. Araya Yuenyongviwat, MD7 and Dr. Mariona Pascal, PhD, 1Mount Sinai School of Medicine, New York, NY, 2Icahn School of Medicine at Mount Sinai, New York, NY, 3242 General Military Training Hospital, Thessaloniki, Greece, 4First Pediatric Department, Aristotle University of Thessaloniki, Hippokration 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

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

Over-The-Counter Dietary Supplements Genistein and Ipiriflavone Suppress Peanut Allergy Symptoms
Ms. Lisa Chang, BS1, Ms. Mohanapiya Kamalakannan, MS5, Mr. Matthew Stadler1, Hugh A. Sampson, MD, FAAAAI1,2 and Madhan Masilamani, PhD1, 1Icahn School of Medicine at Mount Sinai, New York, NY, 2Pediatics, Icahn School of Medicine at Mount Sinai, New York, NY

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, PhD1,2, Dr. Joseph Arolandom, MD3, Mrs. Nour Baiz, PhD3, Dr. Flore Amat, MD1, Dr. Rabehel Gouvis-Echraghi, MD1, Dr. Sophie Candon, MD, PhD1,2, Mr. Remy Couderc, PhD PharmaD3, Prof. Jean-Francois Bach, MD, MD1,2, Prof. Lucienne Chatenoud, MD, PhD, Dr. Veronique Marchionni, MD, PhD, Prof. Jocelyne Bizik, MD, PhD, 1Icahn School of Medicine, New York, NY, 2Laboratoire de recherche, La Cite, France, 3Institut national de la sant and de la recherche medicale, Unité U1013, Paris, France, 4Allergology department, Trouseau, Paris, France

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Air Pollution/Allergens/Air Quality
Food Allergy

Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

Peanut T Cell Epitope Discovery: Ara h1 and Ara h3
Dr. Manish Ramesh, MD, PhD, Madhan Masilamani, PhD, Dr. George N. Konstantinou, MD, PhD, MS, Jay A. Lieberman, MD, Hugh A. Sampson, MD, FAAAAI, Dr. Madhambca Sivakumar, Dr. Araya Yuenyongviwat, MD and Dr. Mariona Pascal, PhD, Mount Sinai School of Medicine, New York, NY, Icahn School of Medicine at Mount Sinai, New York, NY, 242 General Military Training Hospital, Thessaloniki, Greece, First Pediatric Department, Aristotle University of Thessaloniki, Hippokration General Hospital, Thessaloniki, Greece, University of Tennessee, Memphis, TN, Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY, 3Prince of Songkla University, Songkhla, Thailand, Servei d’Immunologia, Centre de Diagnostic Biomedic, Hospital Clinic, Barcelona, Spain

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

Over-The-Counter Dietary Supplements Genistein and Ipiriflavone Suppress Peanut Allergy Symptoms
Ms. Lisa Chang, BS, Ms. Mohanapiya Kamalakannan, MS, Mr. Matthew Stadler, Hugh A. Sampson, MD, FAAAAI and Madhan Masilamani, PhD, Icahn School of Medicine at Mount Sinai, New York, NY, Pediatrics, Icahn School of Medicine at Mount Sinai, New York, NY

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, Dr. Joseph Arolandom, MD, Mrs. Nour Baiz, PhD, Dr. Flore Amat, MD, Dr. Rabehel Gouvis-Echraghi, MD, Dr. Sophie Candon, MD, PhD, Mr. Remy Couderc, PhD PharmaD, Prof. Jean-Francois Bach, MD, MD, Prof. Lucienne Chatenoud, MD, PhD, 2Laboratoire de recherche, La Cite, France, 3Institut national de la sant and de la recherche medicale, Unité U1013, Paris, France, 4Allergology department, Trouseau, Paris, France.
hospital AP-HP–UPMC Paris 6, France, 2Epidemiology of Allergic and Respiratory diseases (EPAR) Department, UMR-S 707 INSEERM, UPMC Paris 6, France, 3Service de Biochimie et Biologie Moléculaire, Trouseau hospital 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. Luyuan (Larry) Ma, PhD3, 1Allergy and Asthma Clinical Center, Carter Center for 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, FAAAAI1 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, FRCP1, Michael M. Cyr, MD, FRCP1, Judah Areyh Denburg, MD, FRCP1, FAAAAI1, Ms. Karleen Schulze, MMath2, Sonia Anand, MD, FRCP1, Koon Teo, MD, FRCP2 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 Sitariak, M.S.1, Ms. Suzanne Havstad, M.A.1, Ganesa Wegienka, PhD1, Dr. Dennis Ownby, MD, FAAAAI1, Dr. Edward M. Zoratti, MD, FAAAAI1 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
4606
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 Manzur1, Dr. Rakesh Chandra, MD2, Dr. David Conley, MD2, Dr. Bruce K. Tan, MD3, Dr. Leslie C. Grammer, MD, FAAAAI4, 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, BSc3, Dr. Robert C. Kern, MD4, Dr. David Conley, MD2, Dr. Rakesh Chandra, MD3, Dr. Anju T. Peters, MD, FAAAAI2, Dr. Leslie C. Grammer, MD, FAAAAI1, Ms. Kathleen E. Harris, BSc2, Dr. Michael Platt, MD3, Dr. Ralph Metson, MD6 and Dr. Robert P. Schleimer, PhD FAAAAI1, 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, 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, PhD3, Dr. Robert C. Kern, MD4, Dr. Kathryn E. Hulse, PhD2, Dr. Rakesh Chandra, MD2, Dr. David Conley, MD1, Ms. Lydia Suh, BSc3, Mr. Roderick Carter, BSc1, Mr. James Norton, MS4, Julia H. Huang5, Dr. Atsushi Kato, PhD3, Dr. Robert P. Schleimer, PhD FAAAAI1 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, Northwestern University Feinberg School of Medicine, Chicago, IL, 5Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 6Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL, 7Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, IL

817 Osteoclast M Is Elevated In Chronic Rhinosinusitis and Decreases Barrier Function In Human Airway Epithelium
Ms. Kathryn L. Pothen2, 3, Mr. James Norton, MS2, Dr. Christopher Ocampo, MD, PhD2, Ms. Lydia Suh, BSc3, Mr. Roderick Carter, BSc3, Dr. Kathryn E. Hulse, PhD3, Dr. Sudarshan Sheshadri, PhD3, Dr. Bruce K. Tan, MD1, Dr. Rakesh Chandra, MD3, Dr. Anju T. Peters, MD, FAAAAI1, Ms. Kathleen E. Harris, BSc2, Dr. David Conley, MD4, Dr. Leslie C. Grammer, MD, FAAAAI1, Dr. Robert C. Kern, MD5 and Dr. Robert P. Schleimer, PhD FAAAAI1, 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, 4Division of Allergy-Immunology, Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL, 5Department of Otolaryngology, 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

Monday, March 3rd, 2014, 2:00 PM - 3:15 PM

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, National Jewish Health, Denver, CO, University 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, MBCBi, 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, PhD2 and Dr. Armen Akopian, PhD3, UTHSCSA, san antonio, TX, 1Univ. Texas Health Science Center San Antonio, San Antonio, TX, 3UTHSCSA, San Antonio, TX

823 Increased Serum Soluble ST2 In Ashtmatic 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

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 CCRC2, Dr. Patrick Ryan, PhD1,2, Dr. Jonathan A. Bernstein, MD, FAAAAI3, Dr. Manuel S. Villareal, MD, FAAAAI4, Dr. Andrew M. Smith, MD, FAAAAI5, Dr. Peter Lenz1 and Dr. Tolly Epstein, MD, MS2, University 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, 6Division of Immunology Allergy & Rheumatology, 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 Singleton Is Mediated By Gestational Age
Vilhelmina Ullemar1, Cecilia Lundholm, MSc1 and Prof. Catarina Almqvist, MD, PhD1,2, 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, MS3, 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, MD2, Dr. Gustavo Wandsalsen, MD2, Dr. Elaine Prestes3, Dr. Herberto J. Chong Neto, MD, PhD, FAAAAI, Prof. Nelson A. Rosario, MD, PhD, FAAAAI, Dr. Ana Carolina Dela Bianca4, Dr. Carolina Aranda1, Dr. Decio Medeiros5, Prof. Emanuel Sarinho, Prof. PHD6, Dr. Lilian SANCHEZ LACERDA Moraes, MD, MSc7, Dr. Javier Mal-lon8 and Prof. Dircue Sole, MD, PhD9, 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, FAAAAI1, Dr. Kei Fujimura, PhD2, Dr. Marcus Rauen, 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 Almabe2, 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. Dircue Sole, MD, PhD, Federal University of Sao Paulo, Sao Paulo, Brazil and Dr. Isabela Londres, UFPE, Universidade Federal de Pernambuco, Brazil, 1Allergy/Immunology, Penn State University College of Medicine, Hershey, PA

832 Are Environmental Factors More Important Than Genetic Factors In Incident Asthma?
Dr. Efren 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 Bissacchi, MD3, Dr. Marcelo Vivo Aun, MD4, Prof. Jorge Kaili, MD, PhD1 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, Brazil, 4Clinical Immunology and Allergy Division, University of Sao Paulo, Boston, MA
Diagnostic Modalities of Asthma

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, Dr. Yukio Nagasaka, Dr. Yasushi Obase, Dr. Michiyoshi Imaoka, Dr. Tomoaki Iwanaga, Dr. Reiko T. Kishikawa, Fukuoka National Hospital, Fukuoka, Japan

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, Policlinica Geral do Rio de Janeiro, Brazil

837 The Association Of Spirometry With Asthma Control and Asthma Morbidity In Inner City Schoolchildren With Asthma
Dr. Watcharoot Kanchongkittiphon, MD, PhD

839 Impulse Oscillometry (IOS) Is Easier Than Spirometry For Older Asthmatic and Non-Asthmatic Subjects
Dr. Michael C. Balduzzi, MD, Dr. Adam Updegraff, DO

838 Clinical and Spirometric Characteristics In Young Patients With Intermittent and Mild Persistent Atopic Asthma
Prof. Vera Tsybulkina

840 Clinical Impact Of Molecular Diagnosis In Dog Allergy
Prof. Joaquin Sastre, MD, PhD, FAAAII and Ms. Silvia Uriarte, Fundación Jiménez Díaz, Madrid, Spain

842 The Simplified Method For Eucapnic Voluntary Hyperventilation (EViH) May Be Useful To Discriminate Between Hyperventilation and Gastroesophageal Reflux Disease (GERD) Induced Bronchospasm
Dr. Richard R. Rosenthal, MD, Mr. Harvey Howe, BS and Mr. Paul Knause, BS

841 A Young Adult With Increased Variability Of FEF25-75 Relative To FEV1 Post-Bronchial Thermoplasty
Dr. Amy M. CaJacob, MD, Dr. Mark H. Kalenian, MD, FAAAAI, Dr. John T. Anderson, MD, Dr. Mark Dransfield and Dr. Jennifer Trevor, MD

843 Interferon-a-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 The Evaluation Of Airway Obstruction By Lung Sound Analysis In The Patients With Asthma
Dr. Terufumi Shimoda, Dr. Yukio Nagasaka, Dr. Yasushi Obase, Dr. Michiyoshi Imaoka, Dr. Tomoaki Iwanaga, Dr. Reiko T. Kishikawa, Fukuoka National Hospital, Fukuoka, Japan

847 Dendrimeric Silica Particle Composites For IgE Determination In Patients Allergic To Amoxicillin
Dr. Maria Isabel Montanez, PhD, Dr. Yolanda Vida, PhD

849 Asthma As An Unrecognized Risk Factor For Herpes Zoster In Adults: A Population-Based Case-Control Study
Dr. Young J. Juhn, MD, MPH

850 Transmaternal Bisphenol A Exposure Accelerates Diabetes Type 1 Development In NOD Mice
Dr. Johanna Bodin, Dr. Anette Kocbach Bølling, Prof. Frieke Kuper, Prof. Mark Davis, PhD and Prof. Garry Nolan, PhD

836 The Evaluation Of Airway Obstruction By Lung Sound Analysis In The Patients With Asthma
Dr. Terufumi Shimoda, Dr. Yukio Nagasaka, Dr. Yasushi Obase, Dr. Michiyoshi Imaoka, Dr. Tomoaki Iwanaga, Dr. Reiko T. Kishikawa, Fukuoka National Hospital, Fukuoka, Japan

844 High Dimensional Single-Cell Mass Cytomtery Demonstrates Conserved Human Toll-Like-Receptor Activation Signatures
Dr. Elena Hsieh, Dr. William O’Gorman, PhD, Ms. Erica Savig, Dr. Pier Federico Gherrardini, PhD, Prof. Mark Davis, PhD and Prof. Garry Nolan, PhD

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

841 The Simplified Method For Eucapnic Voluntary Hyperventilation (EViH) May Be Useful To Discriminate Between Hyperventilation and Gastroesophageal Reflux Disease (GERD) Induced Bronchospasm
Dr. Richard R. Rosenthal, MD, Mr. Harvey Howe, BS and Mr. Paul Knause, BS

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Dr. Terufumi Shimoda, Dr. Yukio Nagasaka, Dr. Yasushi Obase, Dr. Michiyoshi Imaoka, Dr. Tomoaki Iwanaga, Dr. Reiko T. Kishikawa, Fukuoka National Hospital, Fukuoka, Japan

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Dr. Terufumi Shimoda, Dr. Yukio Nagasaka, Dr. Yasushi Obase, Dr. Michiyoshi Imaoka, Dr. Tomoaki Iwanaga, Dr. Reiko T. Kishikawa, Fukuoka National Hospital, Fukuoka, Japan

847 Dendrimeric Silica Particle Composites For IgE Determination In Patients Allergic To Amoxicillin
Dr. Maria Isabel Montanez, PhD, Dr. Yolanda Vida, PhD
851 Soluble Type I Interferon Receptor 2 and Soluble Type II Interferon Receptor 1 Are Independently Regulated
Thomas B. Lavole, PhD, Taher Fatakahavala, Xiao-Hong Lin, Michael Skawinski, Jonathan Ferreira and Taria Stauffer, PBL assay Science

852 Regulation Of Innate Immune Recognition Of Viral Infection By Epigallocatechin Gallate
Dr. Christina L. Nance, PhD1, 2, Melinda Mata, B.S.3, Ashley McMullen, B.S.4, Sean McMaster, B.S.1, 5 and Dr. William T. Shearer, MD, PhD, FAAAAI1, 2, Baylor 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, MS2, Kasia Goleniewska3 and Dr. R. Stokes Peebles Jr., MD, FAAAAA1, 2, Division 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 Pote1, Mrs. Monica Campbell1, Dr. Hironori Masuko, MD, PhD1, Justyna Fert-Bober1, James Snider1, Dr. Margaret Taub, PhD2, Dr. Ingo Ruczinski, PhD3, Dr. Terri H Beatty, PhD7, Dr. Jennifer E. Van Eyk, PhD7 and Dr. Kathleen C. Barnes, PhD FAAAAA1, 2, Division 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, 5Salmonella Typhimurium Impedes Innate Immunity With a Mast Cell-Suppressing Tyrosine Phosphatase Stp
Hae Woong Choi1, Rhea Brookings, PhD1, Subham Neupane1, Chul-Jin Lee, PhD1, Dr. Edward Miao, MD, PhD2, Dr. Herman F. Staats, PhD3 and Dr. Soman N. Abraham, PhD1, 2, 3Duke University Medical Center, Durham, NC, 2University of North Carolina at Chapel Hill, Chapel Hill, 3Duke-National University of Singapore, Singapore, Singapore

855 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-Jun 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

856 Immune Perturbation In Patients With Tgfta Pathway Defects
Dr. Dat Q. Tran, MD1, Mrs. Ellen Regalado2 and Dr. Dianna Milewicz2, 3,4,5, 1University of Texas Medical School at Houston, Houston, TX, 2University of Wisconsin, Madison, WI, 3University of Wisconsin, Madison, WI, 4Massachusetts General Hospital, Boston, MA, 5University of Texas Medical School at Houston, Houston, TX

858 Chemokine Receptors On Regulatory T Cell Surface, Surrogate Markers For Intracellular Th1 and Th2 Cytokines
Mr. Satoru Watanabe1, 2, Dr. Yoshiioyuki Yamada1 and Prof. Hirokazu Murakami1, 2, Gunma Children’s Medical Center, Shibukawa, Gunma, Japan, 3Gunma University Faculty of Medicine School of Health Science, Maebashi, Gunma, Japan

859 IL-4 Signaling Attenuates γδ T Cell IL-17A Protein Expression
Melissa T. Harinoto, BS1, Dr. Dawn C. Newcomb Baker, PhD2, Jacqueline-Yvonne Cephus, BS2, Kasia Goleniewska1 and Dr. R. Stokes Peebles Jr., MD, FAAAAA1, 2, Department 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. Kodenitsova2 and Prof. Lawrence M. DuBuiske, MD, FAAAAA3, 4, Institute of Nutrition, Russian Academy of Medical Sciences, Moscow, Russia, 5Institute of Nutrition Russian Academy of Sciences, Russia, 6Institute of Nutrition Russian Academy of Sciences, Russia, 7George 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 Ponnama1, Ms. Shruthi Thada1, Mrs. Lavanya Joshi1, Dr. Vijayalakshmi Valluri1, 2 and Dr. Sunamitha Gaddam1, 2, Bhagwan mahavir medical research center, Hyderabad, India, 3LEPRA 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 MD1, 2, Ms. Di Xue3 and Dr. Bruce D. Mazer, MD, FAAAAA1, 2, 3Meakins-Christie Laboratories, Montreal, QC, Canada, 4Division of Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, 5Mcgill university, Montreal, QC, Canada, 6Montreal Children’s Hospital, Montreal, QC, Canada, 7Meakins-Christie Laboratories, Research Institute - McGill University Health Centre, Montreal, QC, Canada

TUESDAY

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. Darveaux, MD1, Dr. Anna Hutterlocher2, Dr. Daniel Bennett1, Dr. Judith Smith1, Dr. Christine M. Seroogy, MD, FAAAAA1, 2 and Dr. James E. Gern, MD, FAAAAA1, 2, University of Wisconsin, 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, FAAAAA, 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. Buer Elliotng, 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) Hypermorphic 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, MD,1 and Dr. Troy R. Torgerson, MD, PhD,1,2 University of Washington, Seattle, WA,3 Children’s of Orange County,4 Seattle Children’s Hospital, Seattle, WA

867 Infections In Mannose-Binding Lectin Deficiency Patients
Dr. Mary K. Paul, MD1,2, Dr. Christopher Chang, MD, PhD, FAAAAI3, Dr. Magee DeFelice, MD4, Dr. Gang Ye, PhD5 and Dr. Sam Soundran, PhD6, Thomas Jefferson University Hospital, Philadelphia, PA,2 Alfred I du Pont Hospital for Children, Wilmington, DE, Nemours/Al duPont Hospital for Children, Philadelphia, PA, Nemours, Orlando, FL, Nemours

868 LRBA Causes Immunodeficiency and Autoimmunity By Deregulating NFB-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 Rikfin1, Ms. Bangmei Wang2, Dr. Narasaih Koliputi3, PhD4 and Dr. Richard F. Lockey, MD5,6, Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida, Morsani College of Medicine, Tampa, FL, James 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 Radiigan, Sam Black1, Jessica Overby1, Dr. Emelie Bagliella1, Dr. Isabelle Meys1, Prof. Jean-Laurent Casanova, MD, PhD2,3, Dr. Capucine Picard, MD, PhD2 and Dr. Charlotte Cunningham-Rundles, MD, PhD, FAAAAI, Mount Sinai Medical Center, New York, NY, University Hospitals Leuven, Belgium, Hospital Necker-Enfants Malades, Paris, France, Rockefeller 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, MD2, Dr. Andrea J. Apert, MD MA MSc, FAAAAI4, Dr. Patricia A. Takach, MD, FAAAAI and Dr. Benjamin P. Soule, MD1, University of Pennsylvania, Philadelphia, PA, Medical College of Wisconsin, Milwaukee, WI, UPENN, Philadelphia, PA

873A The Effects Of Anti-Seizure Medications On Patients With Anihbody Deficiency Syndrome
Dr. Tatyana Gavrilova, MD and Dr. Harumi Jyonouchi, MD, Rutgers University of Medicine and Dentistry, Newark, NJ

Epidemiology and Risk Factors of Asthma

Dr. Fernanda Patini Furlan, Dr. Djairina Andrade, Danielli Christinni Bichuete-Silva, MD1, Dr. Tessa Rachel Tranquillini Gonçalves, MD2, Dr. Inês Camelio Nunes2 and Prof. Dirceu Sole, MD, PhD3, Division of Allergy and Clinical Immunology, Dept of Pediatrics, Escola Paulista de Medicina, Federal University of São Paulo, São Paulo, Brazil, São Paulo, Brazil, Universidade Federal de São Paulo, São Paulo, Brazil, Federal 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, PhD3, Children’s Mercy Hospitals and Clinics,7 Children’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 Katsic, MD1, Dr. Rand-Weaver3, YuBin Choi3, Elizabeth Kruemel3 and Dr. Young J. Juhn, MD, MPH4, Mayo Medical School, Rochester, MN, Mayo Medical School, Dept 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, MD1,2, Dr. Ai Masumoto2, Dr. Takehito Kobayashi, MD3, Dr. Atsushi Kamiyio, MD2, Dr. Yoshitaka Uchida1,2, Prof. Kouichi Hagiwara, MD3, Prof. Minoru Kanazawa, MD1,2, Dr. Makoto Nagata, MD1,2, Department of Respiratory Disease, Saitama Medical University, Japan, Allergy 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, MD4 and Dr. Sang-Myeon Park, MD5, Dept. of Pulmonology and Allergy, Hallym University Dongtan Sacred Heart Hospital, Hwasung, South Korea, Dept. of Pulmonology and Allergy, Hallym University Dongtan Sacred Heart Hospital, Hallym University Dongtan Sacred Heart Hospital, Hallym University School of Medicine, Anyang, Hallym 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, FAAAAI, Dr. Alejandra Macias-Weinmann, MD2, Prof. Alfredo Arias-Cruz, MD, FAAAAI, Dr. Maria Del Carmen Zarate-Hernandez, MD3, Dr. Idalia V. Yanez-Perez, MD4 and Dr. Hilda Hernandez-Sanchez, MD4, University Hospital Dr. Jose Eleuterio Gonzalez, UANL, Monterrey, Mexico, Hospital Universitari UANL, Monterrey, N.L., Mexico, University Hospital, Monterrey, Mexico, Regional 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 Chung, 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
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.,1,2 Zainab Kagen, M.D.3, Prof. Steve L. Kagen, MD, FAAAAI1, and Joe Zondlo, M.D.3,1 University 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, PhD3, Peng Guan, BS3, Dr. Francesca Sarett, MD4, Katie Ruyman, BS1, Hamid Bassiri, MD, PhD3, Dr. Kim E. Nichols, MD5, and Dr. Jonathan M. Spergel, MD, PhD, FAAAAI1,2. The Children’s Hospital of Philadelphia, 1University of Florence Italy, Italy, 2University of Pennsylvania, 3Ospedale Di Palmanova, ASS S Bussa Friuliana, Paganucio, Italy, 4Children’s Hospital of Philadelphia, Philadelphia, PA, 5The 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 ChB5 and Seema Sharma Accevs, MD, PhD, FAAAAI6. University 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, 5University 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, PhD1,2, Dr. Akio Matsuda, PhD2, Dr. Tetsuo Shoda, MD2, Dr. Hideaki Morita, MD, PhD,2 Dr. Katsumi Arai, MD3, Dr. Hirotaka Shimizu, MD3, Dr. Yoshiyuki Yamada, MD, PhD4, Dr. Yukihiro Ohyu, 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

884 Targeting Patient Education: Correlating Fluctuating Pollen Counts With Patient Online Inquiries Into Asthma and Allergic Rhinitis
Dr. John M. Kern, D.O.1,2, Dr. Leonard Bielory, MD, FAAAAI1,2 and Mr. Spencer H. Luster1,4,14, Rutgers University - NJMS, oceanport, NJ, 2Robert Wood Johnson University Hospital, New Brunswick, NJ, 3STARx Allergy and Asthma Center, Springfield, NJ, 4University of Pennsylvania, Philadelphia, PA

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

882 Atopic Characteristics Of Patients With Paroxysmal Vocal Cord Dysfunction
Casey Curtis, MD1,2, Mcegan W. Shepherd, MD1,2, Gary Phillips, M.A.S.1 and Princess U. Ogbogu, MD, FAAAAI1,2, 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

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

895 Failure To Thrive In a Pediatric Cohort With Eosinophilic Esophagitis
Dr. Brenda Paquet, MD, FRCPC1, Dr. Philippe Bégin, MD, MSFRCPC2, 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

891 Characteristics Of Eosinophilic Esophagitis Among Children Living In Rural, Southern United States
Ms. Erin O’Brien1,2, Dr. Troy Gibbons, MD1,2, Dr. Amy M. Scurllock, MD1, Dr. Jennifer Oliver, MD1,2, Mallikarjuna Retiganti, PhD1,2, Maria Melguizo Castro1,2, Ms. Peggy L. Chandler, APN1,2, Audrey Fendley, RD1, Dr. Helen Casteel, MD1,2, Dr. Mar- yelle VonLanthen, MD1,2, Dr. Stephen Fiedorek, MD1,2, Dr. Tamara T. Perry, MD1,2, Stacie M. Jones, MD1,2 and Dr. Robbie D. Pesek1,2, 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
Eosinophilic Esophagitis Due To Egg Allergy Presenting As Eosinophilic Esophagitis and Serum Eotaxin-3 Levels: A Non-Dr. Cristina Jimenez-Aponte, MD, FAAAAI, Penn State Hershey Medical Center, Hershey, PA
Dr. Samantha K. Lin, MD, FAAAAI, Southern CA Permanente Med Grp, San Diego, CA
Dr. Kevin Tse, MD, Vanderbilt University School of Medicine, Nashville, TN, 3Nationwide Children’s Hospital, Columbus, OH

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

Eosinophilic Esophagitis and Selective IgA Deficiency: A New Combined Disorder Dr. Eric Gonzalez Hernandez, MD, 1,2 Dr. Vylma Velazquez, MD, 2,3 Hospital Episcopal San Lucas-Ponce, 3Hospital Episcopal San Lucas, Ponce, PR

Assessing IgE-Mediated Reactions In Children Presenting To An Allergy Clinic With a Suspected Antibiotic Allergy Mr. Christopher Mill, BSc, 1,2 Dr. Marie-Noël Primeau, MD, 2, Dr. Christine Lejtenyi, MD, 3 Dr. Elaine J. Medoff, 3 Ms. Nofar Kimchi 3 and Dr. Moshe Ben-Shoshan, MD, MS, 3, 4 Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 5McGill University Health Center, Montreal, QC, Canada, 6Montreal Children’s Hospital, Montreal, QC, Canada, 7Technicon American Medical Students Program, Israel, 8Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, 9Montreal Children’s Hospital, Montreal, Canada

Hypersensitivity Drug Reactions (HDR) In Latin America. Similarities and Differences Between Children and Adults Dr. Ricardo Cardona-Villa, MD, 1 Dr. Edgardo J. Jares, MD, 2 Dr. Maximiliano Gómez, 3, 5 Dr. Luis Felipe C. Ensina, MD, 6, 7 Dr. Mario Sánchez-Borges, MD, FAAAAI, 8, 9 Dr. Alfredo Arias Cruz, 2, 10 Dr. Carlos Serrano, 2, 10 Dr. Mabel Noemi Cuello, MD, 11 Ivan Cherzez, 2, 10 Dr. Andrea Zanacchi, 10 Prof. Alicia De Falco, 1, 2 Dr. Vylma Velazquez, 2 Hospital Episcopal San Lucas-Ponce, 3 Hospital Episcopal San Lucas, Hospital Episcopal San Lucas-Ponce, PR

Rituskan Hypersensitivity and Management Dr. Johnnet T. Wong, MD, FAAAAI, 1, 2 Dr. Aleena Banerji, MD, 3, 4 Dr. Timothy P. Lax, MD, 5, 6 Dr. Aidan Long, MD, FAAAAI, 1, 2 Dr. Michael T. Wilson, MD, PhD, 1 and Dr. Caroline Sokol, MD, PhD, 1 Division 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, 3Massachusetts General Hospital

Diagnostic Evaluation Of Hypersensitivity Reactions To Beta-lactam Antibiotics In A Large Population Of Children Dr. Maria J Torres, MD, PhD, 1, 2 Dr. Maria Angeles Zambonino, 2 Dr. Jose Luis Corzo, MD, 3, 2 Dr. Candelaria Muñoz, 2, 3, 4 Dr. Gloria Requena, 2, 3, 4 Dr. Adriana Ariza, PhD, 1, 2 Dr. Cristobalina Mayorga, PhD, 1, 2 Dr. Antonio Urda 1 and Dr. Miguel Blanca, MD, PhD, 1, 3 Allergy Service, Carlos Haya Hospital, Málaga, Spain, 2Allergy Service, Carlos Haya Hospital, 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

Clinical Presentation and Outcomes Of Children Undergoing Evaluation For Drug Allergy Dara Mairiang, MD, 1, 2, 3 Dr. Wiparat Manuyakorn, MD, 1, 2, 3 Wasu Kamchaisatan, MD, 1, 2, 3 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

Analysis Of Hypersensitivity Reactions In A Large Series Of Children Dr. Maria Angeles Zambonino, 1, 2 Dr. Candelaria Muñoz, 2, 3, 4 Dr. Jose Luis Corzo, MD, 2, 3, 4 Dr. Gloria Requena, 2, 3, 4 Dr. Adriana Ariza, PhD, 1, 2 Dr. Cristobalina Mayorga, PhD, 1, 2 Dr. Antonio Urda, 1 and Dr. Miguel Blanca, MD, PhD, 1, 3 Allergy Service, Carlos Haya Hospital, Málaga, Spain, 2Pediatric Service, Carlos Haya Hospital, Málaga, Spain, 2Research Laboratory for Allergic Diseases, Hospital Regional Universitario de Malaga - FIMABIS-IBIMA, Malaga, Spain

Assessing IgE-Mediated Reactions In Children Presenting To An Allergy Clinic With a Suspected Antibiotic Allergy Mr. Christopher Mill, BSc, 1, 2 Dr. Marie-Noël Primeau, MD, 2, 3 Dr. Christine Lejtenyi, MD, 3 Dr. Elaine J. Medoff, 3 Ms. Nofar Kimchi 3 and Dr. Moshe Ben-Shoshan, MD, MS, 3, 4 Division of Clinical Epidemiology, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada, 5McGill University Health Center, Montreal, QC, Canada, 6Montreal Children’s Hospital, Montreal, QC, Canada, 7Technicon American Medical Students Program, Israel, 8Division of Paediatric Allergy and Clinical Immunology, Department of Paediatrics, McGill University Health Centre, Montreal, QC, Canada, 9Montreal Children’s Hospital, Montreal, Canada

Eosinophilic Esophagitis and Selective IgA Deficiency: A New Combined Disorder Dr. Eric Gonzalez Hernandez, 1, 2 Dr. Vylma Velazquez, MD, 2, 3 Hospital Episcopal San Lucas-Ponce, 3Hospital Episcopal San Lucas, Ponce, PR

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

Drug Allergy

5207
Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM
Cephalexin Cross-Reactivity In Skin Test Dr. Jong-Myung Lee, MD, 1, 2 and Dr. Min-Hye Kim, 1, 2, 3 Regional Pharmacovigilance Center, Kyungpook National University Hospital, Daegu, South Korea, 4Department of Internal Medicine, Kyungpook National University School of Medicine, Daegu, South Korea, 5Department of Internal Medicine, Kyungpook National University School of Medicine, Daegu, South Korea
911 Copy Number Variations In ALOX5 and PTGER1 Genes Are Associated With Susceptibility To AERD and Mnsaid-UA

Mrs. Maria Del Carmen Plaza Serón, Bsc,1 Dr. Pedro Ayuso Parejo, PhD1, Dr. Natalia Blanca-López, MD, PhD2, Dr. Inmaculada Doña, MD, PhD2, Dr. Jose A Conorno-García, PhD3, Dr. Maria José Torres, MD, PhD3, Dr. Javier Fernández2, Dr. Jose Julio Laguna, MD, PhD2, Veronique Godineau1, Ms. Miriam Osorio5, Mrs. Luisa Galindo, RN2, Dr. Gabriela Canto, MD, PhD3 and Dr. Miguel Blanca, MD, PhD3, Allergy Service, Infanta Leonor Hospital, Madrid, Spain, 2Allergy Service, Carlos Haya Hospital, Málaga, Spain, 3Research Laboratory, Carlos Haya Hospital, Málaga, Spain, 4UMH Alicanté 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 Conorno-García, PhD1, Dr. Maria J Torres, MD, PhD2, Dr. Javier Fernández2, Dr. Jose Julio Laguna, MD, PhD2, Ms. Miriam Osorio5, Veronique Godineau1, Mrs. Luisa Galindo, RN2, Dr. Gabriela Canto, MD, PhD3 and Dr. Miguel Blanca, MD, PhD3, Allergy Service, Infanta Leonor Hospital, Madrid, Spain, 2Allergy Service, Carlos Haya Hospital, Málaga, Spain, 3Research Laboratory, Carlos Haya Hospital, Málaga, Spain, 4UMH Alicanté 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 Anti-Inflammatory Drugs (NSAIDs)-Induced Acute Urticaria: A Genome-Wide Association Study In The Spanish Population

Dr. Jose A Conorno-García, PhD1, Dr. Mike Lee2, Dr. Natalia Blanca-López, MD, PhD1, Dr. Lieh-Bang Lhou1, Dr. Chien-Hsun Chen2, Dr. Inmaculada Doña, MD, PhD2, Dr. Veronique Godineau1, Dr. Jose Julio Laguna2, Dr. F. Javier Fernandez, MD, PhD3, Dr. Pedro Ayuso Parejo, PhD3, Mrs. Maria del Carmen Plaza-Serón, Bsc5, Dr. Gabriela Canto, MD, PhD3 and Dr. Miguel Blanca, MD, PhD6, Research Laboratory, Carlos Haya Hospital, Málaga, 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 Alicanté G. University Hospital - Allergy Sect., Alicante, Spain, 92008-2010 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, MD3,2, Joseph Karl3, Sandra Tompkins2, Dawn Nyland2, Jo Ann Clough2, Jane Ludwig2 and Sameer K. Mathur, MD, PhD, FAAAAl,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. Sindhu 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 Sanchez2 and Dr. Ricardo Cardona-Villa, MD, 1Universidad de Antioquia, Colombia, 2Universidad de Antioquia, Medellin, Colombia

918 Effect Of Penicillin Allergy On Outpatient Antibiotic Prescriptions At VA Hospital

Mark Biagtan, MD1,2, Bryan Babler, BS Pharm RPh5, Sujani Kukumani, MD1,2 and Sameer K. Mathur, MD, PhD, FAAAAl,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, PhD2, Dr. Maria Angeles Zamboino5, Dr. Maria Isabel Montaínez, PhD2, Dr. Maria Salas, MD, PhD2, Ms. Maria Dolores Ruiz3, Ms. Lidia Melendez, Lab. Tech.3, Mrs. Maria D Cañamero1, 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, FAAAAl, University Texas SW Medical Center, Dallas, TX

921 Allergy To Betalactams In Brazil: Placebo Effect Or Misdiagnosis?

Dr. Manoela Crespo-Magalhaes1, Dr. Marcelo Vivolo Aun, MD, Dr. Roberta Almeida-Castro2, Dr. Marisa Rosimeire Ribeiro, MD3, Dr. Laila Sabino Sabino Garro, MD, PhD2, Prof. Jorge Kallí, MD, PhD3, Prof. Antonio Abilio Motta, MD, PhD3 and Prof. Pedro Givina-Bianchi, MD, PhD, FAAAAl, 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 Nickels, MD and Dr. Michael Park, MD, FAAAAl, Mayo Clinic, Rochester, MN

923 Successful Oxacillin Desensitization With Interrupted Dosing Versus Continuous Infusion

Dr. Nelinda Braskett, MD, UCLA Med Center - Mattel Children’s Hospital, Los Angeles, CA and Dr. Monika Sacedian, MD, University of California, Los Angeles

924 IgE To Penicillins With Different Specificities Can Be Identified By a Multipieptope Macromolecule. Bileaptenic Penicillin Structures and IgE Specificities

Dr. Adriana Ariza, PhD1, Dr. Cristobalina Mayorga, PhD2, Dr. Maria Jose Torres, PhD2, Dr. Maria Isabel Montaínez,
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

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 Southern Florida Morsani College of Medicine and James A. Haley Veterans’ Affairs Hospital, Tampa, FL

Clinical Predictors Of The Outcome Of Medication Challenges  
Dr. Farah Khan, DO1,2, Dr. Christopher Chang, MD, PhD, FAAAAA and Dr. Gang Ye, PhD, 1Thomas Jefferson University Hospital, Philadelphia, PA, 2Alfred I duPont Hospital for Children, Wilmington, DE, 3Nemours, Orlando, FL

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, FAAAAA, William Beaumont Hospital, Royal Oak, MI

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

Perioperative Reactions: Are They So Infrequent?  
Dr. Claude M. Urbain, MD1, Dr. Alberto Luquente, MD2, Dr. Gracia Javaloyes, MD, PhD1, Dr. Paula Cabrera-Freitag, MD, PhD1, 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, FAAAAA1 and Dr. Gabriel Gastaminza, MD, PhD1, 1Department of Allergy, Clínica Universidad de Navarra, Spain, 2Department of Anesthesia, Clínica Universidad de Navarra, Spain, 3Department of Allergy, Clínica Universidad de Navarra, Pamplona, Spain, 4Department of Allergy, Clínica Universidad de Navarra, Pamplona, Spain

Causes Of Perioperative Allergic Reactions – Our Experience In The Last Two Years  
Dr. Louites Asechena, MD, Mrs. Deborah Hughes, RN, Dr. Bryan N. Fernandez, MD, Dr. Marina Tsoumani, MD and Dr. Susana F Marinho, MD, PhD, University Hospital of South Manchester NHS Foundation Trust, Manchester, United Kingdom

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. Ennsa, MD4, Dr. Juan C. Iavicevich, MD5, Dr. Alfredo Arias Cruz2, Dr. Maximilianó Gómez7, Dr. Mabel Noemi Cuello, MD8, Dr. Paola Toche Pinaud9, Dr. Blanca Maria Morfin-Maciel, MD10, Prof. Alicia De Falco11, Dr. Adolfo Salviatierra12, Dr. Juan F. Schuhl, MD, FAAAAA13, Dr. Ivan Osvvaldo Tinoco Moran, MD14, Dr. Susana Barayasari15, Dr. Andrea Zanacchi16, Prof. Ada Castillo Méndez16 and Dr. Mario Sánchez-Borges, MD, FAAAAA17, 1.C.M.P. SA, Buenos Aires, Argentina, 2Universidad de Antioquia, Medellín, Colombia, 3Catholic University of Cordoba, Cordoba, Argentina, 4Universidade Federal do São Paulo, São Paulo, Brazil, 5Division of Immunology, Medical School, Universidad del Salvador, Buenos Aires. Head of the Division of Allergy and Immunology, Clinica Santa Isabel, Buenos Aires, Argentina, 6Hospital Universitario, Monterrey, Mexico, 7Hospital San Bernardo, Salta, Argentina, 8Consultorios San Juan, San Juan, Argentina, 9Clinica Las Condes, Santiago, Chile, 10Hospital Mocel, 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 Clínico Quirúrgico Dr. Salvador Allende, La Habana, Cuba, 17Clinica El Avila, 6a transversal Altamira, piso 8, consultorio 803, Caracas, Caracas, Venezuela

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 AAAA, Dr. Rosalía Emma, Dr. Raffaella Lizzio and Prof. Riccardo Polosa, MD, PhD, FAAAAI, University of Catania, Catania, Italy

Utility Of ICD-9-CM Codes For Identification Of Allergic Drug Reactions  
Dr. Rebecca Saff, MD, PhD1, Dr. Carlos Camargo Jr., MD, DrPh1,2, Dr. Susan A. Rudders, MD1, Dr. Sunday Clark, MPH, ScD1, Dr. Aidan Long, MD, FAAAAA1 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

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 Penn State Milton S. Hershey Medical Center, Hershey, PA

Detection Of Causative Drugs Using Measurement Of Interferon-α/β QuantiFERON-TB Gold Test In Severe Drug Allergy: Preliminary Study  
Dr. Young-Hee Nam, MD1, Dr. Kyong-Hee Kim, MD2, Dr. Dong Sub Jeon, MD3, Dr. Hye-Won Lee, MD4, Hee-Joo Nam5 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

Successful Rapid Desensitization To Glatiramer Acetate In a Patient With Multiple Sclerosis  
Dr. Ekaterini I. Syringos, PhD, Department of Allergy, “Sotiria” General Hospital, Athens, Greece, Dr. Photos Psarros, Department of Allergy, Athens Naval Hospital ,Greece and Prof. Konstantinos Syringos, Athens School of Medicine, Greece

Hypersensitivity Reaction To Denosumab In Patient With Osteoporosis: Desensitization Methodology  
Dr. Antonio Foncubierta, MD, MPH1,2, Dr. Diego Gutierrez, MD, PhD3, Dr. Fermín Medina, MD1, Dr. Salvador Fernandez, MD,
PhD, Dr. Maria Jose Fernandez and Dr. Juan Luis Anguita, MD, 1 Servicio Andaluz de Salud: UGC Joaquin Pece, 2 Universidad de Cadiz, 3 Hospital Universitario Puerta del Mar, 4 Hospital Universitario Carlos Haya, 5 Complejo Hospitalario de Jaen

939 Patient With Severe Primary IgF-I Deficit and Mecasermin Allergy: Desensitization Methodology
Dr. Diego Gutierrez, MD, PhD1, Dr. Antonio Foncubierta, MD, PhD MPh2,3, Alfonso M. Lechuga, MD, PhD1, Dr. Maria Jose Fernandez1, Juan Luis Anguita, MD, PhD and Jose Luis Lechuga, MD, PhD3, 1 Hospital Universitario Puerta del Mar, 2 Servicio Andaluz de Salud: UGC Joaquin Pece, 3 Universidad de Cadiz, 4 Complejo Hospitalario de Jaen

940 Drug-Induced Anaphylaxis: A Five Year Study In a Third Level Spanish Hospital
Maria Elisa Caralli, M.D.1, Sarah Miccozzi, M.D.1, Abdonias Rodriguez Gamboa, M.D.1, Dasha Roa Medellin, M.D.1, Alberto Alvarez-Perea, MD2 and Manuel De Barrio, M.D.1, 1Hospital General Universitario Gregorio Marañón, Allergy Department, Madrid, Spain, 2Hospital Materno Infantil Gregorio Marañón, Pediatric Allergy 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 Amez, 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.

942 A Successful Desensitization Protocol For Filgrastim
Brett Hronek, MD, Washington University School of Medicine, St Louis, MO and Anthony Kuczynski Jr., MD, FAAAAI, Washington University School of Medicine, St. Louis, MO

943 Are Proton Pump Inhibitors (PPI) Naive? A Case Of Drug Reaction With Eosinophilia and Systemic Symptom (DRESS) Secondary To Lansoprazole
Dr. Aditya Uppalapati, MD1, Dr. Sindhura Gogineni, MD1, Dr. Savantika Koneru, MBBS2 and Dr. Ghassan Kamel, MD3, 1St Louis University, St. Louis, MO, 2Ramon y Cajal University Hospital, Spain. 3Hospital General Universitario Gregorio Marañón, Madrid, Spain.

944 Increased Of PCT and CRP In Dress Syndrome By Two Drugs Structurally Unrelated Molecular In The Same Patient
Dr. Rafael A. Perez Arango, Ramon and Cajal University Hospital, Spain

945 Non-Immediate Skin Reactions Due To Antibiotics
Gabriela Zambrano, M.D.1, Dr. Tamara Fernandez2, Beatriz Amez, M.D.2, Celia Pinto1, Alberto Alvarez-Perea, MD2 and Manuel De Barrio, M.D.3, 1Department of Allergy, Gregorio Marañón University Hospital, Madrid, Spain, 2Hospital General universitario gregorio maraño, Madrid, Spain, 3Department of Allergy, Gregorio Marañón University Hospital, Madrid, Spain., 4Hospital Materno Infantil Gregorio Marañón, Pediatric Allergy Department, Madrid, Spain, 5Hospital General Universitario Gregorio Marañón, Allergy Department, Madrid, Spain

946 Multiple Drug Hypersensitivity Syndrome In Our Allergy Service
Dr. Inmaculada Dona, MD, PhD, Dr. Maria J Torres, MD, PhD, Dr. Paloma Campo, MD, PhD, Dr. Francisca Gomez, MD, PhD, Dr. Maria Salas, MD, PhD, Ms. Maria Dolores Ruiz, Ms. Maria Auxilladora Guerro and Dr. Miguel Blanca, MD, PhD, Allergy Service, Carlos Haya Hospital, Malaga, 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 and Dr. Jong-Myung Lee, MD1,3, 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. Atkins, 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 Folinate: A Case Report
Dr. Maria Alicia Urena Tavera, MD1, Dr. Miriam Zamora Verduga1, Mrs. Denisse Angel Pereira1, Dr. Ricardo Madrigal-Burgaleta, MD2, Dr. Pilar Berges, MD, PhD2 and Dr. Emilio Alvarez-Cuesta21, Ramon y Cajal University Hospital, Spain, 2Ramon y Cajal University Hospital, Madrid, Spain

951 Dual Hypersensitivity To Oxiaptatin Revealed Followed Rapid Drug Desensitization: A History Of Anaphylaxis and New-Onset Hemolytic Anemia
Dr. Jared Silver, MD, PhD1, Dr. Timothy Kyin, MD1 and Dr. Mariana C. Castells, MD, PhD, FAAAAI2, 1B Brigham and Women’s Hospital, Boston, MA, 2Division of Rheumatology, Allergy and Immunology, Department of Medicine, Brigham and Women’s Hospital, Harvard Medical School, Boston, MA

952 Outpatient Lenalidomide Desensitization For Delayed Hypersensitivity Reactions In 5 Patients With Multiple Myeloma
Dr. Min Jung Lee, MD1, Dr. Paige G. Wickner, MD, Dr. Robert Schlossman, MD1, Dr. Paul Richardson, MD1, Dr. Jacob Laubach, MD1 and Dr. Mariana C. Castells, MD, PhD, FAAAAI2, 1B Brigham & Women’s Hospital, Boston, MA, 2B Brigham & Women’s Hospital, Chestnut Hill, MA, 2Dana Farber Cancer Institute, Boston, MA, 2Division 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 Systemic Symptoms (DRESS) With Well-Formed Non-Necrotizing Granulomas On Bone Marrow Biopsy
Dr. Katie Miro, MD, Rutgers- New Jersey Medical School, Newark, 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 University, Portland, OR, Dr. David R. Scott, MD, Allergy and Asthma Center of Western Colorado and Dr. Anthony Montanaro, MD, FAAAAI, Oregon Health Science University, Portland, OR

Ocular Allergy

5208 Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

Ocular Surface Disease Index (OSDI) and Pollen Counts (PC)
Mr. Spencer H. Luster, STARx Allergy and Asthma Center, Springfield, NJ; University of Pennsylvania, Philadelphia, PA and Dr. Leonard Bielory, MD, FAAAAI, Rutgers University, New Brunswick, NJ; Robert Wood Johnson University Hospital, New Brunswick, NJ

Efficacy and Safety Of A New Olopatadine Hydrochloride, 0.77% Ophthalmic Formulation In Patients With Allergic Conjunctivitis Using The Conjunctival Allergen Challenge (CAC) Model
(NCT01479374)
Gail Torkildsen, Andover Eye Associates, Andover, MA, Thomas Macejko, Apex Eye, Fairfield, OH, Abhijit Narvekar, Alcon Laboratories, Inc., Fort Worth, TX and Mark Bergmann, Apex Eye, Cincinnati, OH
Cytokine Secretion Profiles In The Tears Of Patients With Chronic Allergic Conjunctivitis
Dr. Naoko Okada, Dr. Hiroshi Fujishima, Dr. Kazumi Fukagawa, Dr. Akio Matsuda, PhD, Dr. Hirohsita Saito, MD, PhD, and Dr. Kenji Matsumoto, MD, PhD, 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

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 Biely, MD, FAAAAI, Robert Wood Johnson University Hospital, New Brunswick, NJ, Rutgers University, New Brunswick, NJ

Ocular Symptoms Are Proportionally More Bothering 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

Alcaftadine 0.25% Versus Olopatadine 0.2% In Prevention Of Ocular Itching In Allergic Conjunctivitis
Eugene B. McLaurin, MD, FACS1, Nicholas P. Marsico, MD, FACS,1 Joseph B. Ciolino, MD,2 Linda Villanueva, COT,2 Julia M. Williams, MA, BS2 and David A. Hollander, MD, MBA1, Total Eye Care P.A., Memphis, TN, 1East West Eye Institute, Los Angeles, CA, 2Massachusetts Eye & Ear Infirmary, Harvard Medical School, Boston, MA, 4Allergan, Inc., Irvine, CA

Cetirizine Significantly Relieves Ocular Allergy Symptoms In Subjects With Seasonal Allergic Rhinitis
Dr. Mittesh Patel, PharmD3, Dr. Eduardo Urdaneta, MD1, Ms. Kathleen B. Franklin, BSN, RN2, Ms. Xiaoyan Tian, MS2, Ms. Mei-Miau Wu, Dr Ph1 and Ms. Qiong Du, MS3, 1McNeil Consumer Healthcare, Fort Washington, PA, 2Franklin Consultants, LLC., Pheonixville, PA, 3Johnson & Johnson Consumer Products, China, Shanghai, China, 4& J Consumer Products, US, Morris Plains, NJ

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, Ms. Mei-Miau Wu, Dr Ph1, Ms. Qiong Du, MS3, Ms. Kathleen B. Franklin, BSN, RN2 and Dr. Mittesh Patel, PharmD3, 1McNeil Consumer Healthcare, Fort Washington, PA, 2Johnson & Johnson Consumer Products, China, Shanghai, China, 3& J Consumer Products, US, Morris Plains, NJ, 4Franklin Consultants, LLC., Pheonixville, PA

Automated Evaluation Of Conjunctival Provocation Tests
Mr. Torsten Schlinge1, Mr. Jaron Zuberbier2, Dr. Oliver Kuehler1, Mr. Frank Goergen1, Prof. Torsten Zuberbier3 and Prof. Karl-Christian Bergmann5, 1Bleustone Technology GmbH, Woerstadt, Germany, 2Evangelic High-School Kleinmachnow, Germany, 3Allergy-Centre-Charité, Berlin, Germany

Allergen Immunotherapy

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Tuesday, March 4th, 2014, 9:45 AM - 10:45 AM

Aeroallergen Immunotherapy Reduces Wheal Diameter In Seasonal and Perennial Allergic Intradermal Skin Tests
Mr. Michael Hauk1, Mrs. Barbara A. McGoe, RN2, Mr. Parimal Patel1, Mrs. Nicole Argenzia, RN1 and Dr. Mary Ann Michelis, MD, FAAAI2, 1Hackensack University Medical Center, Hacken- sack, NJ, 2Center for Allergy, Asthma and Immune Disorders Hackensack University Medical Center, Hackensack, NJ

Nanoparticle Engineering For The Immunomodulation Of Dendritic Cells
Dr. Xavier le Guevel, PhD1, Dr. Tahia Fernandez, PhD, Dr. Adriana Ariza, PhD3, Dr. Maria Isabel Montanez, PhD4, Dr. Maria J Torres, MD, PhD, Dr. Cristobalina Mayorga, PhD6 and Dr. Miguel Blanca, MD, PhD,1 Bionan, Campanillas, Spain, 2Research Laboratory - FIMABIS Foundation, Malaga, 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, Malaga, Spain, 5Allergy Service, Carlos Haya Hospital, Malaga, Spain, 6Research Laboratory, Carlos Haya Hospital-FIMABIS, Malaga, Spain

Specific Immunotherapy Modified T-Cells Responses In A Spanish Population Of Der p Allergic Patients
Dr. Tahia Fernandez, PhD1, Dr. Cristobalina Mayoagra, PhD2, Dr. Enrique Gomez,1 Mrs. Rosa Garcia4, Mrs. Maria Isabel Sanchez3, Dr. Ana Aranda, PhD2, Ms. Miriam Osorio1, Dr. Miguel Blanca, MD, PhD4 and Dr. Maria Jos Torres, MD, PhD1, 1Research Laboratory - FIMABIS Foundation, Malaga, Spain, 2Research Laboratory, Carlos Haya Hospital-FIMABIS, Malaga, 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, Malaga, Spain

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, MD1, 1Larrey Hospital, CHU, Toulouse, France, 2Charite, Berlin, Germany, 3Stallegenes S.A., Antony, France

The Print Survey II: Perceptions Regarding Injection Number and Technique
Dr. Michael S. Tankersley, MD, FAAAI1, 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

Allergy Immunotherapy: Characteristics and Risk Factors For Recurrent Systemic Reactions
Kerline Ductan, MD1, Ewa Schafer, MD, FAAAI2, Rachel E. Story, MD2, Dheba Masood, MD2, Paul Detjen, MD2 and Ying Zhou, PhD2, 1Department of Internal Medicine, University of Chicago-NorthShore, Evanston, IL, 2Allergy and Immunology, NorthShore University HealthSystem (NUHS), IL, 3Kenilworth Medical Allergy & Immunology, Kenilworth, IL, 4Center for Clinical and Research Informatics (CCRI), NUHS Research Institute, Evanston, IL

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, Mrs. Maria Isabel Sanchez3, Dr. Ana Aranda, PhD2, Ms. Miriam Osorio1, Dr. Miguel Blanca, MD, PhD4 and Dr. Maria Jos Torres, MD, PhD1, 1Research Laboratory - FIMABIS Foundation, Malaga, Spain, 2Research Laboratory, Carlos Haya Hospital-FIMABIS, Malaga, 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, Malaga, Spain

The Effect Of The Ragweed Sublingual Immunotherapy Tablet MK-3641 On Rescue Medication Use
Dr. Sandra M. Gawchik, DO, FAAAI1, Dr. Peter S. Creticos, MD, FAAAI2, Kevin R. Murphy, MD1, Dr. Gary D. Berman, MD, FAAAI4, Dr. David I. Bernstein, MD, FAAAI3, Dr. Jennifer Malone, MD5, Dr. Amaroit Kaur, PhD6 and Dr. Hendrik Nolte, MD, PhD6, 1Allergy and Asthma Associates, Chester, PA, 2Johns Hopkins Division of Allergy & Clinical Immunology, 3Boys Town National
Asthma Epidemiology and Risk Factors

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, MD, Pingsheng Wu, PhD, MS,1,2 Kristina James, MD,1 Tebeb Gebretsadik, MPH,1,2, Gabriel Escobar, MD,4,5, Kecia N. Carroll, MD, D. Henry, PNP-BC,1,2,3, Sherry Liu, MS2, Eileen Walsh, RN, MPH1, Ed Mitchel, MS1 and Dr. Tina V. Hargett, MD, MPH1,2,3 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, 4Department of Biostatistics, Vanderbilt University School of Medicine, Nashville, TN, 5Peninsula Allergy & Asthma Center, Soldotna, AK, 6Kaiser Permanente Medical Care Program, Oakland, CA, 7Kaiser Permanente Northern California, Perinatal Research Unit, Division of Research, 6Department of Pediatrics, Vanderbilt University School of Medicine, Nashville, TN, 8Vanderbilt University School of Medicine, Nashville, TN

974 Ethnic Differences Of Reported Asthma Symptoms In Urban School-Based Screening Surveys
Dr. Margie Louisias, MD,1 Dr. Joanne Sordillo, ScD2,3, Mrs. Chunxia Fu, MS3,4 and Dr. Wanda Phitaponkul, MD, MS, FAAAAI1,2,5,6, Brigham and Women’s Hospital, Boston, MA, 3Channing Division of Network Medicine, Brigham & Women’s Hospital, Harvard Medical School, Boston, MA, 4Harvard Medical School, Boston, MA, 5Harvard School of Public Health, Boston, MA, 6Channing Laboratory, Brigham and Women’s Hospital, Boston, MA, 7Boston Children’s Hospital, Boston, MA

975 Year One Daycare Attendance Predicts Asthma At Age Seven: The Cincinnati Childhood Allergy and Air Pollution Study (CCAPS)
Dr. Gang Cheng, MD, PhD1, Linda Levin, PhD2, Dr. Andrew M. Smith, MD, FAAAAI,3 Dr. Tolly Epstein, MD, MS,4 Patrick Ryan, PhD5, Grace K. LeMasters, PhD,5 Dr. David I. Bernstein, MD, FAAAAI,1,2,3 Division of Immunology Allergy & Rheumatology, University of Cincinnati Medical Center, CINCINNATI, OH, 1University of Cincinnati, Cincinnati, OH, 2Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida, Morsani College of Medicine, Tampa, FL, 3Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida Morsani College of Medicine and the Joy McCann Culverhouse Airway Diseases Research Center, University of South Florida Morsani College of Medicine, Tampa, FL, 4The Pennsylvania State University, University Park, PA

976 Determining Risk Levels Of The Composite Asthma Severity Index (CASI)
Rebecca A. Zabel1, Dr. Peter J. Gergen, MD, MPH,2 Dr. Christina A. Sorkness, PharmD3, Jeremy Wildfire3, Mr. Agustin Calatoni, MA MS1 and Dr. Herman Mitchell, PhD4, 1Rho, Inc., Chapel Hill, NC, 2AIAIBDAITNIH, 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, MD,1,2 Ms. Christina Mahl, RN,2, Ms. Lisa D. Henry, PNP-BC2, Dr. Deborah Loman, PhD, CPNP,2, Dr. Robert C. Strunk IV, MD, FAAAAI1,2, Ms. Lisa A. Meadows, PNP-BC2 and Dr. Alyssa G. Ellis, MD,1, 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

Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

978 Novel NK Cytotoxicity Assay Enables Drug Discovery For Hemophagocytic Lymphohistiocytosis
Dr. Jinhzu Li, MD, PhD, Ms. Sarah E. Figueira, Ms. Julie Ferrel and Dr. Kimberly A. Risma, MD, PhD, FAAAAI, 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,1,2,3 Damien 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, MD,2 Division of Allergy and Immunology, Department of Internal Medicine, University of South Florida, Morsani College of Medicine, Tampa, FL, 3Division 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

Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

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, MD,2 Dr. Young Ho Jung, MD3, Kil-Yong Choi2, Mi-Jin Kang, MS2, Ho-Sung Yu2, Cheol Min Lee3, Prof. Youn Ho Shin, MD, PhD, Prof. Kangmo Ahn, MD, PhD,2 Prof. Kyung Won Kim, MD, PhD, Prof. Soo-Jong Hong, MD, PhD and cocoa study group1, 1Childrenhood Asthma Atopy Center, Department of Pediatrics, Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea, 2Asian 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
Eosinophilic Gastrointestinal Diseases

Tuesday, March 4th, 2014, 2:00 PM - 3:15 PM

984 IgE Anti-Respiratory Syncytial Virus Antibodies In Older Asthmatic Children
Mira Mandal, Dr. Rauno O. Joks, MD, FAAAAI, Dr. Kevin Norowitz, M.D., Dr. Diana Weaver, MD, Dr. Helen G. Durkin, PhD, Dr. Martin H. Bluth, MD, PhD, Dr. Stephen Kohlhoff, MD, and Dr. Tamar A. Smith-Norowitz, PhD, SUNY Downstate Medical Center, SUNY-HSC, Brooklyn, NY, SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY, SUNY Downstate Medical Center, Center for Allergy and Asthma Research, Brooklyn, NY, Wayne State University Medicine, Detroit, MI, Center 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, Dr. S. Stelzer-Braid, PhD, Dr. B.G. Toelle, PhD, Ms. C.M. Willenborg, BSc, Dr. H.K. Reddel, PhD, MBBS, Ms. F.L. Garden, MPH, Prof. A. Jaffe, PhD MD, Ms. R. Strachan, Dr. B.G. Oliver, PhD, Dr. Y.C. Belessis, MBBS, Prof. G.B. Marks, PhD, Dr. W.D. Rawlinson, PhD, MD, Woolcock Institute of Medical Research, Sydney, Australia, University of Sydney, Australia, Virology Division, SEALs Microbiology, Prince of Wales Hospital, Sydney, Australia, University of NSW, Australia, Sydney Children’s Hospital, Randwick Australia

986 Maternal Transfer Of Der p 1 and Blo t 5 Allergens and Their Asthma Symptons and Rhinovirus In A Longitudinal Children’s Cohort
Dr. Euan R. Tovey, PhD, Dr. S. Stelzer-Braid, PhD, Dr. B.G. Toelle, PhD, Ms. C.M. Willenborg, BSc, Dr. H.K. Reddel, PhD, MBBS, Ms. F.L. Garden, MPH, Prof. A. Jaffe, PhD MD, Ms. R. Strachan, Dr. B.G. Oliver, PhD, Dr. Y.C. Belessis, MBBS, Prof. G.B. Marks, PhD, Dr. W.D. Rawlinson, PhD, MD, Woolcock Institute of Medical Research, Sydney, Australia, University of Sydney, Australia, Virology Division, SEALs Microbiology, Prince of Wales Hospital, Sydney, Australia, University of NSW, Australia, Sydney Children’s Hospital, Randwick Australia

987 Rhinovirus Infection Is Associated With Changes In The Airway Microbiome
Dr. Kirsten Kloepper, MD, Dr. Valeri Poroyko, PhD, Mrs. Rose Vrits, BS, Mrs. Tressa Pappas, BS, Dr. Theresa Kang, PhD, Dr. Wai-Ming Lee, PhD, Mr. Michael D. Evans, MS, Dr. Ronald E. Gangnon, PhD, Dr. Yury Bochkov, PhD, Dr. Robert F. Lemanske Jr., MD, FAAAAI and Dr. James E. Gern, MD, FAAAAI, Riley Hospital for Children at Indiana University Health, Indianapolis, IN, University of Chicago, Chicago, IL, University of Wisconsin School of Medicine and Public Health, Madison, WI

988 Natural History Of Esophageal Remodeling In Pediatric Eosinophilic Esophagitis Treated For Four Years
Dr. Jessica Rajan, MD, Dr. Robert Newbury, MD, Arjum Anilkumar, BS, Ranjan Dohil, MD, Dr. David H. Broide, MBChB FAAAAI and Seema Sharma Aceves, MD, PhD, FAAAAI, Scripps Clinic Medical Group, San Diego, CA, Division of Allergy/Immunology, Department of Pediatrics, Division of Pulmonology, Department of Medicine, Department of Pediatrics, Division of Gastroenterology, Division of Gastroenterology, UCSD, Rady Children’s Hospital, San Diego, Division of Medicine, San Diego, CA, Pediatrics, 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, BA, Dr. Katherine E. Clarridge, MD, MSc, Dr. Margaret Collins, MD, Dr. Lisa J. Martin, PhD, Carol J. Henderson, PhD RD, and Dr. Marc E. Rothenberg, MD, PhD, FAAAAI, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, University of Cincinnati

990 Development Of Eosinophilic Esophagitis To Food After Development Of IgE Tolerance To The Same Food
Dr. Solrun Melkorka Maggadottir, MD, Dr. David Hill, MD, PhD, Dr. Terri F. Brown-Whitehorn, MD and Dr. Jonathan M. Spergel, MD, PhD, FAAAAI, Children’s Hospital of Philadelphia, Philadelphia, PA, Children’s Hospital of Philadelphia, The Children’s Hospital of Philadelphia, Philadelphia, PA

991 Mast Cells, Eosinophils and Eosinophilic Esophagitis
Dr. Jay Jin, MD, PhD, Dr. Jeffrey Alexander, MD, Hiroki Kita, MS, Diane Squillace, MS, Dr. Joseph A. Murray, MD, Dr. Amidra 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 Karsten, 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, MBChB, 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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993 Longitudinal Effect Of Food Allergy Education On Epinephrine Availability In Public Schools Dipika Patel, MD, Gwendolyn Johnson, BSN, RN, MEd, Danielle Guffey, MS, Charles Minard, PhD and Carla Davis, MD, Baylor College of Medicine, Houston, TX, Houston Independent School District, Houston, TX

994 Population Response To Change In Infant Feeding Guidelines For Allergy Prevention
Dr. Dean Tey, MD, Prof. Katrina Jane Allen, MD, PhD, FAAAAI, Ms. Rachel Peters, MPH, Dr. Jennifer Koplin, PhD, Prof. Mimi L. K. Tang, MD, PhD, FAAAAI, Prof. Lyle Garrin, PhD, Prof. Anne-Louise Ponsonby, PhD, Dr. Adrian Lowe, PhD, Melissa Wake, MD, PhD and Prof. Shayamali Dharmage, MD, PhD, Royal Children’s Hospital, Victoria, Australia, Murdoch Childrens Research Institute, Victoria, Australia, The University of Melbourne, Melbourne, Australia, University 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 Allergy 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. Andreea, 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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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. Anne Marie Salapatek, PhD3, Dr. Dee pen Patel, M.D.2 and Dr. Mark Larche, PhD2, 4Circassia Ltd, Oxford, United Kingdom, 2Topstone Research, Toronto, ON, Canada, 3Adiga Life Sciences Inc., Hamilton, ON, Canada, 4Inflamex 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 FAAAAI1, 2, Dr. Charles W. Frankish, MD3, Ms. Kristen Armstrong, M.Sc.4, Dr. Mark Larche, PhD2, 5Ms. Lisa Steacy, BSc3, and Dr. Rod Hafner, PhD2, 4Allergy 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, 5Adiga Life Sciences Inc. Hamilton, ON, Canada, 4McMaster University/St. Joseph’s Healthcare, Hamilton, ON, Canada, 5Circassia, Oxford, United Kingdom

1000 Epicutaneous Immunotherapy Induces Epigenetic Changes In Sensitized Mice
Lucie Mondoulet, PhD1, Dr. Vincent Dioszeghy, PhD1, Mrs. Melanie Ligois1, Mrs. Veronique Dheiff1, Mrs. Emile Puteaux1, Mrs. Camille Plaque1, Prof. Christophe Dupont, MD, PhD2 and Pierre Henri Benhamou, MD3, 4DBV Technologies, Bagneux, France, 5Hopital Necker Enfants Malades, Paris, France

1001 Ultra-Fast Hypoallergenic Birch Pollen Allergy Vaccine Allert Is Efficient and Safe: Results Of A Phase Ib Study
Dr. Francois Sperdini, MD1, Prof. Frederic de BLAY2, Dr. Lars Jacobsen, MD3, Prof. Marek Jutel, MD, PhD4, Dr. Margitta Worm, MD2, 5Dr. Gilles Della Corte, MD4, 6Dr. Alexander Kettner, PhD5, 7Dr. Vincent Charlon, PhD4, 8Dr. Charles W. Frankish, MD4, 9Dr. Francois Spertini, MD1, 2Division of Immunology and Allergy, CHUV, LAUSANNE, Switzerland, 3CHR U Strasbourg, France, 4Glostrup University Hospital, Copenhagen, Denmark, 5Wroclaw Medical University, Wroclaw, Poland, 6Charite - Universitaetsmedizin Berlin, Berlin, Germany, 7Aenergis SA, Epalinges, Switzerland, 8ANERGIS 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 Fil1, Dr. Alessandra Vultaggio1, Dr. Elisa Cardillicchia1, Dr. Cinzia Manuelli1, Dr. Andrea Casini3, Dr. Francesca Nencini1, Dr. Laura Maggi1, Dr. Sara Pratesi1, Dr. Giulia Petroni1, Dr. Francesca Boscano1, Prof. Ernesto Giovanni Occhiato2, Prof. Sergio Romagnani1, Prof. Enrico Maggi1 and Prof. Paolo Parronchi1, 1University of Florence, DENOTHE Center, Florence, Italy, 2University of Florence, Dept. of Chemistry “U. Shift”, Florence, Italy, 3University of Florence, Mass Spectrometry Center (CISM), Florence, Italy

Mechanisms of T Cell-Mediated Allergic Disease

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1003 TSLP Induces Corticosteroid Resistance In Natural Helper Cells Via STAT5 Pathway
Hiroki Kabata1, Kazuyo Moro2, 3, Koichi Fukunaga1, Yusuke Suzuki1, Katsumoni Masaki1, Tomoko Betsuyaku1, Shigeo Koyasu1, 2 and Prof. Koichiro Asano, MD1, 2Keio University School of Medicine, Tokyo, Japan, 3RIKEN Center for Integrative Medical Sciences, Kanagawa, Japan, 4PRESTO, JST, Japan, 5Tokai 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, Xiaoping Qi2, Prof. Chunxue Bai2 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 Chiang1, Alexander V. Grishin, PhD2, Madhan Masi lamani, PhD3, Miriam Merad, MD, PhD1, A. Karolina Palucka, MD, PhD1, 2Hideki Ueno, MD, PhD2, A. Wesley Burks, MD, FAAAAI3, Stacie M. Jones, MD4, Andrew H. Liu, MD5, Scott H. Sichener, MD, FAAAAI1, Robert A. Wood, MD, FAAAAI1, Wendy Davidson, PhD2, Hugh A. Sampson, MD, FAAAAI4 and M. Cecilia Berin, PhD1, 1Ichon 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, PhD2 and Hiroshito 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, MD2, Paul Wright3, William W. Kwok, PhD2, Ronald Turner, MD2, 1University of Virginia Health System, Charlottesville, VA, (2) Benaroya Research Institute at Virginia Mason, Seattle, WA
**L1 Human TNFR2 Exhibits Bi-Directional Control over Regulatory T Cells**

**Dr. Denise L. Faustman, MD, PhD**, Limi Wang, Yoshiaki Okubo, Massachusetts 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+ 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 Tregs into phenotypically homogeneous populations of effector Tregs (FOXP3+CD4+RO-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 Hazebruck, PhD**, Blanche Guillon, BSc, Marie-Francoise Drumare, BSc, Evelyne Paty, MD, Jean-Michel Wal, PhD, Marie-Franc¸oise 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 DPYSF\(^{\text{HMS}}\), 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, PhD**, Stefan Wohrl, MD, MSC, FAAPAAD, Felix Wantke, MD, FAAAAI, Friedrich Altmann, PhD, Floridsdorf 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 (0.41-6.6 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 p 12, rFel d 1, rAra h 2, and rPru p 3 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.
The RNA-Binding Protein Hur Is Required to Control Cytokine Expression in CD4+ T Cells

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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\textsuperscript{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 allergic driven airway lung inflammation.

Whole-Exome Sequencing Reveals \textit{IKKB} As a Cause of Combined Immunodeficiency

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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\textbeta, IKBo, and phospho-IKBo immunoblotting, retroviral mediated reconstitution of IKK\beta, and cell growth in an immortalized patient B cell line.

RESULTS: We found the same homozygous nonsense mutation in \textit{IKKB} (R286X) in both patients. IKK\beta acts as part of the IKK complex in NF-\kappaB activation and phosphorylates the NF-\kappaB inhibitor, IKBo. The mutation co-segregated with disease in both families. Western blotting showed absence of detectable IKK\beta, and retroviral mediated reconstitution with wild type IKK\beta corrected cell growth and restored IKBo phosphorylation and IKBo degradation in an EBV transformed patient B cell line.

CONCLUSION: These data indicate that mutated \textit{IKKB} 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 \textit{IKKB}.

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*

Dr. Katharine Faruqi, PhD1, Dr. Kei Fujimura, PhD2, Dr. Marcus Rauch, PhD3, Ad Faruqi4, Douglas Fadroski1, Dr. Tine Dennoor, PhD2, Dr. Christine Cole Johnson, PhD, MPH, FAAAAI1, Dr. Homer A. Boushey, Jr, MD, FAAAAI1, Dr. Edward M. Zoratti, MD, FAAAAI3, Dr. Dennis Ownby, MD, FAAAAI3, Dr. Nicholas W. Lukacs, PhD2, Dr. Susan V. Lynch, PhD1; 1University of California San Francisco, San Francisco, CA, 2University of Michigan, Ann Arbor, MI, 3Henry Ford Health System, Detroit, MI.

**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 metageneomic 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 interspecies 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 Caldivierica (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 (COCOA)

Prof. So Yeon Lee, MD, PhD1; Prof. Hay-Ran Lee2; Kang Mo Ahn3; Prof. Kyung Won Kim, MD, PhD2; Prof. Youn Ho Shin, MD, PhD4; Gyeong-shin Lee5, Seo Ah Hong5, Dr. Young-Ho Ho Jung, MD, PhD4; Dr. Eun Lee, MD4; Song-Yi Yang2, Dr. Ju-Hee Seo, MD4, Ji-Won Kwon5, Dr. Byoung-Ju Kim, MD, PhD1,4,14; Dr. Byoung-Ju Kim, MD, PhD1,4,14; Dr. Hyo-Bin Kim, MD, PhD1,4,14; Prof. Soo-Jong Hong, MD, PhD12; 1Department of Pediatrics, Hallym University College of Medicine, Seoul, South Korea; 2Division of Molecular and Life Sciences, Department of Life Science, Pohang University of Science and Technology (POSTECH), Pohang, South Korea; 3Department of Internal Medicine, Gachon University Gil Medical Center, Incheon, South Korea; 4Institute of Allergy and Clinical Immunology, Seoul National University Medical Research Center, Seoul, South Korea.

**BACKGROUND:** Chitin is a potent adjuvant in immune responses of Th2, Th1 and Th17. In our previous study, tumor necrosis factor – alpha (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 μg of ovalbumin (OVA) and 100 μg 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.
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 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.

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<0.03) 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.

Grass Pollen Allergies 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 higher 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-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.

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.
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 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^{-5}). The same pattern was observed for ra- diometric 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 gelatinease 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.

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, 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 eosin 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.
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.

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 not-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 questionnaire (LFQ) were administered at a median of 61.6 months from enrollment to assess unbaked/boiled egg consumption in current diet and symptoms.

RESULTS: Of 40 egg OIT-treated subjects, 22(40(55%)) were SU by year 2 (versus 27.5% at year 2). Of 8,925 egg OIT doses in years 2-4, 95% were symptom-free. 4555 (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%) placebo 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.

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-4Ra 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 >50% (EASI-50), Investigator’s Global Assessment (IGA) 0 or 1, and safety were assessed.

RESULTS: Baseline characteristics were similar between groups (EASI mean ±SD: 23.12±12.35 on dupilumab and 24.10±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.