Monday, March 5

Seminars 
7:00 to 8:00 am
Credit: 1.00 CME / 1.20 CE
Pre-registration and ticket required. Fee: $40. Continental breakfast included. Sessions and meals limited to 30 people.

4001 Asthma and Smoking: From Physiology to Diagnosis and Therapy
James F. Donohue, MD
Mark F. Sands, MD FAAAAI

4002 Biomarkers for Evaluating and Treating Asthma
Ian D. Pavord, MD
Sally E. Wenzel, MD FAAAAI

4003 What is New in Exercise-Induced Bronchial Constriction
Teal Hallstrand, MD MPH
Christopher C. Randolph, MD FAAAAI

4004 Approach to the Evaluation of Immunodeficiency in Adults
Joyce E. Yu, MD
Zuhair K. Balsam, MD FAAAAI

4005 Update on the Immunology and Management of HIV Infections
Elizabeth A. Secord, MD FAAAAI
William T. Shearer, MD PhD FAAAAI

4006 Pesticides, Herbicides and Other VOCs in Indoor Environments as Causes of Allergies and Asthma: What is Real?
John R. Cohn, MD FAAAAI
Ronald A. Simon, MD FAAAAI

4007 Evaluation of an Index Case of Work-Related Asthma
Leslie C. Grammer, MD FAAAAI
Hae-Sim Park, MD FAAAAI

4008 Problem-Based Learning: A Child with Recurrent Anaphylaxis
Amal H. Assa’ad, MD FAAAAI
Michelle B. Lierl, MD FAAAAI

4009 Allergic Reactions to Vaccines
Amanda Cox, MD
John M. Kelso, MD FAAAAI

4010 Adherence Management for Adults with Asthma
Cynthia S. Rand, PhD
Daniel A. Searing, MD

4011 Getting Ready for ICD-10: Cracking the Code
Marshall P. Grodofsky, MD FAAAAI
Stephen A. Imbeau, MD FAAAAI

4012 Are We Ready to Use Parasites to Treat Allergic Diseases?
Luisa Karla P. Arruda, MD FAAAAI
Philip J. Cooper, PhD

Allied Health Course ❀ticket required ❀fee required ❀included in the Virtual Annual Meeting

4013 Problem-Based Learning: Rhinitis and Aging
Jayant M. Pinto, MD
Raymond G. Slavin, MD MS FAAAAI

4014 Surrogate Markers of Mast Cell Activation
Joshua A. Boyce, MD FAAAAI
Melody C. Carter, MD

4015 Pediatric Asthma: Mechanisms, Management by the New Guidelines and Early Intervention
Ronina A. Covar, MD
Lynn M. Taussig, MD

4030 Practical Applications of Immune Replacement Therapy
8:00 am to 3:00 pm
Pre-registration and ticket required. Fee: $85. Box lunch included.
Credit: 6.75 CME / 8.10 CE
Moderator: Debra A. Sedlak, MSN CPNP

8:15 Therapeutic Immunoglobulin: What It Is and How It Works
Mark Ballow, MD FAAAAI

9:00 The Good, the Bad and the Challenges of Immune Therapy
Carla M. Duff, CPNP MSN CCRP

9:45 Break

10:00 PIDD Indications of Immune Therapy
Jordan Orange, MD PhD FAAAAI

10:45 Non-PIDD Uses of Immune Therapy
Stephen J. McGeady, MD FAAAAI

11:30 Quality of Life: Patient Care, Support and Education
Margaret R. Dodds, RN MS CPNP

12:15 Luncheon Discussion of Difficult Cases

1:30 Infusion Pumps for Therapy
William R. Blouin, ARNP
Carla M. Duff, CPNP MSN CCRP

2:15 Administration Devices for SCIG
Margaret R. Dodds, RN MS CPNP
Debra A. Sedlak, MSN CPNP

Plenary ❀

4101 Anaphylaxis in the New Millennium
8:15 to 9:45 am
Credit: 1.50 CME / 1.80 CE
Moderator: Vivian P. Hernandez-Trujillo, MD FAAAAI

8:15 Pathophysiology of Anaphylaxis: New Concepts
Stephen J. Galli, MD

8:45 Clinical Aspects of Mast Cell Dysfunction
Dean D. Metcalfe, MD FAAAAI

9:15 Risk Factors for Severe and Fatal Anaphylaxis
F. Estelle R. Simons, MD FAAAAI

Posters
Authors present: 9:45 to 10:45 am
Poster hours: 7:00 am to 6:00 pm
Session titles and abstracts to be announced.
### Symposium 4301

**Macrophages: More than an Alternative in Airway Diseases**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** Joshua A. Boyce, MD FAAAAI

10:45 Macrophages at the Center of the Allergic Universe  
Paul J. Bertsics, PhD

11:05 Macrophages: The Neglected Effector Cell of Allergic Inflammation  
Barbara Balestrieri, MD

11:25 Macrophages and Chronic Inflammation  
Jack A. Elias, MD

11:45 Question & Answer

### Symposium 4302

**What’s New in Indoor Mold: An Update on Health Effects and Exposure Assessment**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** W. Elliott Horner, PhD LEED AP FAAAAI

10:45 World Health Organization Guidelines for Indoor Air Quality  
Jay M. Portnoy, MD FAAAAI

11:05 What is New in Exposure Assessment for Indoor Mold and Remediation  
Brett J. Green, PhD

11:25 Indoor Mold and Asthma Onset  
Tina Reponen, PhD

11:45 Question & Answer

### Symposium 4303

**Mast Cell Activation Syndromes**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** Cem Akin, MD PhD FAAAAI

10:45 Mast Cell Activation Syndrome: Symptoms and Presentation  
Mariana C. Castells, MD PhD FAAAAI

11:05 Differentiating Idiopathic Anaphylaxis from Mast Cell Clonal Disorder  
Phillip L. Lieberman, MD FAAAAI

11:25 Mast Cell Surface Markers for Activation and Clonality  
Dean D. Metcalfe, MD FAAAAI

11:45 Question & Answer

### Symposium 4304

**Epigenetics and Immunologic Disease**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** Malcolm N. Blumenthal, MD FAAAAA

10:45 How Epigenetics Contributes to Asthma and Allergy  
Shuk-Mei Ho, PhD

11:05 Role of Epigenetics, Host Defense and Contending with Infection  
Speaker to be announced.

11:25 Role of Epigenetics, Autoimmunity and Auto Inflammation  
Speaker to be announced.

11:45 Question & Answer

### Symposium 4305

**Novel Treatment of Food Allergy**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** J. Andrew Bird, MD

10:45 Oral Desensitization in Patients with Peanut Allergy  
A. Wesley Burks, MD FAAAAI

11:05 Oral Desensitization Enabled with Omalizumab for Food Allergy  
Kari C. Nadeau, MD PhD FAAAAI

11:25 Traditional Chinese Medicine as Therapy for Food Allergy  
Julie Wang, MD FAAAAI

11:45 Question & Answer

### Symposium 4306

**Sneezy or Wheezy: Effect of Viral Diversity on Illness Severity**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** Robert F. Lemanske Jr., MD FAAAAI

10:45 Etiology of Viral Wheeze Determines Risk for Childhood Asthma  
Tuomas Jartti, MD

11:05 HRV-C: Bad Actor or Just Another Rhinovirus?  
E. Kathryn Miller, MD

11:25 RSV: A Role for Viral Genetic Diversity in Illness Severity?  
Martin L. Moore, PhD

11:45 Question & Answer

### Symposium 4307

**Making Sense of Lymphocyte Development**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** Christine M. Seroogy, MD FAAAAI

10:45 Sorting out T Cell Development  
M. Louise Markert, MD PhD FAAAAI

11:05 B Cell Differentiation and Control  
Speaker to be announced.

11:25 Birth of a Killer: NK Cell Development  
Jeffrey Miller, MD

11:45 Question & Answer

### Symposium 4308

**New Trends in Immunotherapy**

- **Time:** 10:45 am to 12:00 pm
- **Credit:** 1.25 CME / 1.50 CE
- **Moderator:** Désirée E.S. Larenas Linnemann, MD FAAAAI

10:45 Intralymphatic and Epicutaneous Immunotherapy  
Thomas M. Kuendig, MD

11:05 The Dust Mite Story: How Do SCIT and SLIT Differ? Which is Better?  
Stephan R. Durham, MA MD FRCP

11:25 New Molecules for Immunotherapy: Peptides and Modified Molecules Under Investigation  
Mark Larche, PhD

11:45 Question & Answer
Monday, March 5

AAAIAI Business Meeting
12:30 to 1:30 pm
All AAAAI Fellows and members are invited to attend this annual business meeting. Box lunches included.

Oral Abstracts
2:00 to 3:15 pm
Credit: 1.25 CME / 1.50 CE
Session titles, speakers and abstracts to be announced.

Keynote
4701 Cutting-Edge Research Keynote
3:30 to 4:30 pm
Credit: 1.00 CME / 1.25 CE
Moderator and speakers to be announced.

Q & A Workshop
4801 Asthma in the Elderly
4:45 to 6:00 pm
Credit: 1.25 CME / 1.50 CE
Moderator: Monroe J. King, DO FAAAAI
4:45 Asthma in the Elderly
Paula J. Busse, MD FAAAAI
5:00 Non-Allergic Rhinitis and Asthma
Sharmilee M. Nyenhuis, MD
5:15 Allergic Rhinitis and Asthma
Joram S. Seggev, MD FAAAAI
5:30 Question & Answer

Q & A Workshop
4802 Tools and Resources for Scientists in Allergy Research
4:45 to 6:00 pm
Credit: 1.25 CME / 1.50 CE
Moderator: Judith Woodfolk, MBChB PhD FAAAAI
4:45 Approaches to Molecular Modeling of Allergens
Anna Pomes, PhD FAAAAI
5:00 The Immune Epitope Database: Navigation and Applications
Alessandro Sette, PhD
5:15 Class II MHC/Peptide Tetramers: Insights into Allergen-Specific T Cells
William W. Kwok, PhD
5:30 Question & Answer

Q & A Workshop
4803 Shaping Immunologic Responses with Environmental Exposures
4:45 to 6:00 pm
Credit: 1.25 CME / 1.50 CE
Moderator: R. Stokes Peebles Jr., MD FAAAAI
4:45 Interactions Between the Innate and Adaptive Immune Systems that Impact the Development of Allergen Sensitization
Patrick G. Holt, DSc
5:00 The Impact of the Farming Environment on Neonatal Immune Responses
Erika Von Mutius, MD MSc
5:15 The Impact of Environmental Exposures on Pulmonary Dendritic Cell Function
Mitchell H. Grayson, MD FAAAAI
5:30 Question & Answer

Panel Discussion Workshop
4804 Opportunities for Improving Immunoglobulin Therapy
4:45 to 6:00 pm
Credit: 1.25 CME / 1.50 CE
Moderator: Marc A. Riedl, MD
Erwin W. Gelfand, MD FAAAAI
W.A. Carrock Sewell, MD PhD FAAAAI
Mark R. Stein, MD FAAAAI

Panel Discussion Workshop
4805 Writing and Publishing a Manuscript: A Roadmap for the Allergist/Immunologist
4:45 to 6:00 pm
Credit: 1.25 CME / 1.50 CE
Moderator: Michael H. Clayton, MD FAAAAI
Richard W. Honsinger, MD MACP FAAAAI
James T. Li, MD PhD FAAAAI
Richard F. Lockey, MD FAAAAI

Problem-Based Learning Workshop
4806 Optimal Treatment of Heredity Angioedema
4:45 to 6:00 pm
Pre-registration and ticket required. Fee: $50.
Credit: 1.25 CME / 1.50 CE
Moderator: Timothy J. Craig, DO FAAAAI
Bruce L. Zuraw, MD

Problem-Based Learning Workshop
4807 Atopic Dermatitis
4:45 to 6:00 pm
Pre-registration and ticket required. Fee: $50.
Credit: 1.25 CME / 1.50 CE
Moderator: Lynda C. Schneider, MD FAAAAI
Vivian P. Hernandez-Trujillo, MD FAAAAI
Monday, March 5

Problem-Based Learning Workshop  
**4808** The Intricacy of Penicillin Allergy Testing and Cross-Reactivity with Cephalosporin Allergy  
4:45 to 6:00 pm  
Pre-registration and ticket required. Fee: $50.  
Credit: 1.25 CME / 1.50 CE  
Eric M. Macy, MD FAAAAI  
Miguel A. Park, MD

Q & A Workshop

**4809** Prevention of Food Allergy in Children  
4:45 to 6:00 pm  
Credit: 1.25 CME / 1.50 CE  
Moderator: Sami L. Bahna, MD DrPH FAAAAI

4:45 Maternal Dietary Interventions  
Gideon Lack, MD

5:00 Breastfeeding, Formula Feeding and Formula Options  
Marion E. Groetch, MS RD

5:15 Timing and Selection of Solid Food Introduction  
J. Andrew Bird, MD

5:30 Question & Answer

Panel Discussion Workshop  

**4810** ABAI Maintenance of Certification (MOC) and Beyond  
4:45 to 6:00 pm  
Credit: 1.25 CME / 1.50 CE  
Moderator: Mary Beth Fasano, MD FAAAAI  
Sarah Johnson  
Stephen I. Wasserman, MD FAAAAI

Q & A Workshop

**4811** Using Information Technology to Maximize Outcomes and Reimbursement  
4:45 to 6:00 pm  
Credit: 1.25 CME / 1.50 CE  
Moderator: David J. Shulan, MD FAAAAI

4:45 Proving I Should be Paid for My Performance  
Speaker to be announced.

5:00 Using Online Resources to Evaluate Asthma Control and Patient Adherence  
Andrew G. Weinstein, MD FAAAAI

5:15 Questions to Consider When Determining the Optimal Software to Evaluate Patient Outcomes  
Richard L. Wasserman, MD PhD FAAAAI

5:30 Question & Answer

Problem-Based Learning Workshop  
**4812** The Child with Chronic Vomiting and Diarrhea  
4:45 to 6:00 pm  
Pre-registration and ticket required. Fee: $50.  
Credit: 1.25 CME / 1.50 CE  
Moderator: Scott H. Sicherer, MD FAAAAI  
Speaker to be announced.

Q & A Workshop

**4813** Teaching Residents and Students in the Clinical Practice  
4:45 to 6:00 pm  
Credit: 1.25 CME / 1.50 CE  
Moderator: Mark H. Moss, MD

4:45 The Six Core Competencies  
Asriani M. Chiu, MD FAAAAI

5:00 Designing a Clinical Rotation  
Lily Pien, MD FAAAAI

5:15 Evaluating Residents and Medical Students  
Jeffrey R. Stokes, MD FAAAAI

5:30 Question & Answer

Hands-On Workshop

**4814** Hands-On Rhinolaryngoscopy  
4:45 to 6:00 pm  
Pre-registration and ticket required. No fee. Ticket included with registration for Workshop 2814: Introductory Rhinolaryngoscopy.  
Credit: 1.25 CME / 1.50 CE  
Allen D. Adinoff, MD FAAAAI  
Jerald W. Koepke, MD FAAAAI  
Kevin R. Murphy, MD  
Grant C. Olson, MD  
Donald W. Pulver, MD FAAAAI  
C. Ross Westley, MD FAAAAI

Q & A Workshop

**4815** CNS Consequences of Allergic Rhinitis in Children and Adults: Sleep Disturbance, Behavioral Problems and Migraine Headache  
4:45 to 6:00 pm  
Credit: 1.25 CME / 1.50 CE  
Moderators: Lyndon E. Mansfield, MD FAAAAI  
Eli O. Meltzer, MD FAAAAI

4:45 Allergic Rhinitis and Migraine Headache: Effect of Allergy Treatment  
Jonathan A. Bernstein, MD FAAAAI

5:00 Overview of the CNS Consequences of Allergic Rhinitis  
Speaker to be announced.

5:15 ADHD, Sleep Apnea and Allergic Rhinitis in Children  
Bernard Silverman, MD FAAAAI

5:30 Question & Answer
### Hands-On Workshop

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<tr>
<td>4816</td>
<td>Skin Testing: How to Get the Right Swing</td>
<td>4:45 to 6:00 pm</td>
<td>$50</td>
<td>1.25 CME / 1.50 CE</td>
<td>Kaiser G. Lim, MD FAAAAI</td>
<td>Pre-registration and ticket required. Fee: $50.</td>
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<td>Minor Details That Can Improve Your Skin Prick Testing Accuracy</td>
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<td>John Oppenheimer, MD FAAAAI</td>
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<td>Extracts and Devices</td>
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<td>Désirée E.S. Larenas Linnemann, MD FAAAAI</td>
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<td>Documentation of Skin Test Results</td>
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<td>Warner W. Carr, MD FAAAAI</td>
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### Q & A Workshop

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<tr>
<td>4817</td>
<td>Beyond Th2 Cells and Mediators of Allergic Inflammation</td>
<td>4:45 to 6:00 pm</td>
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<td>1.25 CME / 1.50 CE</td>
<td>Larry Borish, MD FAAAAI</td>
<td>Pre-registration and ticket required. Fee: $50.</td>
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<td>Allergic Inflammation Regulating Th17 Immunity</td>
<td>4:45</td>
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<td>Dawn C. Newcomb, PhD</td>
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<td>IL9, Th9 Cells and Allergic Inflammation</td>
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<td>Clare M. Lloyd, PhD</td>
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<td>Complement in Allergic Inflammation</td>
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<td>Marsha A. Wills-Karp, PhD</td>
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<td>Question &amp; Answer</td>
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### Seminars

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<tr>
<td>4821</td>
<td>How to Advise Patients on Home Pest Control, Indoor Contaminants and Clean and Safe Indoor Environments</td>
<td>4:45 to 5:45 pm</td>
<td>$40</td>
<td>1.00 CME / 1.20 CE</td>
<td>Kevin Kennedy and Elizabeth Matsui, MD</td>
<td>Pre-registration and ticket required. Fee: $40. Refreshments included. Sessions limited to 30 people.</td>
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<td>4822</td>
<td>Oral Immunotherapy for Food Allergy: Contrasting Practices in the U.S. and in Europe</td>
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<td>Giovanni Battista Pajno, MD FAAAAI and Rushani W. Saltzman, MD</td>
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<td>4823</td>
<td>Using Technology in Teaching and Medical Education</td>
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<td>Adrian Casillas, MD FAAAAI and Tao Le, MD MHS FAAAAI</td>
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<td>4824</td>
<td>Use of Pneumococcal Vaccination in Immunodeficiency Diagnosis and Management</td>
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<td>Francisco A. Bonilla, MD PhD FAAAAI and Kenneth Paris, MD MPH</td>
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<td>4825</td>
<td>Advanced Therapeutics: Managing the Severe and Refractory Eczema Patient</td>
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<td>Jennifer S. Kim, MD FAAAAI and Peter Lio, MD</td>
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