Revitalize, Refresh, Reimagine Your Practice

2019 Practice Management Workshop
July 12-14, 2019
Cincinnati, OH

Because Practice Matters! to the AAAAI
Dear Colleagues,

We are excited to have you here at the 2019 AAAAI Annual Meeting in San Francisco, California. A great deal of planning went into the educational program you will experience over the next few days. It begins with our theme, Food Allergy: Advances in Prevention and Treatment, which reflects the increasingly important role food allergy is playing in our specialty. This role will only continue to increase as the disease becomes more prevalent and treatments become available. Thus it is crucial to keep up to date on the ever changing world of food allergy—and the theme sessions we have programmed will allow you to do that.

We want to remind you that while the theme covers about 20% of our sessions, the remaining 80% were developed through member submissions. Please look for the labels and keys inside this program to help you determine which sessions relate to the theme or to our other various session tracks.

See You at the Plenary and Keynote Sessions
Join us at the Presidential Plenary, “Optimal Care of the Food Allergic Patient,” on Friday from 2:15 to 3:45 pm in Moscone Center South, Exhibition Level, Hall A. You will learn about optimal diagnostic and testing strategies to confirm food allergies, optimal use of emerging treatments, and novel therapies in development. Our plenary sessions continue Saturday morning with “Outcomes, Education and Healthcare Delivery in Allergic Diseases.” Sunday morning offers our plenary on “Systemic Regulation of Susceptibility and Pathogenesis of Allergic Inflammation,” and we wrap up Monday morning with Atopic Dermatitis: Bench to Bedside and Back.”

Saturday afternoon also offers our Keynote presented by Eric Schadt, PhD, Dean for Precision Medicine at Icahn School of Medicine at Mount Sinai. His talk is titled, “Constructing Individualized Health Course Trajectories to Construct Better Models of Asthma and Other Immune/Inflammation Disorders.”

Download the Annual Meeting App and Join the Social Media Conversation by Using #AAAAI19
We hope you packed your smartphone or tablet. Remember to download the official 2019 Annual Meeting app, which allows you to: interact with other attendees; access session handouts, abstracts and evaluations; search by speakers and add their sessions to your schedule; learn about last minute program changes and navigate Moscone Center South with interactive maps and exhibitor information. Keep in mind that the app offers the only way to complete session evaluations, and we need your feedback to make future programming improvements. You can download the app from the App Store or Play Store on your device.

We know many of you are active on social media, so make sure to use #AAAAI19 when you tweet during the meeting to start conversations and share what you’re learning with your patients as well as your colleagues who could not be here.

Save Time for Some Fun at the AAAAI Foundation Benefit and 5K Run/Walk
Of course, we also hope you make time for camaraderie with your fellow attendees at the AAAAI Foundation’s two events: Saturday evening’s AAAAI Foundation Benefit at the Park Central San Francisco Hotel and Sunday’s 5K Run/Walk at AT&T Park. By registering and attending, you are showing your support for allergy/immunology dedicated research.

Enjoy your educational and networking experience here in San Francisco, and we hope to see you next year at the 2020 Annual Meeting in Philadelphia.

Sincerely,

Robert A. Wood, MD FAAAAI  
AAAAI President

David D. Chaplin, MD PhD FAAAAI  
Chair, Annual Meeting Program Committee
Annual Meeting Program Committee

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- Leonard B. Bacharier, MD FAAAAI, Vice Chair

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- Patricia A. Takach, MD FAAAAI, IRSO Secretary

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- Roma Sehmi, PhD FAAAAI, MAAI Secretary

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- Kara J. Wada, MD

Copies of all Annual Meeting Program Committee and CME/MOC Committee disclosure information are available online at the Annual Meeting website and in the Speaker Resource Room.
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Catherine Weiler, MD PhD FAAAAI
John Weiler, MD FAAAAI
Kevin White, MD
Eveline Wu, MD
An Educational Connection

Don’t worry about missing sessions at this year’s Annual Meeting—the Virtual Annual Meeting has you covered!

The Virtual Annual Meeting includes:
• Keynote
• Plenaries
• Select workshops, symposia and pro/con debates

The recordings can also be used to satisfy some MOC requirements, and can serve as a training resource for:
• Students
• Residents
• Fellows-in-training
• Medical office staff

Accessible in two options:
• Online streaming
• Downloadable files for any device

*Early bird pricing available until February 25th at the Registration Desk.
Member pricing $185
Non-Member pricing $250
Abstracts
Abstracts programmed at the 2019 Annual Meeting were published as an online supplement to *The Journal of Allergy and Clinical Immunology* (JACI) and can be accessed on the JACI website, jacionline.org.

Admission to Sessions
Admission to Annual Meeting educational sessions is reserved for meeting registrants and registered members of the press only. Guests and exhibitors will not be admitted to educational sessions. Ushers will monitor the name badges of all meeting attendees to control access to educational sessions.

Some sessions require tickets for entry, which are indicated in this program with a ticket icon. Invited sessions have limited attendance and an additional fee. All educational sessions requiring such fees will be noted in the sessions by day schedule. Please visit the registration desk to register for ticketed sessions. In consideration of state fire codes and as a courtesy to others, those without tickets will not be allowed access into ticketed sessions.

American Academy of Allergy, Asthma & Immunology Foundation (AAAAI Foundation)

Moscone Center South, Exhibition Level, Hall A Lobby
Visit the AAAAI Foundation desk to pick up your Benefit tickets, 5K Run/Walk race packet, Friend of the President and New Allergist/Immunologist Assembly Ribbons.

You can make a donation to the AAAAI Foundation’s GAIN Campaign at any time during the meeting by pressing the STAR icon on the Annual Meeting app. Click the STAR now to support young researchers in our field!

Annual Meeting Mobile App
Sponsored by Teva.

The AAAAI has a mobile app dedicated to the 2019 Annual Meeting. This app features tools allowing you to search by speaker or session type, organize your schedule, evaluate speakers and sessions, respond to polls and ask questions in sessions, stay current with changes as they occur during the meeting and navigate the Moscone Center with floor plans and exhibitor information. Download the 2019 Annual Meeting app from the App Store or Play Store on your mobile device.

Associates to the AAAAI
See Hospitality Suite.

ATMs
Moscone Center has two onsite ATMs located in the South lobby near the entrance at 3rd and Howard.

Business Center
The Moscone Center Business Center is located in the South lobby near the entrance to Hall C. Services include photocopying, office supplies, email receipt and UPS services. The Business Center will be open during exhibit hours. The Moscone Center Business Center uses UPS for shipping. Visa, MasterCard, American Express and business checks are accepted.

The Marriott Business Center is located on the B2 Level near the escalators. Services include photocopying, office supplies, and FedEx services. The Business Center is open from 7:00 am to 7:00 pm daily.

Career Fair
Saturday, February 23 9:45 am to 2:30 pm
Sunday, February 24 9:45 am to 2:30 pm
Moscone Center South, Exhibition Level, Hall B
Delegates attending the Annual Meeting will have the opportunity to make valuable connections at the Career Connections Job Fair. Employers will be available to meet potential candidates and share information about open positions. Job seekers, regardless of the stage in their career, will also benefit from attending to hand out copies of their resume, browse the onsite job board and set up potential interviews with companies all at no cost. The AAAAI’s recruitment resources open doors to a wealth of possibilities for both the employer and the job seeker. It only takes a moment to make the connection that could lead to the career of a lifetime.

Case Report Poster Session
Moscone Center South, Exhibition Level, Hall B Lobby
The case report poster sessions are open on Saturday, February 23, Sunday, February 24 and Monday, February 25 from 9:45 to 10:45 am daily.

Charging Lounges
Relax between sessions and recharge your electronic devices or connect with colleagues in these lounges. We are pleased to offer five locations this year:

Concourse
Sponsored by Sanofi Genzyme and Regeneron.
Moscone Center South, Lobby Level
Sponsored by Shire, now part of Takeda.
Moscone Center South, Lobby Level
Sponsored by AstraZeneca.
Moscone Center South, Upper Mezzanine Level
Exhibit Hall
Sponsored by Shire, now part of Takeda.
Moscone Center South, Exhibition Level, Hall B – 200 Aisle
Sponsored by Sanofi Genzyme and Regeneron.
Moscone Center South, Exhibition Level, Hall B – 400 Aisle
Meeting Information

Children and Guests
The AAAAI asks delegates to refrain from taking children, spouses or guests to any educational session offered at the 2019 Annual Meeting. Registered guests are welcome to relax in the Hospitality Suite or visit the Exhibit Hall; however, an adult must accompany children under the age of 18 at all times. Most San Francisco hotels can provide their guests with a list of independent babysitters and babysitting agencies frequently used by visitors. For more information, please contact the concierge at the appropriate hotel.

Education Station
Moscone Center South, Exhibition Level, Hall B Lobby
Visit the AAAAI Education Station to:
- Learn about online educational opportunities
- Register for live courses beyond the Annual Meeting
- Share clinical challenges you have experienced to help shape future activities

**Education Station Hours**
- Friday, February 22: 7:30 am to 5:00 pm
- Saturday, February 23: 7:30 am to 5:00 pm
- Sunday, February 24: 7:30 am to 4:00 pm
- Monday, February 25: 7:30 am to 3:00 pm

Emergency
In the event of an emergency, please use one of the house telephones available in all Moscone Center meeting rooms and dial 511. At the Marriott, dial 0 from any house phone. House phones are located in all foyers.

Evaluations
Delegates will be able to provide feedback on their experiences at the Annual Meeting in two ways:

Participants will be asked to provide input on the educational program of the 2019 Annual Meeting through the online CME Claim System when claiming credit for participation.

Delegates can provide feedback on Annual Meeting faculty members and the sessions they attend by using the mobile app.

Exhibits
Moscone Center South, Exhibition Level, Hall B
The exhibiting companies and organizations will provide you with the latest information on products and services available to physicians, researchers and allied health professionals in the field of allergy/immunology. The directory on page 92 will provide you with the information you need to take full advantage of the opportunities offered by the exhibitors.

Please allow adequate time in your daily schedule to visit the exhibits located in the Exhibit Hall in the Moscone Center. Take time to speak with representatives of companies that provide services or market products directly related to your professional interests.

**Exhibit Hours**
- Saturday, February 23: 9:45 am to 3:15 pm
- Sunday, February 24: 9:45 am to 3:15 pm
- Monday, February 25: 9:45 am to 2:00 pm

First Aid
Moscone Center South, Upper Mezzanine Level, Esplanade Ballroom Hallway
Non-emergency medical services are available in the First Aid room.

Food Outlets
There are coffee, food and beverage vendors located throughout the Moscone Center. There are also two restaurants in the Marriott.

Handouts
Handouts at the 2019 Annual Meeting will be available in two ways:

- **Online Handouts**
  The most up to date versions of the 2019 Annual Meeting handouts are available to meeting delegates online at annualmeeting.aaaai.org during and after the Annual Meeting and in the sessions listings in the mobile app. Delegates are able to view, download and print available session handouts. Handouts can be searched by session number, session title or a speaker’s last name.

- **Handout Printing Stations**
  Sponsored by AstraZeneca.
  Moscone Center South, Exhibition Level, Hall B
  Moscone Center South, Level 2, Foyer
  Marriott, Lower B2 Level, Yerba Buena Foyer

Hospitality Suite
Marriott, Level 2, Foothill D
Attendees with guest badges are welcome to relax in the Hospitality Suite. Stop in for information on local attractions and shopping, or just relax and enjoy some friendly conversation.

**Hospitality Suite Hours**
- Friday, February 22: 8:00 am to 12:00 pm
- Saturday, February 23: 8:00 am to 12:00 pm
- Sunday, February 24: 8:00 am to 12:00 pm
- Monday, February 25: 8:00 am to 12:00 pm

JACI Journals
Key representatives from The Journal of Allergy and Clinical Immunology (JACI), the most-cited allergy/immunology journal, and sister journal The Journal of Allergy and Clinical Immunology: In Practice (JACI: In Practice) will again be stationed within the Member Resource Center to answer your questions regarding your subscriptions and submissions.

Lost and Found
In the event that you have lost or found a personal belonging, please see the AAAAI registration desk in the Moscone Center South, Lobby Level to either turn in or report a lost item. Please be prepared to provide a detailed description of your missing article.

Luggage Storage
February 25 from 7:00 am to 5:00 pm
Moscone Center South, Lobby Level
Complimentary storage for luggage and coats will be available on Monday.
Member Resource Center
Moscone Center South, Exhibition Level, Hall A Lobby
Visit the AAAAI Member Resource Center to:
- Take advantage of Annual Meeting discounts on all public education products.
- Pay your dues, update your membership information or learn how to become a member.
- Speak with representatives from The Journal of Allergy and Clinical Immunology (JACI) and The Journal of Allergy and Clinical Immunology: In Practice (JACI: In Practice) about your subscription or submissions.

Member Resource Center Hours
Thursday, February 21 12:00 to 7:00 pm
Friday, February 22 7:00 am to 5:00 pm
Saturday, February 23 7:00 am to 5:00 pm
Sunday, February 24 7:00 am to 5:00 pm
Monday, February 25 7:00 am to 4:00 pm

Morning Yoga😊
Marriott, Level 2, Foothill C
Start your day off right with a morning yoga session.
Friday, February 22 6:00 – 7:00 am
Saturday, February 23 6:00 – 7:00 am
Sunday, February 24 6:00 – 7:00 am
Monday, February 25 6:00 – 7:00 am

Name Badges
All registered attendees at the 2019 Annual Meeting will receive a name badge as part of their onsite registration package. These badges have a barcode on the back that is embedded with the attendee’s name, mailing address, fax number and email address. Delegates may scan their badges in the Exhibit Hall and give their contact information to specific exhibitors.

Please note: When you allow an exhibitor/sponsor to scan your badge, you are authorizing them to contact you and send you materials via postal mail, fax and/or email. The AAAAI cannot be responsible for the use of your contact information once you have given it to an exhibitor/sponsor.

Networking Lounge
Moscone Center South, Exhibition Level, Hall B – 900 Aisle
Relax between sessions and connect with colleagues. Enjoy the iconic photo op located adjacent.

Nursing/Lactation Room
Moscone Center South, Upper Mezzanine Level
There are dedicated rooms available for nursing mothers located on the Upper Mezzanine Level.

Photography
Personal photography is permitted within the educational sessions and the Poster Hall, unless the speaker or poster presenter explicitly states otherwise. A camera icon with a black circle and slash on posters or slides indicates that picture taking is not allowed. Delegates are also welcome to take photographs at all other AAAAI functions and activities. Please be mindful to turn off your flash during a presentation.
A professional photographer will be onsite to document the event. By registering for and taking part in the Annual Meeting, your photo may be taken and used in future promotional materials. If you do not want your photo used, please inform the staff photographer at the time the photograph is taken.

Plenary Q&A
Moscone Center South, Exhibition Level, Hall A
The Plenary Q&A sessions allow attendees to ask questions directly to the plenary faculty and get responses directly from the presenters.
Make note of your questions during the plenary sessions and bring them here to get answers from the speakers and moderators in a more casual, intimate setting.

Plenary speakers and moderators will be available to answer questions at the following times:
Friday, February 22 3:45 to 4:15 pm
Saturday, February 23 9:45 to 10:15 am
Sunday, February 24 9:45 to 10:15 am
Monday, February 25 9:45 to 10:15 am

Poster Hall
Moscone Center South, Exhibition Level, Hall B
The poster sessions, featuring presentations of abstracts in thematic groupings, are open Saturday through Monday. Authors will be present with their posters from 9:45 to 10:45 am daily.

Poster Hall Hours
Saturday, February 23 7:00 am to 6:00 pm
Sunday, February 24 7:00 am to 6:00 pm
Monday, February 25 7:00 am to 2:00 pm

Practice Management Hub
Moscone Center South, Exhibition Level, Hall A Lobby
Visit the Practice Management Hub to obtain guidance about office operations, coding and promoting your practice.

Press Room
Moscone Center South, Lower Mezzanine Level, Room 70
Members of the press representing print, broadcast and electronic consumer media, as well as healthcare trade media, are invited to attend the 2019 Annual Meeting if they have pre-registered at annualmeeting.aaaai.org. To claim a press pass onsite, journalists must provide media identification or a business card issued by their news organization. Freelance writers must provide a letter of assignment on a news organization letterhead or bylined articles from a recognized news organization. Press passes will only be issued to journalists representing the editorial staff of print, broadcast or internet media. Journalists must display their press passes at all times while attending the meeting or covering meeting-sponsored events.
The AAAAI does not issue press passes to: a publication’s advertising, marketing, public relations or sales representatives; publishers, editors or reporters from manufacturers’ in-house or promotional publications; public relations staff of exhibitors or educational institutions; writers creating analyses or reports sold as a commodity to customers; or other individuals who are not actually reporting on the meeting or on behalf of a specific media outlet. Exhibitors may not register as press.

Quiet Reflection Room
Moscone Center South, Lower Mezzanine Level, Room 56
This room has been designated for prayer and meditation and is available for use at the Annual Meeting during regular hours of operation.

Recording of Sessions
Many of the scientific sessions will be recorded as part of the Virtual Annual Meeting and available for purchase onsite at the registration desk and after the meeting at the AAAAI Continuing Education Center (education.aaaai.org). Individual recording of educational sessions is not permitted.

Registration Desk
Moscone Center South, Lobby Level
Visit the registration desk to pick up your name badge, tickets and registration bag. You can also purchase tickets, register onsite and receive your CME/CE or attendance certificates.

Registration Desk Hours
Thursday, February 21 12:00 to 7:00 pm
Friday, February 22 6:30 am to 5:00 pm
Saturday, February 23 6:30 am to 5:00 pm
Sunday, February 24 6:30 am to 5:00 pm
Monday, February 25 6:30 am to 4:00 pm

Ribbons
Ribbons are available at a kiosk located near the registration desk.

Ticket Exchange
Tickets to available sessions will be sold at the onsite registration desk. Please check the Session Monitor for available sessions. To exchange or cancel a session ticket, please bring the ticket to the assisted registration desk no less than 30 minutes prior to the start of the session. Refunds for returned tickets will be mailed from the AAAAI executive office after the meeting.

Smoking
Smoking is prohibited at all 2019 Annual Meeting sessions and events.

Speaker Disclosures
Copies of all speakers’ disclosure information are available online at the Annual Meeting website and in the Speaker Resource Room.

Speaker Resource Room
Moscone Center South, Lobby Level, Room 102
All speakers are asked to report to the Speaker Resource Room immediately upon arrival in San Francisco to deliver their presentation materials. Computers and technical support are available for speakers to use in this room. Individuals will receive their speaker ribbons in the Speaker Resource Room.

Speaker Resource Room Hours
Thursday, February 21 12:00 to 7:00 pm
Friday, February 22 6:30 am to 6:00 pm
Saturday, February 23 6:30 am to 6:00 pm
Sunday, February 24 6:30 am to 6:00 pm
Monday, February 25 6:30 am to 4:00 pm

Special Dietary Requirements
If items on the daily, pre-arranged menu do not meet your special dietary requirements (e.g., allergies, kosher) an alternative option can be made available. Please notify an AAAAI staff member at the registration desk to ensure arrangements are made. Special arrangements require at least 24 hours advance notice. Vegetarian options will be available at all functions with food. If you are a vegetarian, please inform the server assigned to the room at the beginning of the session that you would like a vegetarian selection.

Training Stations
Moscone Center South, Exhibition Level, Hall B Lobby
Saturday, February 23 and Sunday, February 24 12:00 pm to 2:00 pm

Training stations provide Annual Meeting delegates the opportunity to get hands-on practice with allergy/immunology devices and procedures as well as personalized instruction from peers with appropriate expertise. Participation is on a first-come, first-served basis and is open to any registered delegate. Participants can earn continuing education credit for time spent in the training stations. The 2019 stations will feature three options:

Saturday 2401: Practical Approaches to Adjunctive Management of Primary Immunodeficiency Diseases
This session will provide a hands-on approach to the use of IgG replacement products. The participants will receive instruction on when to start IgG replacement and different routes that can be used to infuse the medication including both IV and SC products. The instructors will review the different types of products available for both IV and SC infusions. They will also work through different scenarios to determine the appropriate starting dose and maintenance schedule for the medication in both adults and children. The experts will review the best practice schedule of monitoring labs required for patients who are on IgG replacement therapy. See page 64 for details.
Meeting Information

Saturday 2402 and Sunday 3402: Oral Food Challenges: Practical Tips for Preparation in the Office Setting
These sessions will address the preparation for and administration of oral food challenges in the office setting. The sessions will include hands-on demonstrations and training, and will also allow participants to ask their personal and individualized questions. Session faculty are prepared to discuss the administration of oral food challenges to different age groups, as well as more practical aspects including office preparation and billing. See page 64 and 76 for details.

Sunday 3401: Asthma Medication Delivery Devices: How to Use Them and How to Teach Them
Many practices educate patients about asthma medication delivery devices but lack standard demonstration techniques for teaching device use. This training station will allow participants to learn about proper techniques for device use and the best ways to teach patients to use them. See page 76 for details.

Tweet Up
Saturday, February 23, 5:00 to 6:00 pm
Tabletop Tap House, 175 4th Street, San Francisco, CA 94103
Are you interested in Twitter and social media? Do you use social media to promote your practice or other allergy/immunology topics? Join others who share your interest at the Tweet Up.

Virtual Annual Meeting Recordings
Pre-purchase the 2019 Virtual Annual Meeting at the onsite registration desk located in the Moscone Center South, Lobby Level. The Virtual Annual Meeting will be available online via streaming and MP4 file downloads. MP4 downloads will allow you to download the content and access it without being connected to the Internet. The recordings include presentation slides along with video and audio for the Plenary and Keynote sessions, and presentation slides synchronized with the audio recordings for selected courses, symposia, Interest Section Forums, workshops, pro/con debates and allied health sessions. Sessions included in the Virtual Annual Meeting are indicated with a icon in this program.

Wellness Lounge
Moscone Center South, Exhibit Level, Hall B – 1600 Aisle
Take a moment to recharge your mind & body with one of these wellness sessions:

Saturday, February 23
Meditation for Stress Relief 12:00 to 12:30 pm
Breathing for Energy 1:30 to 2:00 pm

Sunday, February 24
Meditation for Stress Relief 1:30 to 2:00 pm

Monday, February 25
10 Easy & Effective Poses 12:00 to 12:30 pm

WIFI
Complimentary WiFi access is available at the Moscone Center South and in all meeting spaces throughout the Marriott.

Moscone Center South
Sponsored by Sanofi Genzyme and Regeneron.
Wireless Network: DUPIXENT (dupilumab)
Marriott
Wireless Network: AAAAI
Password: AnnualMeeting
Password is case sensitive.

Friend of the President Ribbon
Thank AAAAI President Robert A. Wood, MD, FAAAAI for his year of service to the AAAAI with the $100 purchase of a Friend of the President Ribbon.

This ribbon honors Dr. Wood and directly supports the mission of the AAAAI Foundation: funding research that leads to the prevention and cure of asthma and allergic and immunologic disease.

Purchase or pick up your ribbon at the AAAAI Foundation booth located in the Moscone Center South, Exhibition Level, Plenary Hall Foyer
Spending time researching patient conditions and treatments? You should get credit for that.

With the new AAAAI Internet Point-of-Care Learning program, now you can.

Allergist/immunologists can earn .50 AMA PRA Category 1 Credit™ for each search performed in JACI or JACI: In Practice, with no limit to the number of searches that can be claimed each year. In addition, this program is offered free of charge to AAAAI members, who already have free access to the journals as a member benefit.*

Earn credit where credit is due. Log in at education.aaaai.org/IPOC2019 and submit your first internet point-of-care learning search today!

*Non-members will be charged a $10 fee for each search completed. Journal access is limited to paid subscribers, so non-members may also be required to pay a fee for access to articles if they do not have institutional access via a medical school or hospital.
Business and Committee Meetings

AAAAI Annual Business Meeting
Monday, February 25, 12:30 to 1:30 pm
Moscone Center South, Level 2, Room 203
All AAAAI Fellows and members should attend the annual Business Meeting. Box lunches will be provided. No fee. No pre-registration required.

Associates to the AAAAI Breakfast and Business Meeting
Saturday, February 23, 9:00 to 11:00 am
Marriott, B2 Level, Golden Gate A

Interest Section Forums
Sunday, February 24, 3:30 to 4:30 pm
AAAAI Fellows and members, as well as other delegates, are invited to attend an Interest Section Forum. Each interest section of the AAAAI will host a separate forum. Fellows and members may designate their interest section affiliation, while non-members may inquire about AAAAI membership opportunities. Continuing education credits are available for these activities. See page 33 for more information.

AAAAI Assembly/Board/Division Committee Meetings (Invitation Only)
If you are a current member of an AAAAI assembly, Board or division committee, please plan to attend your committee meeting. Committee meetings are open to current AAAAI members only. All members of these committees must be named by the AAAAI President-Elect. If you are an AAAAI member and you are interested in becoming a member of any of these committees, please contact the AAAAI executive office at (414) 272-6071 or info@aaaai.org.

A/I Division Directors Committee
Saturday, February 23, 7:00 to 8:00 am
Marriott, B2 Level, Golden Gate A

Advocacy Committee
Sunday, February 24, 12:30 to 1:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 14

Allied Health Education Committee
Saturday, February 24, 2:00 to 3:00 pm
Marriott, B2 Level, Willow

Allied Health Professionals Assembly Business Meeting and Oral Abstract Session
Saturday, February 23, 12:15 to 1:45 pm
Moscone Center South, Exhibition Level, Hall D8

Allied Health Professionals Assembly Leadership Meeting
Sunday, February 24, 3:00 to 4:00 pm
Marriott, B2 Level, Willow

Annual Meeting Award Committee
Friday, February 22, 4:00 to 5:30 pm
Marriott, B2 Level, Golden Gate C1

Annual Meeting Program Committee
Monday, February 25, 10:00 am to 12:00 pm
Moscone Center South, Lobby Level, Room 101

Clinical Rotation Curriculum Committee
Sunday, February 24, 12:30 to 1:30 pm
Marriott, Lower B2 Level, Nob Hill C

CME/MOC Committee (Invitation Only)
Saturday, February 23, 5:00 to 6:00 pm
Moscone Center South, Lower Mezzanine Level, Room 50

Core Curriculum, Education & Residency Review Subcommittee
Sunday, February 24, 12:30 to 1:30 pm
Marriott, Lower B2 Level, Nob Hill A

Federation of RSLAAIS Governors Meeting
Saturday, February 23, 2:00 to 3:15 pm
Moscone Center South, Lower Mezzanine Level, Room 50

Fellows-In-Training Committee
Saturday, February 23, 7:00 to 8:00 am
Moscone Center South, Upper Mezzanine Level, Esplanade 160

Grant Review Committee
Sunday, February 24, 8:00 to 9:00 am
Moscone Center South, Lower Mezzanine Level, Room 50

Interest Section Coordinating Committee (ISCC)
Saturday, February 23, 10:45 to 11:45 am
Moscone Center South, Lobby Level, Room 104

In-Training Examination Committee
Saturday, February 23, 12:30 to 2:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 15

Leadership Institute Steering Committee
Sunday, February 24, 10:45 to 11:45 am
Marriott, B2 Level, Willow

Measures Stewardship Committee
Saturday, February 23, 7:00 to 8:00 am
Marriott, B2 Level, Golden Gate C1

New Allergist/Immunologist Assembly Leadership Team Meeting
Sunday, February 24, 12:30 to 1:45 pm
Moscone Center South, Lobby Level, Room 104

New Allergist/Immunologist Assembly (NAIA) Business Meeting and Reception
Sponsored by DBV Technologies.
Saturday, February 23, 4:45 to 6:15 pm
Marriott, Lower B2 Level, Yerba Buena Salon 10

Program Directors Assembly Business Meeting and Forum
Friday, February 22, 12:00 to 2:00 pm
Moscone Center South, Exhibition Level, Hall D7

Federation of RSLAAIS Assembly Forum, Business Meeting and Reception
Friday, February 22, 4:45 to 6:15 pm
Moscone Center South, Exhibition Level, Hall D7
Office of Medical Education Committee  
Saturday, February 23, 7:00 to 8:00 am  
Marriott, Lower B2 Level, Nob Hill D

Office of Practice Management  
Friday, February 22, 12:30 to 1:30 pm  
Marriott, B2 Level, Golden Gate C2

Office of School-Based Management of Asthma  
Saturday, February 23, 7:00 to 8:00 am  
Marriott, B2 Level, Golden Gate C2

Practice Management Committee  
Sunday, February 24, 12:30 to 1:30 pm  
Moscone Center South, Exhibition Level, Hall D4

Program Directors Assembly Executive Committee  
Sunday, February 24, 7:00 to 8:00 am  
Marriott, B2 Level, Golden Gate C2

Veteran’s Health Administration Allergists Committee  
Saturday, February 23, 9:45 to 10:45 am  
Moscone Center South, Lower Mezzanine Level, Room 50

AAAAI Interest Section Committee Meetings  
Committee meetings are held during the Annual Meeting for the purpose of conducting AAAAI related business. If you are a current member of an interest section committee, please plan to attend your committee meeting. If you are an AAAAI member and you are interested in joining an interest section committee, please attend the meeting and notify the chair that you are interested in joining. For more information on AAAAI committees, please contact the AAAAI executive office at (414) 272-6071 or info@aaaai.org.

Adverse Reactions to Drugs, Biologicals and Latex Committee  
Saturday, February 23, 12:15 to 1:45 pm  
Moscone Center South, Exhibition Level, Hall D7

Adverse Reactions to Food Committee  
Saturday, February 23, 6:00 to 7:30 am  
Moscone Center South, Exhibition Level, Hall D7

Aerobiology Committee  
Sunday, February 24, 6:30 to 7:45 am  
Moscone Center South, Lobby Level, Room 101

Allergic Fungal Respiratory Diseases Committee  
Sunday, February 24, 6:45 to 7:45 am  
Marriott, Lower B2 Level, Nob Hill C

Allergic Skin Diseases Committee  
Saturday, February 23, 7:00 to 8:00 am  
Moscone Center South, Lobby Level, Room 101

Anaphylaxis Committee  
Sunday, February 24, 7:00 to 8:00 am  
Moscone Center South, Exhibition Level, Hall D4

Asthma & Allergic Diseases in the Elderly Committee  
Saturday, February 23, 12:30 to 1:30 pm  
Marriott, Lower B2 Level, Yerba Buena Salon 14

Asthma, Cough, Diagnosis and Treatment Committee  
Saturday, February 23, 12:30 to 1:30 pm  
Marriott, Lower B2 Level, Yerba Buena Salon 13

Autoimmunity and Altered Immune Response Committee  
Saturday, February 23, 12:30 to 1:30 pm  
Marriott, B2 Level, Golden Gate C1

Cells and Mediators of Allergic Inflammation Committee  
Sunday, February 24, 12:30 to 1:30 pm  
Moscone Center South, Lobby Level, Room 101

Committee on the Underserved  
Saturday, February 23, 1:45 to 2:45 pm  
Moscone Center South, Lobby Level, Room 104

Environmental Exposure and Respiratory Health Committee  
Saturday, February 23, 12:30 to 1:30 pm  
Moscone Center South, Lobby Level, Room 101

Eosinophilic Gastrointestinal Disorders Committee  
Saturday, February 23, 12:30 to 1:30 pm  
Marriott, B2 Level, Golden Gate C2

Genetics, Molecular Biology and Epidemiology Committee  
Saturday, February 23, 7:00 to 8:00 am  
Marriott, Lower B2 Level, Yerba Buena Salon 15

Health Informatics, Technology & Education Committee  
Saturday, February 23, 12:30 to 1:30 pm  
Moscone Center South, Exhibition Level, Hall D4

Immunotherapy, Allergen Standardization & Allergy Diagnostics Committee  
Saturday, February 23, 7:00 to 8:00 am  
Moscone Center South, Lobby Level, Room 104

Integrative Medicine Committee  
Saturday, February 23, 1:00 to 2:00 pm  
Marriott, Lower B2 Level, Nob Hill A

Mast Cells Disorders Committee  
Sunday, February 24, 7:00 to 8:00 am  
Moscone Center South, Lobby Level, Room 104

Microbes in Allergy and Asthma Committee  
Monday, February 25, 7:00 to 8:00 am  
Marriott, Lower B2 Level, Nob Hill D

Occupational Diseases Committee  
Saturday, February 23, 7:00 to 8:00 am  
Moscone Center South, Lower Mezzanine Level, Room 50

Practice, Diagnostics and Therapeutics Committee  
Sunday, February 24, 7:00 to 8:00 am  
Marriott, Lower B2 Level, Nob Hill D

Primary Immunodeficiency Diseases Committee  
Sunday, February 24, 7:00 to 8:00 am  
Moscone Center South, Exhibition Level, Hall D7
Other Meetings and Events

**Quality, Adherence and Outcomes Committee**
Saturday, February 23, 12:30 to 1:30 pm
Marriott, B2 Level, Willow

**Rhinitis, Rhinosinusitis and Ocular Allergy Committee**
Saturday, February 23, 6:45 to 7:45 am
Marriott, Lower B2 Level, Nob Hill A

**Sports, Exercise and Fitness Committee**
Saturday, February 23, 12:30 to 1:30 pm
Marriott, Lower B2 Level, Nob Hill D

**Vaccines Committee**
Friday, February 22, 5:45 to 6:45 pm
Marriott, B2 Level, Golden Gate C2

**Other AAAAI Meetings (Invitation Only)**

**AAAAI Leadership Institute Course**
Friday, February 22, 8:00 am to 12:00 pm
Marriott, Lower B2 Level, Yerba Buena Salon 10

**AAAAI Foundation Council Meeting**
Monday, February 25, 10:00 to 11:30 am
Moscone Center South, Lower Mezzanine Level, Room 50

**AAAAI Past Presidents & Honorary Award Recipients Luncheon**
Saturday, February 23, 12:15 to 1:30 pm
Marriott, B2 Level, Golden Gate B

**AAAAI Allied Health Wine and Cheese Reception**
Sponsored by Aimmune Therapeutics.
Friday, February 22, 5:30 to 6:45 pm
Moscone Center South, Exhibition Level, Hall D8

**Chrysalis Project Participant Registration**
Thursday, February 21, 6:00 to 7:00 pm
Moscone Center South, Lobby Level, Room 101

**2019 Chrysalis Project Program**
Friday, February 22, 7:30 am to 1:45 pm
Marriott, Lower B2 Level, Yerba Buena Salon 6

**Chrysalis Project Reception with FIT Mentors and Faculty**
Saturday, February 23, 6:00 to 7:00 pm
Marriott, Lower B2 Level, Yerba Buena Salon 6

**FIT Reception**
Sponsored by Teva.
Friday, February 22, 5:00 to 6:00 pm
Marriott, Lower B2 Level, Yerba Buena Salon 10

**FIT Symposium**
Friday, February 22, 7:00 am to 1:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 9

**JACI Associate Editors Meeting**
Sunday, February 24, 12:30 to 1:45 pm
Marriott, Lower B2 Level, Golden Gate C2

**JACI Editorial Board Meeting**
Friday, February 22, 12:30 to 1:45 pm
Moscone Center South, Lobby Level, Room 104

**JACI International Advisory Board**
Sunday, February 24, 6:30 to 8:00 am
Marriott, Lower B2 Level, Nob Hill A

**JACI Journals’ Reviewers Forum and Reception**
Sunday, February 24, 4:45 to 6:30 pm
Moscone Center South, Exhibition Level, Hall D8

**JACI: In Practice Editorial Board Meeting**
Saturday, February 23, 7:00 to 8:00 am
Moscone Center South, Exhibition Level, Hall D4

**National Allergy Bureau (NAB) Counters Meeting**
Friday, February 22, 5:45 to 6:45 pm
Marriott, Level 5, Sierra J

**Tweet Up**
Saturday, February 23, 5:00 to 6:00 pm
Tabletop Tap House, 175 4th Street, San Francisco, CA 94103
Other Meetings and Events

Non-CME Educational Programs

Thursday
These programs are not sponsored or programmed by the AAAAI.

Reimagine the Management of Hereditary Angioedema
Thursday, February 21, 6:30 to 8:30 pm
Marriott, B2 Level, Golden Gate B
Sponsored by Shire, now part of Takeda. No CME/CE credit can be claimed.

Faculty: John Anderson, MD, William Lumry, MD, Daniel Soteres, MD, MPH, and a Patient Ambassador
Join us for an interactive session to learn more about the innovative advances in the treatment of hereditary angioedema (HAE). Thought leaders will share insights on preventive and acute treatment options including an injection that can be self-administered subcutaneously to help prevent HAE attacks. A patient ambassador will present their story about how they have been able to reimagine the management of HAE. Complimentary dinner and drinks will be served.

Friday
These programs are not sponsored or programmed by the AAAAI.

The Future of Food Allergy: Demystifying Oral Immunotherapy
Friday, February 22, 6:30 to 8:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 9
Sponsored by Aimmune Therapeutics.

Aimmune Therapeutics will host 3 joint presentations on peanut allergy: the need for standardized terminology in food allergy clinical trials, the importance of protection from accidental exposure, and the aims of oral immunotherapy. Donations of $50 will be made to the AAAAI Foundation for each participant completing a passport for attending all 3 presentations. Speakers include:
J. Andrew Bird, MD
University of Texas Southwestern Medical Center
Christina Ciaccio, MD
The University of Chicago Medicine
David Stukus, MD
Nationwide Children’s Hospital & The Ohio State University College of Medicine

Target Treatment in Eosinophilic Disease
Friday, February 22, 6:30 to 8:30 pm
Marriott, B2 Level, Golden Gate A
Sponsored by GlaxoSmithKline.

GSK invites you to an interactive program about the role of eosinophils in disease pathogenesis. Join us at this dinner program to discuss the benefits of targeted treatment in patients with an eosinophilic disease.

Clearing the Air in Severe Asthma Management: Improving Patient Outcomes Through Shared Clinical Decision Making
Friday, February 22, 6:30 to 8:30 pm (Dinner will be provided)
Marriott, Lower B2 Level, Yerba Buena Salon 7
Supported by an educational grant from Sanofi Genzyme and Regeneron Pharmaceuticals.

Faculty: Jonathan Corren, MD; John J. Oppenheimer, MD (Virtual Professor); Reynold A. Panettieri, Jr, MD; Sally E. Wenzel, MD

This Interactive Exchange™ educational program focuses on identification and long-term management of patients with severe asthma. Expert faculty will provide interpretive insights into the role of biomarkers, comorbidity management, and use of targeted biologic therapies, including their own clinical experience with personalizing therapy and engaging patients in shared decision making. Brief video segments will be shown throughout the program to highlight key aspects of severe asthma pathophysiology and the clinical implications for targeted therapies. In the last segment of the program, attendees will choose a final representative case study for discussion. Please join us for this informative and engaging session.

Register now: www.ExchangeCME.com/2019AsthmaSF

Follow the AAAAI Annual Meeting on Twitter

While you’re in San Francisco, use #AAAAI19 when you tweet to participate in onsite conversations and share what you’re learning with your colleagues.
Non-CME Educational Programs (continued)

Navigating PI Management Over a Lifetime
Friday, February 22, 8:30 to 10:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 8
Sponsored by CSL Behring.
Successful management of PI requires physicians to adapt their approaches over the patient’s lifetime—addressing age-specific considerations and evaluating new diagnostic and treatment modalities. This interactive symposium presents information to support physicians as they navigate shifts in the clinical and managed care setting and evaluate options for optimizing outcomes throughout the patient’s lifelong journey with PI.
Attendees will enjoy complimentary refreshments while rotating through a series of stations where they will have the opportunity to dialogue with experts on:
- Age-specific dynamics that influence care
- Impact of comorbid conditions
- Managing access and resources
- Navigating individual patient transitions across these domains

Saturday
These programs are not sponsored or programmed by the AAAAI.

Phenotyping Airway Disease: The Role of Eosinophils and their Potential Heterogeneity in Personalizing Therapy for Asthma and COPD
Saturday, February 23, 6:00 to 8:00 am
Marriott, Lower B2 Level, Yerba Buena Salon 9
Sponsored by GlaxoSmithKline.
Speakers: Prescott Woodruff, MD, MPH and Nestor Molfino, MD, MSc
Eosinophils have been recognized as playing an important role in airways inflammation. They are associated with proposed phenotypes, or as a “treatable trait,” in both asthma and COPD. This program will review the biology of eosinophils and compare eosinophilic airway disease to other cellular mediated mechanisms of airway inflammation. Evidence for the use of eosinophils to identify subpopulations of airways disease as well as guideline recommendation for incorporation of phenotyping into clinical practice to guide treatment decisions will be highlighted.

AIRWAY PATHOPHYSIOLOGY: Type 2 Inflammation in Uncontrolled Asthma
Saturday, February 23, 6:00 to 8:00 am
Marriott, Lower B2 Level, Yerba Buena Salon 7
Sponsored by Sanofi Genzyme and Regeneron.
Presented by: William W. Busse, MD
Our expert faculty will review our understanding of uncontrolled Type 2 inflammation as a broad, underlying disease process that contributes to multiple, often comorbid conditions including allergic rhinitis, chronic rhinosinusitis with nasal polyps, asthma, AERD, atopic dermatitis, food allergies and eosinophilic esophagitis.
Next, we will discuss research supporting the contributory roles IL-4 and IL-13 in of the pathological manifestations of Type 2 inflammation that occur across epithelial surfaces in the upper and lower airways, skin and GI tract. Finally, using an interactive patient case-based approach we will discuss how comorbidities might magnify patient burdens of disease and complicate patient management.

Finding a Balance: Important Considerations for Investigational Peanut Allergy Immunotherapies
Saturday, February 23, 6:30 to 8:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 9
Sponsored by DBV Technologies.
The management of peanut allergy continues to evolve as we develop a greater understanding of both the condition as well as the impact on patients and caregivers.
As investigational immunotherapies are being evaluated for peanut allergy, it is important to consider the balance between safety, efficacy, and practicality and their contribution to treatment effectiveness. In addition, a greater understanding of the goals for treatment among allergy health care specialists, patients, and families is needed.
Please join DBV Technologies and a panel of experts at a non-CME dinner program to discuss the management of peanut allergy.
Faculty:
Hugh A. Sampson, MD (Chair)
David M. Fleischer, MD
Matthew Greenhawt, MD, MBA, MSc
Ray S. Davis, MD (Facilitator)
Edmond S. Chan, MD, FRCP
t
Ruchi S. Gupta, MD, MPH
Michael Manning, MD
S. Shahzad Mustafa, MD
Manav Singla, MD
Other Meetings and Events

Non-CME Educational Programs (continued)

**The Allergic Asthma Challenge**
Saturday, February 23, 6:30 to 8:30 pm
Marriott, B2 Level, Golden Gate A
Sponsored by Genentech, Inc. and Novartis Pharmaceuticals Corporation.
Test your knowledge of allergic asthma! Doctors Jonathan Corren and Reynold Panettieri will host a live educational event using a game show format – “The Allergic Asthma Challenge” – where dinner attendees have the opportunity to participate. The highest scoring teams from the first round will move on to compete on the main stage in the final round. Questions will focus on the following topics: asthma phenotypes and endotypes, the role of biomarkers in diagnosis, asthma-related comorbidities, and the pathology of asthma. The program will conclude with a Q&A session with our two hosts.

**DUPIXENT® (dupilumab)**
Saturday, February 23, 6:30 to 8:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 7
Sponsored by Regeneron and Sanofi Genzyme.
Speaker: Raffi Tachdjian, MD, MPH
DUPIXENT is approved by the FDA. Come learn about clinical efficacy, safety information, MOA, and dosing and administration, and how DUPIXENT may help your patients.

**Molecular Allergen Components – Practical Applications for Improving Diagnostic Precision**
Saturday, February 23, 6:30 to 8:30 pm
Marriott, B2 Level, Golden Gate B
Sponsored by Thermo Fisher Scientific.
Co-Chairs: Thomas Platts-Mills, MD and Magnus Borres, MD
Join us for an informative and interactive educational program in which expert faculty with extensive expertise in molecular allergy and component resolved diagnosis will discuss a series of topics including:

- **Peanut Allergy: Filling the gaps with additional components**
  Barbara Balmer-Weber, MD, PhD
  Associate Professor of Allergy and Dermatology, University Hospital, Zürich, Switzerland

- **Venom Allergy: The Case for Component Resolved Diagnosis**
  Markus Ollert, MD, PhD
  Director of Department of Infection and Immunity, Luxembourg Institute of Health

- **Furry Animal Allergy: Increasing diagnostic precision through molecular allergology**
  Magnus Borres, MD, PhD
  Professor of Pediatrics, Uppsala University, Sweden
  Global Medical Director Allergy, Thermo Fisher Scientific

- **Alpha-gal: The evolving understanding of this unusual allergen**
  Thomas Platts-Mills, MD, PhD
  Professor of Medicine and Microbiology, University of Virginia School of Medicine

**The Many Faces of Severe Asthma: Patient-Centered Perspectives and Evolving Evidence on Asthma Heterogeneity**
Saturday, February 23, 8:30 to 10:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 8
Sponsored by PRIME through independent medical education grant support from Genentech.
Renowned asthma experts unravel the underlying mechanisms in asthma to characterize the complex evidence around phenotypes, endotypes, and genotypes that are shifting the way we understand and treat severe asthma. Engaging video interviews of patients with severe asthma offer a window into the spectrum of daily burdens, challenges, and strategies for self-care and resiliency faced by patients, and serve as a platform for expert discussions on applications of current evidence and patient-reported experiences to achieve personalized treatment decisions.

Register now: https://primeinc.org/aaaai

**Sunday**

These programs are not sponsored or programmed by the AAAAI.

**Oral Corticosteroid (OCS) Stewardship: A Closer look at OCS Overuse in Severe Asthma**
Sunday, February 24, 6:00 to 8:00 am
Marriott, Lower B2 Level, Yerba Buena Salon 9
Sponsored by AstraZeneca.
Please join a panel of experts that will engage and challenge the audience to think differently about oral corticosteroid (OCS) use in severe asthma by reviewing the cumulative burden and impact of OCS exposure, and highlighting the importance of appropriate OCS use in the management of severe asthma. This interactive presentation will introduce the concept of OCS stewardship, with the goal of reducing the potential overexposure of asthma patients to OCS therapy.

**A Virtual View: Long-Term Management of Atopic Dermatitis: New and Emerging Targeted Systemic Therapies**
Sunday, February 24, 6:45 to 8:00 am
Marriott, Lower B2 Level, Yerba Buena Salon 7
Supported by an educational grant from Sanofi Genzyme and Regeneron Pharmaceuticals.
While guidelines regarding the management of AD in children have been published, variability persists in practice. Treatment inconsistencies and the chronic and relapsing nature of AD can lead to frustration for patients, family, and caregivers when managing AD. This program will focus on providing AD caregivers an update on recent pathophysiological findings that drive new therapeutic targets; reviewing severity and diagnosis of AD; and discussing the clinical profiles of existing and emerging agents, with focus on treatment individualization.

**Virtual reality headsets** will be provided to all attendees for viewing this presentation only.

Register now: www.MLG-AD.com
Registration begins at 6:45 am
Food and beverage will be served
Non-CME Educational Programs (continued)

**Eosinophilic Asthma: Patient Identification & A Targeted Treatment Approach**

Sunday, February 24, 6:30 to 8:30 pm  
**Marriott, B2 Level, Golden Gate B**  
**Sponsored by AstraZeneca.**

Eosinophilic asthma is a common type of severe asthma in adult patients. Eosinophils can contribute to exacerbations and lung function decline in patients with allergic or non-allergic severe asthma. This complimentary symposium will highlight the growing body of literature on eosinophils and severe asthma. The presenters will use a case-based approach to help clinicians identify eosinophilic asthma in clinical practice and will discuss a targeted approach to the management of severe eosinophilic asthma. Attendees should leave being able to translate the growing science of eosinophils into real-world applications for severe asthma patients in the clinic.

**Through the Allergist Lens: Achieving Optimal Outcomes in Patients with Mild-to-Moderate Atopic Dermatitis**

Sunday, February 24, 6:30 to 8:30 pm  
**Marriott, B2 Level, Golden Gate A**  
**Provided by Integrity Continuing Education and supported by an educational grant from Pfizer.**

Faculty: Mark Boguniewicz, MD  
Peck Ong, MD  
Myron Zitt, MD

Join our panel of internationally recognized allergy and clinical immunology experts for a complimentary dinner symposium focused on mild-to-moderate atopic dermatitis. Our panel of experts will highlight recent clinical guidelines and current recommendations for diagnostic strategies, severity assessment, and up-to-date safety and efficacy data of established and emerging therapies for mild-to-moderate AD. Faculty will provide insight regarding patient evaluation, treatment strategies, and guidance on how to facilitate treatment adherence. This engaging program will feature a series of animated white-board case-study videos and interactive iPad technology that will leave attendees with clinically relevant information to implement in your practice.

Register Now: [www.practitionersedge.com/aaaai](http://www.practitionersedge.com/aaaai)

**Personalized Approach in the Management of Patients with Moderate-to-Severe Asthma**

Sunday, February 24, 6:30 to 8:30 pm  
**Marriott, Lower B2 Level, Yerba Buena Salon 7**  
**Sponsored by Sanofi Genzyme and Regeneron.**

Faculty: Dr. Jonathan Corren  
Dr. Geoffrey Chupp

This program will help raise awareness of recent scientific and clinical developments in the management of patients with moderate-to-severe asthma that involves targeted inhibition of select cytokines important in inflammation in asthma. Our expert faculty panel will lead an interactive workshop to review some of the key issues that may be involved in the management of hypothetical patients with asthma, each having unique manifestations of uncontrolled inflammation.

**Chronic Idiopathic Urticaria: Improving Treatment with a Focus on Patient Outcomes**

Sunday, February 24, 8:30 to 10:30 pm  
**Marriott, Lower B2 Level, Yerba Buena Salon 8**

This non-CME educational program is provided by Vindico Medical Education and supported by an educational grant from Genentech, Inc. Urticaria is a common skin condition characterized by transient pruritic wheals. Patients who experience symptom recurrence for a duration over 6 weeks may be diagnosed as having chronic idiopathic urticaria (CIU). A US practice guideline and an updated international guideline are available to guide diagnosis and treatment of urticaria. This activity will assess the impact of CIU on quality of life, particularly its impact on sleep, psychological functioning, work, and activity. Current guideline approaches to the management of CIU will be evaluated, as well as treatment options for patients with CIU who fail to achieve complete symptom control.

**Monday**

These programs are not sponsored or programmed by the AAAAI.

**Coffee and Conversation with the Experts: Delve into the current issues on allergic asthma in expert-led small group sessions**

Monday, February 25, 6:00 to 8:00 am  
**Marriott, Lower B2 Level, Yerba Buena Salon 9**  
**Sponsored by Genentech, Inc. and Novartis Pharmaceuticals Corporation.**

Join our four experts in allergic asthma, doctors Thomas Casale, William Busse, Geoffrey Chupp, and William Calhoun, for a dynamic discussion-based educational program. Attendees will be seated at small tables with one of our experts for a short interactive discussion on a key topic in the field of allergic asthma. Experts will rotate through tables for discussions with attendees on the following topics: asthma phenotypes and endotypes, the use of biomarkers in patient classification, the allergic asthma cascade, and comorbidities associated with allergic asthma. The program will conclude with a Q&A session with our panel of faculty.

**Chronic Rhinosinusitis with Nasal Polyps (CRSwNP): Understanding Mechanisms of Disease and the Role of Type 2 Inflammation**

Monday, February 25, 6:00 to 8:00 am  
**Marriott, Lower B2 Level, Yerba Buena Salon 7**  
**Sponsored by Regeneron and Sanofi Genzyme.**

Speaker: Stella Lee, MD

The pathophysiology of chronic rhinosinusitis with nasal polyps (CRSwNP) is multifactorial, involving Type 2 inflammation in the majority of cases in Western societies. This program presents an overview of CRSwNP, discussing its pathophysiology, its association with comorbidities such as asthma and increased disease burden, and current unmet needs.
Get your 2019 AAAAI Annual Meeting Program with the tap of a finger!

Download the 2019 AAAAI Annual Meeting app from the App Store or Play Store on your mobile device.

- Easily locate session handouts, abstracts and evaluations. *(Note: This will be the ONLY place to access session evaluations.)*
- Research speakers and add their sessions to your calendar.
- Learn about last minute program changes.
- Navigate with interactive maps.
- Interact with other members through the app.

**VAMPSS** — Vaccines and Medications in Pregnancy Surveillance System

*Helping asthmatic women deliver healthy babies*

**Using biologics to treat your severe asthma patients of childbearing age? Help us find out how asthma and its treatments affect pregnancy outcomes.**

The Vaccines and Medications in Pregnancy Surveillance System (VAMPSS) is coordinated by AAAAI and monitors the use and safety of vaccines and medications during pregnancy. Our current focus is the safety of new biologics used to treat severe asthma in pregnant women.

Visit our prospective cohort study partner MotherToBaby at booth #1528 to find out how you can refer your pregnant asthma patients for this important study.
Join us for an evening of fine food, great music and the presentation of our 2019 Faculty Development Awards.

2019 AAAAI Foundation Benefit

SATURDAY, FEBRUARY 23
PARK CENTRAL SAN FRANCISCO

7:00 pm - 10:00 pm
Cocktail Attire

TICKET PRICES:
$300 – Patron
$3,000 – Table of 10
$125 – NAIA/Allied Health
$100 – Student

To purchase tickets, visit the AAAAI Foundation booth located in Moscone Center South, Exhibition Level, Plenary Hall Foyer.
Only $50 to register onsite
visit the Foundation booth located in Moscone Center South, Exhibition Level, Plenary Hall Foyer.

Sunday, February 24, 2019
Starting Line @ Lefty O’Doul Plaza, AT&T Park
Race Start: 5:30 pm
Transportation provided from Moscone Center to AT&T Park via motorized cable car.
NEW four-person team competition - register onsite at the booth!

Proudly sponsored by Shire
Associate and Guest Activities

Associate and Guest Activities

Associates (Spouses & Friends) to the AAAAI
For over 35 years, the Associates (Spouses & Friends) to the AAAAI have provided networking opportunities and events for the spouses and friends to the AAAAI.

Full membership in the Associates is included in each spouse/guest registration fee. Membership includes volunteer opportunities and a chance to participate in future programming for the Associates.

Associates (Spouses & Friends) to the AAAAI Hospitality Suite
Friday, February 22 to Monday February 25
8:00 am to 12:00 pm
Marriott, Level 2, Foothill D
Make sure to visit the Associates hospitality suite, which is open each morning of the Annual Meeting. A host will be on-hand to assist with restaurant and activity recommendations and to help in making reservations. Stop by, have a cup of coffee, learn more about the city of San Francisco and things to do and learn how you can get involved and help the A/I specialty!

Associates Breakfast and Business Meeting
Saturday, February 23, 9:00 to 11:00 am
Marriott, B2 Level, Golden Gate A
Pre-registration and ticket required.
The Associates Steering Committee would like to invite you to begin your Annual Meeting experience by joining us for the Associates Celebration at the Marriott Marquis San Francisco. This breakfast event is open only to spouse/guest attendees (those displaying a delegate or exhibitor badge will not be allowed entry). For guests interested in bringing a child under the age of 17, pre-registration and a ticket is required. Children under age of 6 are complimentary.

The AAAAI Foundation announces these newly funded Named Lectureships and Named Awards: These Lectureships and Awards will be presented at the 2020 AAAAI Annual Meeting in Philadelphia.

Richard F. Lockey, MD MS FAAAAI & University of South Florida Lectureship and Faculty Development Award
Term: 2020-2034

Michael M. Frank, MD FAAAAI Lectureship
Term: 2020-2024

Allen P. Kaplan, MD FAAAAI Lectureship: Creating Knowledge for Our Future
Term: 2020-2024

Harold S. Nelson, MD FAAAAI Lectureship: Investing Together in Our Future
Term: 2020-2024

David S. Pearlman, MD FAAAAI Lectureship: Contributing to Discovery and Education
Term: 2020-2022

Bench to Bedside:
K. Frank Austen, MD FAAAAI & Albert L. Sheffer, MD FAAAAI Lectureship
Term: 2020-2024
Annual Meeting Lectureships

For nearly five decades, members of the American Academy of Allergy, Asthma & Immunology have honored outstanding individuals who have contributed to this field as leaders and teachers by the establishment of Annual Meeting lectureships. The Annual Meeting Program Committee is pleased to announce the lectureships and lectureship speakers for the 2019 AAAAI Annual Meeting. Biographies and photographs are available at annualmeeting.aaaai.org.

The Isil Berat Barlan Memorial Lectureship: 3rd Year
Lecturer: Raif S. Geha, MD FAAAAI
Award presentation at Plenary 3101: Systemic Regulation of Susceptibility and Pathogenesis of Allergic Inflammation on Sunday, February 24, 8:15 to 9:45 am

The Rebecca Buckley Lectureship: 8th Year
Lecturer: Donata Vercelli, MD
Award presentation at Symposium Session 2306: Innate Immunity in Allergic Responses on Saturday, February 23, 10:45 am to 12:00 pm

The Robert A. Cooke Memorial Lectureship: 57th Year
Lecturer: Eric Schadt, PhD
Award presentation at Keynote Session 2701: Inching Towards the Construction of Individualized Health Course Trajectories of Disease and Wellness on Saturday, February 23, 3:30 to 4:30 pm

The Elliot F. Ellis Memorial Lectureship: 21st Year
Lecturer: Julie Wang, MD FAAAAI
Award presentation at Plenary Session 1810: Allied Health Plenary: Food Allergy Update on Friday, February 22, 4:15 to 5:30 pm

The Hugh A. Sampson Lectureship in Food Allergy: 4th Year
Lecturer: Robert A. Wood, MD FAAAAI
Award presentation at Plenary Session 1601: Optimal Care of the Food Allergic Patient on Friday, February 22, 2:15 to 4:15 pm

The Robert G. Townley Memorial Lectureship: 5th Year
Lecturer: Kim E. Mudd, RN MSN CCRP
Award presentation at Plenary Session 1810: Allied Health Plenary: Food Allergy Update on Friday, February 22, 4:15 to 5:30 pm

AAAAI Foundation Named Lectureships

AAAAI Foundation and I. Leonard Bernstein, MD FAAAAI Memorial Lectureship: 3rd Year
Lecturer: Jonathan I. Silverberg, MD PhD MPH
Award presentation at Plenary Session 4101: Atopic Dermatitis: Bench to Bedside and Back on Monday, February 25, 8:15 to 9:45 am

AAAAI Foundation and Bettina C. Hilman, MD FAAAAI Lectureship: 2nd Year
Lecturer: Emma Guttman-Yassky, MD PhD
Award presentation at Plenary Session 4101: Atopic Dermatitis: Bench to Bedside and Back on Monday, February 25, 8:15 to 9:45 am

AAAAI Foundation and Phillip E. Korenblat, MD FAAAAI Lectureship: Investing Together in Our Future: 2nd Year
Lecturer: A. Wesley Burks, MD FAAAAI
Award presentation at Plenary Session 1601: Optimal Care of the Food Allergic Patient on Friday, February 22, 2:15 to 3:45 pm

AAAAI Foundation and Donald Y. M. Leung, MD PhD FAAAAI-JACI Lecture: Investing Together in Our Future: 7th Year
Lecturer: Lisa A. Beck, MD FAAAAI
Award presentation at Plenary Session 4101: Atopic Dermatitis: Bench to Bedside and Back on Monday, February 25, 8:15 to 9:45 am

AAAAI Foundation and Phil and Barbara Lieberman and Friends Lecture: Investing Together in Our Future: 5th Year
Lecturer: Cecilia Berin, PhD
Award presentation at Plenary Session 1601: Optimal Care of the Food Allergic Patient on Friday, February 22, 2:15 to 3:45 pm

AAAAI Foundation and Louis Mendelson Lectureship: Investing Together in Our Future: 3rd Year
Lecturer: Cathryn Nagler, PhD
Award presentation at Plenary Session 3101: Systemic Regulation of Susceptibility and Pathogenesis of Allergic Inflammation on Sunday, February 24, 8:15 to 9:45 am

AAAAI Foundation and Gary S. Rachelefsky, MD FAAAAI Lectureship: Investing Together in Our Future: 2nd Year
Lecturer: Anuradha Ray, PhD
Award Presentation at Symposium Session 3555: Interferons Contribute to Allergic Disease: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Center on Sunday, February 24, 12:30 to 1:45 pm
The American Academy of Allergy, Asthma & Immunology Foundation presents the

2019 Named Lectureship Series

Featuring Lectures at AAAAI Annual Meeting Plenary and Keynote Sessions In Honor Of:

I. Leonard Bernstein, MD FAAAAI
Bettina C. Hillman, MD
Phillip E. Korenblat, MD FAAAAI
Dennis K. Ledford, MD FAAAAI
Donald Y.M. Leung, MD PhD FAAAAI and JACI Editors
Phil and Barbara Lieberman and Friends
Louis M. Mendelson, MD FAAAAI

Gary S. Rachelefsky, MD FAAAAI
Gail G. Shapiro, MD FAAAAI
William T. Shearer and Lynn Des Prez
Sheldon L. Spector, MD FAAAAI
The Heritage Lectureship (Honoring Drs. Robert Becker, Jerry Dolovich, Elliot Middleton, John Salvaggio and Burton Zweiman)

The 2019 Named Lectureship Series is proudly sponsored by AstraZeneca
AAAAI Foundation and William T. Shearer and Lynn Des Prez Lecture: Investing Together in Our Future: 5th Year
Lecturer: Carla Davis, MD FAAAAI
Award presentation at Plenary Session 2101: Outcomes, Education and Healthcare Delivery in Allergic Diseases on Saturday, February 23, 8:15 to 9:45 am

AAAAI Foundation and Sheldon L. Spector, MD FAAAAI Memorial Lectureship: 2nd Year
Lecturer: Maureen George, PhD RN AE-C
Award presentation at Plenary Session 2101: Outcomes, Education and Healthcare Delivery in Allergic Diseases on Saturday, February 23, 8:15 to 9:45 am

AAAAI Foundation and Gail G. Shapiro, MD FAAAAI Memorial Lectureship: Inaugural Year
Lecturer: David R. Stukus, MD FAAAAI
Award presentation at Plenary Session 2101: Outcomes, Education and Healthcare Delivery in Allergic Diseases on Saturday, February 23, 8:15 to 9:45 am

AAAAI Foundation and Dennis K. Ledford & University of South Florida Allergy & Immunology Division Lectureship: Inaugural Year
Lecturer: Sergejs Berdnikovs, PhD
Award presentation at Plenary Session 3101: Systemic Regulation of Susceptibility and Pathogenesis of Allergic Inflammation on Sunday, February 24, 8:15 to 9:45 am

AAAAI Foundation Heritage Lectureship: Inaugural Year
Lecturer: Linda Herbert, PhD
Award presentation at Plenary Session 1810: Allied Health Plenary: Food Allergy Update on Friday, February 22, 4:15 to 5:30 pm

Coding Questions?
Coding Questions Answered Quickly
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aaaaai.org/practicematters
Awards

### Allied Health Abstract Travel Award Recipients:

Nancy L. Ross, RN BN CAE  
**Children’s Allergy & Asthma Education Centre**  
“Impact of Food Allergy on School-Age Students: Perceptions of Winnipeg Parents, Teachers and School Staff”

Jodi Shroba, MSN APRN CPNP  
**Children’s Mercy Hospital**  
“Assessment of school preparedness in the school-aged child with a food allergy”

Nicole Cascone, RN  
**University of Pittsburgh Medical Center, Presbyterian**  
“The Impact of Allergic Disease in Adults with Chronic Idiopathic Urticaria”

Daisy Tran, RN  
**Texas Children’s Hospital**  
“School Personnel Apprehension Related To Stock Epinephrine In Greater Houston Area”

### AAAAI/APFED Best Abstract on EGIDs Award

Basil M. Kahwash, MD  
**The Ohio State University**  
“Peripheral Blood Microarray Analysis in Pediatric Patients with Eosinophilic Esophagitis”

Catherine Sonaly Ferreira Martins, MD  
**University of São Paulo**  
“EoE, OIT and Anaphylaxis: An Unsolved Puzzle”  
The award is funded by APFED and provides $750.

### American Academy of Pediatrics Section on Allergy and Immunology Pediatric Abstract Awards

#### FIT Award Recipients - $750

David Peloza, MD  
**University of Wisconsin-Madison**  
“Early Life Risk Factors for Asthma at Early Adulthood”

Watcharoot Kanchongkittiphon, MD PhD  
**Washington University School of Medicine**  
“Characterization of Gut Microbiome in Infants with Severe Respiratory Syncytial Virus Bronchiolitis”

Katie Kennedy, MD  
**The Children’s Hospital of Philadelphia**  
“Replacement immunoglobulin trends amongst patients with CVID and concurrent autoimmunity: A report from the USIDNet registry”

#### Junior Faculty - $1000

Sima Ramratnam, MD MPH  
**University of Madison Wisconsin**  
“Spirometry and Impulse Oscillometry Trajectories in an Inner-City Longitudinal Birth Cohort at High Risk for Asthma”

Eric M. Schauberger, DO PhD  
**University of Wisconsin**  
“The Pediatric Asthma Risk Score (PARS) Predicts Atopic and Non-atopic Asthma Better than the Asthma Predictive Index”

### 2019 Bernard B. Siegel Memorial Abstract Award

Yuval Tal  
**Hadassah Medical Center**  
“Anaphylaxis-related posttraumatic stress disorder”
Awards

AAA AI Interest Section Fellow-in-Training Abstract Award Recipients

Asthma Diagnosis and Treatment
Jamie A. Rosenthal, MD
University of Washington
"Type-1 Interferon and Th2-Type Gene Expression Responses and Childhood Asthma"

Basic and Clinical Immunology
Anna Lang, MD PhD
University of Wisconsin
"Distinct Innate Immune Cell Maturation during the First Year of Life is Associated with Farm Exposure"

Environmental and Occupational Respiratory Diseases
Nicole Akar-Ghibril, MD
Boston Children's Hospital
"Mouse Allergen Levels in Schools in Two Inner City Asthma Studies: Past versus Present"

Food allergy, Anaphylaxis, Dermatology and Drug Allergy
Emily H. Liang, MD
Southern California Permanente Medical Group
"Penicillin and Clindamycin Associated Anaphylaxis and Serious Cutaneous Adverse Reactions"

Health outcomes, Education, Delivery and Quality
Jason Kwah, MD
Northwestern University Feinberg School of Medicine
"Respiratory Virus Detection in Nasal Lavage Fluid of Chronic Rhinosinusitis Patients During Acute Exacerbation"

Immunotherapy, Rhinitis, Sinusitis and Ocular diseases
Rory Nicolaides, MD
University of Texas Southwestern Medical Center
"Experience with Pharmacist Prepared Pre-filled SCIT Dosing in an Urban Allergy Clinic"

Mechanisms of Asthma and Allergic Inflammation
Katherine L. Tuttle, MD
Brigham and Women's Hospital
"Pathogenic effector Th2 lymphocytes in human nasal polyposis"

2019 International Travel Scholarship Recipients

The following international in-training members have been awarded International Travel Scholarships to attend the Annual Meeting. The 2019 International Travel Scholarships are selected by an ad hoc panel of International Fellows.

East Asia
Thitima Kantachatvanich, MD
Chulalongkorn Hospital
Thansinee Saetae, MD
King Chulalongkorn Memorial Hospital
Yee Yan Christine Wai, PhD
The Chinese University of Hong Kong
Dong Keon Yon, MD
Bundang CHA Medical Center
Wassamon Phattarapongdilok, MD
Songklanagarind Hospital

Europe
Adriana Ariza Veguillas, PhD
University of Malaga

Mexico
Rosalaura Villarreal-Gonzalez, MD
University Hospital Jose Eleuterio Gonzalez

South America
Claudia Leiko Yonekura Anagusko, MD
University of São Paulo
Patricia Bastos, MD
Federal University of São Paulo
Barbara Cancado, MD
Federal University of São Paulo
Wagner Campos, PhD
School of Medicine of Ribeirão Preto
Isabella Manhaes, MD
Federal University of São Paulo
Luiza Marino, MD
Federal University of São Paulo
Marilia Moraes, MD
Federal University of São Paulo
Orlando Trevisan Neto, MD
School of Medicine of Ribeirão Preto

2019 Medical Student and Resident Travel Scholarships

The Medical Student and Resident Scholarships are open to Medical Students and Residents in the United States and Canada.

Awarded Amount: $1100
Babak Aberumand, MD
Morgan A. Amigo
Abhilasha Banerjee, MD
Felix Chan
Brian T. Cheng
Alanna Chomyn, MD
Sue Dong
Jocelyn Jia
Darya Koenig, MD
Monica T. Kraft, MD
Abigail Lang, MD
Hannah N. Neuhaus, MD
Yitzchok M. Norowitz
Jordan D. Pitt, MD
Benjamin Rahoy, DO
Kathryn A. Rentfro
Shaunah S. Ritter, DO
Cale J. Roberts, MD
Pragya Shrestha, MD
Ashley N. Stoner, MD
Lulu Tsao, MD
Garen S. Wolff, MD
Elizabeth A. Yakaboski, MD
Cindy X. Zhang
2019 Domestic Fellow-in-Training Travel Scholarships
The FIT Travel Scholarships are open to Fellows-in-Training in the United States and Canada.

Awarded Amount: $1100
Amanda Agyemang, MD
Hassan A. Ahmad, MD
Ammara G. Ahmed, DO
Nicole Akar-Ghibril, MD
Ayobami Akenroye, MD MPH
Fadi Alkhathib, DO
Taha Al-Shaikhly, MD MBChB
Evelyn Angulo, MD
Niloofar Anooshiravani, MD
Karen M. Anstey, MD
Anna Arroyo, MD MPH
Mary Grace Baker, MD
Carolyn H. Baloh, MD
Rachel Bean, MD
Peter S. Capucilli, MD
Erica C. Chen, MD
Sheeba K. Cherian, MD
Sun Mi Choi, MD PhD
Madeleine B. Chollet, MD
Dara Cohn, MD
Quindelyn Cook, MD
Cleavon J. Covington, MD
Aparna S. Daley, MD
Elizabeth Daniel, MD
Christin Deal, MD
Ashley Devonshire, MD MPH
Hannah Duffey, MD
Joan Dunlop, MD
Amy Eapen, MD
Stephanie C. Erdle, MD
Julie Flom, MD PhD MPH
Kourtney Gardner, MD
Christopher Gordon, DO
Maria W. Guenther, MD
Madeleine E. Holschuh, MD
Dara Cohn, MD
Katherine Larabee Tuttle, MD
Kathleen Lee-Sarwar, MD
Mona Liu, MD
Shazia Lutfi, MD
Kristen Lutzkanin, MD
Amarilla Bernadett Mandola, MD
Katherine McCormack, MD
Gordon Myers, MD
Stacy M. Nassau, MD
Kathryn Neupert, MD
Diana X. Nichols-Vinueza, MD
Rory Nicolaides, MD
Irum Noor, DO
Nneoma Obiejamba, MD
Nurcicek Padem, MD
Aarti Pandya, MD
Gargi Patel, MD
Gayatri Patel, MD
Priya J. Patel, MD
David Peloza, MD
Carla Perez, MD
Neelam A. Phadke, MD
Jennifer Pier, MD
Nicole Ramsey, MD PhD
Niharika Rath, MD
Cali Reynolds, MD
Lacey Robinson, MD
Daniel L. Rosenberg, MD
Jamie A. Rosenthal, MD
Daniel A. Rosloff, MD
Lauren Rothstein, MD
Christine Rukasin, MD
Zeinab Saleh, MD
Charles Schuler, MD
Justin Schwartz, MD PhD
Sara Seghezzo, MD
Ruchi Shah, MD
Kirk V. Shepard, II, MD
Travis M. Sifers, MD
Jennifer C. Simonaire, DO
Ruchi Singla, MD
Claire Smigiel, MD
Julia Sohn, MD
Amika Sood, MD
Cheryl A. Steiman, MD
Heather H. Stern, DO
Lindsey Stoltz, MD
Cosby Stone, MD MPH
Di Sun, MD MPH
Robert J. Szalewski, MD
Robert Tamayev, MD PhD
Monica Tang, MD
David E. Tapke, MD MPH
Julia Thorsen, MD
Nalin U.G., DO
Anusha Vadlamudi, MD
Sofiia Volertas, MD
Jamie L. Waldron, MD
Vivian Wang, MD
Jeffrey Wilson, MD PhD
Alanna Wong, MD
Albert Wu, MD
Luanne Yang, MD

Awarded Amount: $800
Eliane Abou-Jaoude, MD
Yuliya Afoninova, MD
Neha Agnihotri, MD
Rhonda Alkatib, MD
Sasha A. Alvarado, DO
Santiago Alvarez Arango, MD
John Anthonypillai, MD
Amarilla Bernadett Mandola, MD
Nathan A. Boggs, MD
Ana-Maria Bosonea, MD
David Brauer, MD
Joseph Cafone, MD
AnnetteCarlisle, MD
Alice S. Chau, MD
Melanie Conway, MD
Elise Coulson, MD
Alma Cruz, MD
Vincent P. Devlin, Jr., DO
Rashmi D’mello, MD
Jessica R. Durkee-Shock, MD
Marwa El-Bohy, MD
Arfa Faiz, MD MBBS
Lara Farhat, DO
Dinah Foer, MD
Shannon French, MD
Claudia L. Gaefke, MD
Melissa D. Gans, MD
Meghan Farrell Garcia, MD
August J. Generoso, MD
Baliee H. Gilchrist
Saul Moshe Greenbaum, MD
Lily Grobman, MD
Joshua Grossman, MD
Olga Hardin, MD
Yasmin Hassoun, MD
Awards

Build a strong peer and mentor network while preparing for your career in research.

Apply now to participate in the 2019 Faculty Development Program on August 15-18, 2019.

Learn more and apply now at education.aaaai.org/2019facultydevelopment

“arly truly was an exceptional experience... My peers are brilliant and will be a source of future support, advice, and collaboration.”

Monica Tsai, MD
Linh-An C. Tuong, MD
Lorelei Vandiver, MD
Kateryna Vostretsova, MD
Helen T. Wang, MD
Kathleen Wang, MD
Melissa M. Watts, MD
Alissa Welsh, MD
Laura J. West, MD
Alicia Widge, MD MS
Shan Shan Wu, DO
Barbara Yang, MD
Tyler R. Yates, MD
Ofer Zimmerman, MD

Awarded Amount: $650

Jennifer L. Barnas, MD PhD
Pascale Dupuis, MD
Jocelyn Farmer, MD PhD
Anna Ferguson, MD
Paria Kashani, MD
Ravdeep Kaur, MD
Zhen Ren, MD
Savannah L. Sommerhalder, MD
Alberta L. Wang, MD

Awards

Jessica W. Hui, MD
Baruch Jakubovic, MD
Warit Jithpratuck, MD
Rebin Kader, DO
Anita Kallepalli, MD
Micah Karasov, DO
Bani Preet Kaur, MD
Jeffrey Kepes, MD
Farah N. Khan, MD
Suzanne R. Kochis, MD
Lisa A. Kohn, MD PhD
Hasan Kular, MD
Jason Lam, DO
Weyman Lam, MD
Ivan Lee, MD PhD
Dawn K. Lei, MD
Elise Liu, MD
Rachel Lo, MD
Hannah Martin, MD
Victoria Menashy, MD
Jennifer Miller, MD
Pavle S. Milutinovic, MD PhD
Sanju Mishra, MD
Diana Munoz-Mendoza, MD
Anh P. Nguyen, MD
Johnny Nguyen, DO
Nora Odisho Domit, DO
Chirag Patel, MD
Nilam D. Patel, DO
Shiven Patel, MD
Mohini Pathria, MD
Megan Patterson, MD
Ryan Paulk, MD
Michael Polcar, MD
Erica K. Ridley, MD
Christopher Rigell, MD
Zachary Rubin, MD
Juan C. Ruiz, MD
Keith A. Sacco, MD
Rebecca Saenz, MD PhD
Trisha Saha, MD
Miriam Samstein, MD PhD
Neha Sanan, DO
Parteet Sandhu, MD
Tara Sarin, MD
Amanda Schneider, MD
Ori Scott, MD
Amina Siddiqi, MD
Elizabeth R. Smith, MD
Erin C. Steinbach, MD PhD
Hiral P. Thakrar, MD

American Academy of Allergy Asthma & Immunology
ANNUAL MEETING
SAN FRANCISCO, CA - FEBRUARY 22-25, 2019

AAAAY Faculty Development Program

AAAAY Faculty Development Program

29
2019 PhD Travel Scholarships
The PhD Travel Scholarships is open to non-faculty PhD Post-Doctoral Fellows and PhD Students/Candidates working on A/I related topics with an affiliated A/I program in the US or Canada.

**Awarded Amount: $1100**
Matthew G. Brewer, PhD  
Casey G. Cohen, DO  
Anh N. Do, MSPH PhD  
Dan C. Do, PhD  
Cameron H. Flayer, PhD  
Tammy Gonzalez  
Jennifer A. Hoang, PhD  
Koa Hosoki, MD PhD  
Mark D. Ihrie, PhD  
Ara Jo, PhD  
Hemanth Kumar Kandikattu, PhD  
Lyndsey M. Muehling, PhD  
Manali Mukherjee, PhD  
Jun Nagai, PhD  
Allison E. Norlander, PhD  
Ashley Ramos, PhD  
Piper A. Robida, PhD  
Sachin Samuchiwal, PhD  
Kapil Sirohi, PhD  
Johanna Smekens, PhD  
Lianne Soller, PhD  
Jada Suber  
Wei Zhao

2019 AAAAI/EAACI Reciprocal Travel Grants
Each year, AAAAI sponsors two EAACI junior members to attend the AAAAI Annual Meeting, and in turn, EAACI sponsors two AAAAI fellows-in-training to attend the EAACI Congress.

Alessandra Arcolaci, MD  
University of Cagliari, Italy  
Peter Valentin Tomazic, MD  
Medical University of Graz, Austria

**AAAAl Payer Relations**
Reviewing policy updates and initiating correspondence to protect patient access to care and provider compensation.

- Evaluating payer revisions to policies; more than 750 allergy testing and immunotherapy policies reviewed in 2018.
- Impacting policies ranging from compensation for drug allergy and venom immunotherapy services to treatment access for allergic rhinitis and asthma.
- Engaging with payers across the country, including Blue Cross Blue Shield, Humana, Anthem, AmeriHealth, Caritas Northeast, Pacific South and many more.

- Advocating for Change; more than 250 letters to payers issued in 2018.
- Getting Results: “Concerning the medical policy addressing Mepolizumab (i.e., Nucala), we agree with your recommendation. That policy document needs to specify that asthma is considered severe if ANY ONE of the components of severity are met, not all. We’ll revise that wording today. We appreciate you sending that suggestion to us.”

Learn more at the Practice Management Hub

aaai.org/practicematters
THE AAAAI FOUNDATION IS PLEASED TO ANNOUNCE THE
RECIPIENTS OF OUR 2019 FACULTY DEVELOPMENT AWARDS

Matthew C. Altman, MD, MPhil
University of Washington
Regulatory Circuits Between Antiviral Type I Interferon and Th2-Type Inflammation in Pediatric Asthma

Maria J. Gutierrez, MD
Johns Hopkins University
Antibody Secreting Cell Dysfunction and Infection Risk in Rheumatoid Arthritis

Paul J. Maglione, MD, PhD
Boston University School of Medicine
How B Cell Developmental Defects Shape Manifestations of Common Variable Immunodeficiency

Caroline L. Sokol, MD, PhD
The AAAAI Foundation & Dr. Donald Y. M. Leung/JACI Editors Faculty Development Award
Massachusetts General Hospital Allergy Associates
Innate Immune Control of Th2 Differentiation

Thank you, AAAAI Foundation Donors, for making FOUR awards possible this year! Your generosity will have a huge impact on the careers of these young investigators.

Congratulations, Award Recipients! We are pleased to participate in the development of your career.
Claim Annual Meeting Credits

Select **Claim Credits** on the Annual Meeting app or annualmeeting.aaaai.org

Enter your badge number or name and choose certificate type

Complete evaluation and select sessions you have attended

Click **Save Sessions and Go Forward** after selecting all sessions

**Deadline: December 31, 2019**
Continuing Education & Accreditation

Two types of continuing education credit will be available at the 2019 AAAAI Annual Meeting: AMA PRA Category 1 CME Credits™ for physicians and Continuing Education (CE) contact hours for nurses. Not all Annual Meeting sessions may offer credit, and of those that do not all may offer both CME and CE. The types and amount of credit offered for each session are indicated in the session descriptions beginning on page 46. Attendance certificates are available to all delegates.

Credit Claiming: Continuing education credits and attendance certificates can be claimed at the Registration Desk, located at Moscone Center South, Lobby Level, beginning Thursday, February 21. Credits can also be claimed through the mobile app or online at annualmeeting.aaaai.org beginning Thursday, February 21 and ending December 31, 2019.

Physicians – Continuing Medical Education (CME) Credits

Accreditation Statement
The American Academy of Allergy, Asthma & Immunology (AAAAI) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Credit Designation Statements
The AAAAI designates this live activity for a maximum of 39.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The American Medical Association has determined that physicians not licensed in the U.S. who participate in this CME activity are eligible for AMA PRA Category 1 Credits™.

Target Audience
The AAAAI Annual Meeting is designed for clinicians, researchers, trainees/students and allied health professionals involved and/or interested in the study of allergy, asthma and immunology.

Program Objective
Upon completion of the AAAAI Annual Meeting, participants should be able to discuss the latest advances in the research, diagnosis and treatment of allergic and immunologic disease. Learning objectives for individual sessions can be reviewed in the online program and the mobile app.

ABAI – Continuing Medical Education (CME) Credits
The American Board of Allergy and Immunology (ABAI) requires diplomates to attest to obtaining 25 AMA PRA Category 1 CME Credits™ in allergy/immunology each year. AAAAI reports all CME credits it issues to physician learners to the ABAI on a quarterly basis to be posted in learners’ diplomate portals. For more information about credit requirements for ABAI Maintenance of Certification visit the ABAI website at abai.org/cme.asp.

Allied Health – Continuing Education (CE) Credits

Nurses – Continuing Education (CE) Contact Hours
The American Academy of Allergy, Asthma & Immunology (AAAAI) is a Provider, approved by the California Board of Registered Nursing, Provider #10704, for up to 39.25 Contact Hours.

Medical Administrators
Practice administrators who attend the Annual Meeting may apply for credit through the American College of Medical Practice Executives (ACMPE). For additional information, please contact the Medical Group Management Association at mgma.com.

Advanced Practitioners
The AAPA, ANCC and AANP accept reports from advanced practitioners of their participation in activities offering AMA PRA Category 1 Credits™ for continuing education and credentialing purposes. For more information, please contact the appropriate organization.

Pharmacists
Pharmacists are encouraged to contact their state boards of pharmacy to determine if reports of participation in the 2019 AAAAI Annual Meeting are accepted for re-licensure.

Target Audience
Healthcare professionals who assist with and provide care to persons with asthma, allergy and immunologic disease, specifically: RNs, LPNs, nurse practitioners, physician assistants, respiratory therapists, medical technologists, medical assistants, clinical research coordinators and practice managers/administrators.

Learning Objectives
Upon completion of the Annual Meeting, participants should be able to discuss and expand upon the latest advances in medications, equipment and procedures necessary to promote health for their patients; describe and discuss new therapies, information, patient care and education in the field of allergy, asthma and immunology; identify new approaches to clinical research which will improve efficiency and effectiveness; and discuss coding and other administrative aspects of a medical practice. Learning objectives for individual sessions can be reviewed in the online program and the mobile app.
Introduction to Session Tracks

Sessions Tracked by Topic
To help you navigate the 150+ sessions in the Annual Meeting program, the index on the following pages lists all of the education sessions by topic. The topic categories include:

- Allergens/Allergy Testing/Allergy Therapeutics
- Allergic and Immunologic Skin Diseases
- Allergy Office Practice
- Anaphylaxis/Urticaria/Angioedema
- Asthma
- Autoimmune/Autoinflammatory Disorders
- Drug/Insect Allergy/Vaccines
- Food Allergy
- Immune Mechanisms
- Immunodeficiency
- Lung Diseases Other than Asthma
- Mast Cell/Eosinophilic Disorders
- Research Principles
- Rhinosinusitis/Ocular Allergy

These categories are included in the session descriptions in the online program as well. Use this index to tailor your Annual Meeting agenda to best meet your learning needs and answer your questions about your practice.

2019 Clinical Theme:
Food Allergy: Advances in Prevention and Treatment

All education sessions related to the Annual Meeting theme are highlighted in the session descriptions in light green. Theme-related sessions include plenaries, symposia, workshops, and seminars throughout the meeting.

The AAAAI Foundation achieved Platinum Level of Transparency from GuideStar.

This rating by GuideStar puts the AAAAI Foundation in the top 0.1% of charities nationally in terms of transparency.

Your donation in 2019 will fund more research in 2020. Consider making a gift today!
To donate, please visit the AAAAI Foundation booth or aaaaaifoundation.org/give

NEW Four-Person Team Competition

To create your team of four, visit the Foundation booth and complete a Team Registration form.

The top three teams with the lowest combined times will each receive a trophy and bragging rights!

The Foundation booth is located in Moscone Center South, Exhibition Level, Plenary Hall Foyer.

Proudly sponsored by Shire
# Introduction to Session Tracks

## Allergens/Allergy Testing/Allergy Therapeutics

**Thursday, February 21, 2019**

- **Session 201**: Basic Aeroallergen Course
- **Session 601**: 2019 Literature Review: ABAI Continuous Assessment Study Course

**Friday, February 22, 2019**

- **Session 1201**: Difficult Cases 1 and Difficult Cases 2
- **Session 1302**: Allied Health: Hot Topics in Allergy: What You May Have Missed in the Literature
- **Session 1803**: Generation of Antigen-Specific Immunoglobulin E: A Revolution in Novel Therapies for Allergic Diseases
- **Session 1804**: An Update on the Efficacy and Safety of Subcutaneous (SCIT) and Sublingual (SLIT) Immunotherapy
- **Session 1805**: Environmental Yeasts: An Overlooked Exposure and Potential Aeroallergen Source in the United States

**Saturday, February 23, 2018**

- **Session 2005**: How to Best Use Component Testing for Food Allergy in Clinical Practice
- **Session 2009**: How to Apply Component Based Testing in Your Practice: A Case-Based Presentation
- **Session 2305**: World Allergy Forum: New Advances in Allergen Immunotherapy
- **Session 2307**: Stories from the AAAAI Foundation
- **Session 2309**: Implementation of Food Immunotherapy into Clinical Practice
- **Session 2506**: Cannabis Sativa: Marijuana as Medicine and Allergen?
- **Session 2612**: Allied Health: Update on Allergen Extract Compounding: Immunotherapy Survey Results and Coding
- **Session 2801**: Hot Topics in Pediatric Allergy and Immunology
- **Session 2807**: A Review of Cross-Reactivity Patterns, Extract Stability, Optimal Dosing and Mixing for Subcutaneous Allergen Immunotherapy: A Case-Based Immunotherapy Prescription Mixing Workshop

**Sunday, February 24, 2019**

- **Session 3004**: Toxic Mold: Health Effects and Home Assessment

**Monday, February 25, 2019**

- **Session 4001**: Cross-Reactivity Patterns, Extract Stability, Optimal Dosing and Mixing for Subcutaneous Immunotherapy: A Case-Based Review of Immunotherapy Prescription Mixing

## Allergic and Immunologic Skin Diseases

**Friday, February 22, 2019**

- **Session 1506**: Allied Health: Hands on Eczema: Trying Out the Toolbox
- **Session 1511**: Problem-Based Learning: Severe Atopic Dermatitis
- **Session 1802**: Environment and Allergic Disease: A Global Phenomenon with Particular Consequences for At-Risk Populations
- **Session 1807**: The New International Urticaria Guidelines: Are They of Practical Use to the Clinical Allergist?

**Sunday, February 24, 2019**

- **Session 3501**: Should I Test My Patient with Atopic Dermatitis for Food Allergies?
- **Session 3509**: Diagnosis and Management of Contact Dermatitis in Patients
- **Session 3510**: Detergents in Allergic Sensitization

**Monday, February 25, 2019**

- **Session 4005**: Diagnosis and Treatment of Common Skin Conditions and Cutaneous Drug Allergy in Older Adults
- **Session 4101**: Atopic Dermatitis: Bench to Bedside and Back
- **Session 4305**: Targeting the Outside: Moving in on Atopic Dermatitis

## Allergy Office Practice

**Friday, February 22, 2019**

- **Session 1001**: 2019 FIT Symposium
- **Session 1050**: 2019 Chrysalis Project Program
- **Session 1101**: Allied Health: Advanced Practice Update
- **Session 1110**: Boot Camp for Program Directors and Clinical Faculty: How to Develop and Maintain Excellence in Allergy/Immunology Fellowships
- **Session 1204**: Best of Practice Management Workshop: Expanding the Scope of Practice
- **Session 1207**: Hands-On Workshop: IT Counts: Interactive Patient Cases
- **Session 1208**: Improving Your Merit-Based Incentive Payment System Score by Promoting Adherence to Asthma Therapy
- **Session 1510**: JACI: In Practice Year-in-Review Workshop
**Introduction to Session Tracks**

**Saturday, February 23, 2019**

**Session 2007:** New Solutions for Old Problems: Can Technology Improve Medication Adherence?

**Session 2010:** Overcoming Barriers to Change: Relationship Centered Communication Skills to Help with Asthma Control

**Session 2101:** Outcomes, Education and Healthcare Delivery in Allergic Diseases

**Session 2303:** Growing Your Practice While Earning MOC Credit with the AAAAI Clinical Rotation Curriculum

**Session 2405:** Career Paths in Allergy and Immunology

**Session 2501:** There’s an App for That: The Use of Mobile Technology in Clinical Practice

**Session 2557:** Interesting Cases Part I

**Session 2614:** Allied Health: Perspectives from the Allied Health Travel Scholarship Recipients

**Session 2802:** ABAI Continuous Assessment Program (CAP) Pilot: One Year Later

**Session 2806:** JACI Year-in-Review Workshop

**Sunday, February 24, 2019**

**Session 3003:** Making QI Work for You: How to Begin, Complete and Publish Your Ideas in Quality Improvement

**Session 3009:** Update on Health Care Reform, Registries, Measures and Guidelines

**Session 3305:** Physician Health and Wellness: “We Need to Talk”

**Session 3705:** HEDQ: Effect the Change You Wish to See in the Allergy Clinic

**Monday, February 25, 2019**

**Session 4303:** Schools and Tools: How We Can Advance the Management of Asthma, Food Allergies and Anaphylaxis

**Session 4712:** Teledicine in Practice: From Contemplation to Implementation

**Anaphylaxis/Urticaria/Angioedema**

**Saturday, February 23, 2019**

**Session 2006:** Evaluation and Treatment of Angioedema: An Approach to Difficult Cases

**Sunday, February 24, 2019**

**Session 3704:** FADDA: Hereditary Angioedema and Eosinophilic Esophagitis: Management in 2019

**Monday, February 25, 2019**

**Session 4008:** Idiopathic Anaphylaxis: The Overlap with Chronic Idiopathic Urticaria/Angioedema and Magnetic Cell Sorting and Approach to Patient Care

**Asthma**

**Friday, February 22, 2019**

**Session 1103:** Allied Health: Improving Asthma Control through Telemedicine

**Session 1505:** Asthma Over the Age of 65: All’s Well That Ends Well

**Session 1515:** What is the Best Treatment Strategy for the Prevention and/or Treatment of Asthma Exacerbations in Children?

**Saturday, February 23, 2019**

**Session 2008:** Asthma and Allergy Health Disparities throughout the Lifespan

**Session 2301:** Asthma Care in the Era of Precision Medicine

**Session 2503:** Asthma in Preschool Children: Primary and Secondary Prevention and Management of Exacerbations

**Session 2507:** Biologic Therapies and Occupational Asthma

**Session 2551:** Antibiotics are Effective Therapy for the Management of Acute Episodic Wheeze in Preschool Children

**Session 2555:** National Heart, Lung and Blood Institute: Precision Medicine in Asthma

**Session 2803:** Asthma and the Athlete: Insights from an Ironman Legend

**Session 2804:** Gender Disparities in Asthma: Are Hormones to Blame?

**Sunday, February 24, 2019**

**Session 3006:** Introducing the New 2017 ATS Updates to the 2005 ATS/ERS Guidelines: How to Perform, Interpret and Report Spirometry

**Session 3304:** Biologics for Severe Asthma: Treatment-Specific Effects Important in Choosing a Specific Agent

**Session 3310:** Allied Health: Multidisciplinary Approach to Treating the Severe Pediatric Asthma Patient

**Session 3401:** Asthma Medication Delivery Devices: How to Use Them and How to Teach Them

**Session 3504:** Anti-Eosinophil Therapies for Severe Asthma and Beyond

**Session 3551:** The Severe Asthma Patient with Eosinophilic Phenotype Should Be Treated with Anti-Interleuken 5 Therapies

**Session 3701:** ADT: Asthma Education, Asthma Action Plans and Peak Flow Meters: Which Strategies Actually Work?

**Session 3703:** EORD: Microbiome, Metabolome and Asthma: Clues for Treatment and Prevention

**Monday, February 25, 2019**

**Session 4004:** Up-to-Date Perspectives on Exercise-Induced Bronchoconstriction

**Session 4301:** Asthma Development: The Environment and Prevention in Early Life

**Session 4302:** Difficulties in the Management of Older Patients with Asthma

**Session 4702:** Evaluating Systemic Side Effects in Children Receiving Inhaled Corticosteroids
Introduction to Session Tracks

**Autoimmune/Autoinflammatory Disorders**

**Friday, February 22, 2019**
- **Session 1503**: Understanding the Link between Immunodeficiency and Autoinflammation

**Sunday, February 24, 2019**
- **Session 3507**: Autoimmune Mimics of Allergic Disease

**Drug/Insect Allergy/Vaccines**

**Friday, February 22, 2019**
- **Session 1212**: Approach to Delayed Drug-Allergic Reactions

**Saturday, February 23, 2019**
- **Session 2001**: Aspirin and Non-Steroidal Antiinflammatory Drug Challenges in the Office
- **Session 2004**: Skin Testing to Drugs in the Outpatient Clinic
- **Session 2810**: Taking a Closer Look at Venom Immunotherapy from Several Angles

**Sunday, February 24, 2019**
- **Session 3308**: Translational Drug Allergy
- **Session 3508**: Approach to the Patient with Multiple Drug Allergies
- **Session 3553**: Skin Testing is Necessary Prior to Oral Penicillin Challenge in all Patients

**Monday, February 25, 2019**
- **Session 4714**: Pathways to Approval for New or Novel Hymenoptera Venom Allergenics

**Food Allergy**

**Friday, February 22, 2019**
- **Session 1102**: Allied Health: Food Protein-Induced Enterocolitis Syndrome: Diagnosis and Management
- **Session 1206**: The Circus Surrounding Peanuts: The Genetic and Molecular Mechanisms Driving Peanut Allergy
- **Session 1210**: Can There Be a Universal Approach to Food Allergy Prevention Guidelines?
- **Session 1301**: Allied Health: Management Dilemmas and Strategies in Pediatric Food Challenges
- **Session 1513**: Clinical Management of Psychosocial Concerns among Pediatric Patients with Food Allergy and Their Caregivers
- **Session 1514**: Advancing Care for Anaphylaxis and Food Allergy in Schools: Devil in the Details
- **Session 1601**: Optimal Care of the Food Allergic Patient
- **Session 1806**: Food Allergy Prevention: To Screen or Not to Screen, That is the Question

**Saturday, February 23, 2019**
- **Session 2308**: The Microbiome in Food Allergy
- **Session 2402**: Oral Food Challenges I
- **Session 2505**: Case-Based Learning: Challenges in Food Protein-Induced Enterocolitis Syndrome Management
- **Session 2613**: Allied Health: Tree Nut Allergy: Clinical Update

**Sunday, February 24, 2019**
- **Session 3001**: Non-Immunoglobulin IgE Mediated Food Allergy: A Practical Approach for Recognition and Treatment
- **Session 3005**: Nutritional Concerns in Children with IgE-Mediated Food Allergies
- **Session 3302**: Allied Health: Words Will Never Hurt Me: Empowering Food Allergic Patients to Handle Bullying and School-Related Problems
- **Session 3402**: Oral Food Challenges II
- **Session 3511**: Allied Health: Where Are We With Allergy Prevention?
- **Session 3550**: Oral Immunotherapy is Essential for Food Allergy Management

**Monday, February 25, 2019**
- **Session 4003**: Management of Food Allergy in Breastfed Infant
- **Session 4304**: Emerging Food Allergy Therapies
# Introduction to Session Tracks

## Immune Mechanisms

**Friday, February 22, 2019**

- **Session 1205:** How Microbes Affect Allergic Illnesses
- **Session 1209:** An Old Topic Gets Hot: Lipid Control of Type 2 Immunity
- **Session 1211:** Single Cell Analysis in Human Disease: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Center
- **Session 1516:** Early Life Environmental Exposures Regulate Host Allergic Immune Responses: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Center Birth Cohorts
- **Session 1517:** Regulatory RNA in Allergic Diseases
- **Session 1801:** Gene Therapy, Gene Silencing and Gene Editing for the Clinical Allergist/Immunologist

**Saturday, February 23, 2019**

- **Session 2306:** Innate Immunity in Allergic Responses
- **Session 2553:** Interleukin-33, and Not Thymic Stromal Lymphopoietin, is the Primary Driver of the Innate Allergic Immune Response
- **Session 2556:** National Institute of Allergy and Infectious Diseases: Allergic Sensitization and the March of Allergic Diseases
- **Session 2701:** Inching Towards the Construction of Individualized Health Course Trajectories of Disease and Wellness
- **Session 2808:** Sputum Transcriptomics of Neutrophilic Asthma

**Sunday, February 24, 2019**

- **Session 3007:** Big Data Approaches in the Allergy Field
- **Session 3101:** Systemic Regulation of Susceptibility and Pathogenesis of Allergic Inflammation
- **Session 3307:** Neuroimmune Interactions in the Allergic Immune Response
- **Session 3309:** Genetic and Environmental Impact on Immune System Variability and Disease
- **Session 3554:** National Institute of Environmental Health Services: Novel Pathways Involved in Regulation of Airway Inflammation
- **Session 3555:** Interferons Contribute to Allergic Disease: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Center
- **Session 3702:** BCI: What’s New in Vaccines

**Monday, February 25, 2019**

- **Session 4009:** Genetics 101 for the Practicing Immunologist
- **Session 4307:** The Initiation of Allergic Immunity: From Innate Sensors to Initiation of Adaptive Immune Responses

## Immunodeficiency

**Saturday, February 23, 2019**

- **Session 2302:** Primary Immunodeficiency Disease Outcomes: Are They Improving?
- **Session 2401:** Practical Approaches to Adjunctive Management of Primary Immunodeficiency Diseases
- **Session 2509:** Adult Primary Immunodeficiencies
- **Session 2611:** Allied Health: Recurrent Infections, Severe Eczema or Failure to Thrive: Is it Allergy or Immunodeficiency?

**Sunday, February 24, 2019**

- **Session 3010:** Caring for Your Severe Combined Immunodeficiency Patient Post-Transplant
- **Session 3301:** Precision Medicine in the Era of Primary Immunodysregulatory Diseases

**Monday, February 25, 2019**

- **Session 4006:** Writing Orders for Immunoglobulin Therapy
- **Session 4701:** A Nuts and Bolts Approach to the Workup of Immunodeficiency Disorders in Children

## Lung Diseases Other than Asthma

**Friday, February 22, 2019**

- **Session 1202:** Problem-Based Learning: A Patient with Chronic Obstructive Pulmonary Disease, Severe Asthma or Both?

**Saturday, February 23, 2019**

- **Session 2003:** E-Cigarettes: The Arc of the Evidence: Smoking Cessation to Harm Reduction to Harm Production
- **Session 2021:** Allied Health: Take Your Spirometry Interpretation to the Next Level
- **Session 2508:** The Mechanic’s Guide to Nanoparticles in the Airways

**Monday, February 25, 2019**

- **Session 4002:** Asthma/Chronic Obstructive Pulmonary Disease Overlap Syndrome (ACOS) with and without Occupational Causes
- **Session 4703:** Biomarkers in Occupational Lung Disease
- **Session 4713:** Laryngeal Syndromes Presenting as Asthma at Home and in the Workplace
# Introduction to Session Tracks

## Mast Cell/Eosinophilic Disorders

**Friday, February 22, 2019**

- **Session 1502:** Mast Cell Activation Syndrome: Navigating the Information Maze with Your Patient
- **Session 1504:** Approach to the Patient with Irritable Bowel Syndrome

**Saturday, February 23, 2019**

- **Session 2002:** Inflammation in Eosinophilic Esophagitis: Beyond Eosinophils
- **Session 2011:** Mast Cell and Eosinophilic Disease: The Value of a Hematology Consult
- **Session 2022:** Allied Health: Eosinophilic Esophagitis: Diagnosis and Management
- **Session 2502:** Venom Allergy: When to Suspect Mastocytosis
- **Session 2504:** Hypereosinophilic Syndrome: Evaluation and Management Options

**Sunday, February 24, 2019**

- **Session 3008:** Multi-Organ Involvement in Systemic Mastocytosis
- **Session 3306:** Is Eosinophilic Esophagitis a Primary Barrier Defect?
- **Session 3503:** Eosinophil Phenotypes: Location Matters
- **Session 3506:** The Role of the Practicing Allergist in the Management of Eosinophilic Esophagitis
- **Session 3707:** MAAI: New Directions in Mast Cell Research

**Monday, February 25, 2019**

- **Session 4007:** Mast Cell Tryptases and Alpha-Tryptasemia

## Rhinosinusitis/Ocular Allergy

**Thursday, February 21, 2019**

- **Session 0001:** 33rd Annual Harold S. Nelson Military Allergy/Immunology Symposium

**Friday, February 22, 2019**

- **Session 1203:** Introductory Course in Rhinolaryngoscopy with Hands-on Instruction
- **Session 1501:** Interaction of Irritants and Allergens in Allergic Rhinitis

**Saturday, February 23, 2019**

- **Session 2023:** Allied Health: Chronic Rhinosinusitis: Beyond the Basics
- **Session 2304:** Does Chronic Rhinosinusitis Without Nasal Polyps Need a Different Approach?

**Sunday, February 24, 2019**

- **Session 3002:** Refractory Chronic Rhinosinusitis: When Does My Patient Need Surgery?
- **Session 3303:** EACI: Novel Developments in Endotype-Driven Approach for Allergic Disease
- **Session 3502:** What to Do with a Patient with Severe Chronic Rhinosinusitis
- **Session 3552:** Injectable Epinephrine for Subcutaneous Immunotherapy: To Prescribe or Not?
- **Session 3706:** IRSO: Update in Rhinitis and Rhinosinusitis

**Monday, February 25, 2019**

- **Session 4010:** Current and Future Directions in Rhinitis and Sinusitis in Children
- **Session 4306:** Hot Topics in Immunotherapy

## Research Principles

**Friday, February 22, 2019**

- **Session 1512:** How to Use Online Genomics Tools and Datasets in Your Allergy and Immunology Research

**Saturday, February 23, 2019**

- **Session 2510:** Demystifying the National Institutes of Health Grant Submission/Peer Review Process
- **Session 2805:** Quality Reporting and the Quality Clinical Data Registry: A 2019 Update
- **Session 2808:** The Effect of Health Disparities on Allergy and Immunology Practice

**Sunday, February 24, 2019**

- **Session 3505:** Innovative Methods to Improve the Collection of Patient-Reported Outcomes (PROs)

**Monday, February 25, 2019**

- **Session 4711:** Update from the US Food and Drug Administration
Conversations from the World of Allergy is a new podcast series from the American Academy of Allergy, Asthma & Immunology (AAAAI).

It is the easiest way for busy healthcare providers and the general public to keep updated on medical topics in the A/I specialty. Subscribe today to make sure you never miss an episode.

Available now on iTunes, Google Play and aaaaai.org.
Thursday, February 21, 2019

Chrysalis Project Registration (Invite Only)

6:00 to 7:00 pm
Moscone Center South, Lobby Level, Room 101
Registration restricted to selected participants of award program.

Friday, February 22, 2019

Course

1050 2019 Chrysalis Project Program (Invite Only)
7:30 am to 1:45 pm
Marriott, Lower B2 Level, Yerba Buena, Salon 6
Pre-registration and ticket required. Attendance restricted to selected participants of award program. No fee. Continental breakfast and box lunch included.
Credit: No CME/CE
Moderator: Rebecca Saff, MD PhD FAAAAI
7:30 Breakfast
8:00 Welcome from the Chrysalis Project Chairs
A. Wesley Burks, MD FAAAAI
8:10 Welcome from the AAAAI President
Robert A. Wood, MD FAAAAI
8:15 Immunodeficiency
Thomas A. Fleisher, MD FAAAAI
8:45 Eosinophilic Disorders
Amy D. Klion, MD
9:15 Food Allergy
A. Wesley Burks, MD FAAAAI
9:45 Asthma
Rohit Katial, MD FAAAAI
10:15 Break
10:25 Atopic Dermatitis
Mark Boguniewicz, MD FAAAAI
10:55 Drug Allergy
Kimberly G. Blumenthal, MD MSc FAAAAI
11:25 Hot Topics Discussion Session: Drug Allergy
Kimberly G. Blumenthal, MD MSc FAAAAI and Amy M. Dowden, MD FAAAAI
11:45 Hot Topics Discussion Session: Food Allergy
Emily C. McGowan, MD PhD and Sarita U. Patil, MD
12:05 Hot Topics Discussion Session: Asthma
Katherine N. Cahill, MD and Timothy P. Moran, MD PhD
12:25 Class Photo
12:35 Luncheon with FIT Mentors and Chrysalis Faculty

Saturday, February 23, 2019

Course

2405 Career Paths in Allergy and Immunology
12:00 to 1:45 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 160
Pre-registration and ticket required. Attendance restricted to selected participants of the Chrysalis Project program and other medical student/resident meeting attendees. No fee. Box lunch included.
Credit: No CME/CE
Moderator: Rebecca Saff, MD PhD FAAAAI
12:00 Lunch
12:15 Welcome and Introduction
Rebecca Saff, MD PhD FAAAAI
12:20 Academia: Clinical
Amy M. Scurlock, MD
12:30 Academia: Research
Mitchell H. Grayson, MD FAAAAI
12:40 Industry
Dorothy S. Cheung, MD FAAAAI
12:50 Government
Melody C. Carter, MD FAAAAI
1:00 Private Practice
Andrew W. Murphy, MD FAAAAI
1:10 Summary
Rebecca Saff, MD PhD FAAAAI
1:15 Breakout/Question & Answer

Chrysalis Project Reception (Invite Only)

6:00 to 7:00 pm
Marriott, Lower B2 Level, Yerba Buena Salon 6
Private reception open to current Chrysalis participants, Chrysalis mentors, Chrysalis faculty, Chrysalis workgroup members, Program Directors Assembly and AAAAI Board of Directors. Prior RSVP required.
Friday, February 22, 2019

Course

1001 2019 FIT Symposium
7:00 am to 1:30 pm
Marriott, Lower B2 Level, Yerba Buena Salon 9
Pre-registration and ticket required. Attendance restricted to current allergy/immunology Fellows-in-Training only. No fee. Continental breakfast and box lunch included.
Credit: No CME/CE
Moderator: Eric M. Schauberger, DO PhD
7:00 Networking Breakfast
7:45 Introductions
Eric M. Schauberger, DO PhD
7:50 Networking Organizations
8:05 American Board of Allergy and Immunology
8:15 Speaker-Facilitated Small Group Discussion: Pregnancy and Allergic Disease
Michael Schatz, MD MS FAAAAI
8:45 Break
9:00 Welcome from AAAAI President
Robert A. Wood, MD FAAAAI
9:15 Optimal Care of the Food Allergic Patient
Robert A. Wood, MD FAAAAI
9:45 The Latest on Biologics and Allergy
Monica Kraft, MD FAAAAI
10:15 Break
10:30 Career Panel: Industry
Kari R. Brown, MD
10:45 Career Panel: Government
Kelly D. Stone, MD PhD FAAAAI
11:00 Career Panel: Private
Toral A. Kamdar, MD
11:15 Career Panel: Academia
Vivian P. Hernandez-Trujillo, MD FAAAAI
11:30 Speaker-Facilitated Small Group Discussion: Interactive Contract Negotiations Session
Weily Soong, MD FAAAAI
12:30 Networking Lunch

FIT Reception

5:00 to 6:00 pm
Marriott, Lower B2 Level, Yerba Buena Salon 10
Sponsored by Teva.
Private reception open to current allergy/immunology Fellows-in-Training only.

Saturday, February 23, 2019

Workshop

2557 Interesting Cases Part I
12:30 to 1:45 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 159
Credit: 1.25 CME/CE
Moderators: Paul J. Dowling, MD FAAAAI
Eric M. Schauberger, DO PhD
12:30 Eosinophilic Mastitis: A Diagnostic and Therapeutic Conundrum
Alegra Grieb, MD
12:40 Question & Answer
12:45 Making Repeat Aspirin Desensitizations “Water Under the Bridge”: Making a Case for Ibuprofen Bridge Therapy
Cali M Reynolds, MD
12:55 Question & Answer
1:00 Hereditary Angioedema and Cholinergic Urticaria: Not Mutually Exclusive
Rachel Bean
1:10 Question & Answer
1:15 Long Term Outcomes of an Infant with Food-Induced Pulmonary Hemosiderosis: Is Eoe a Late Manifestation of Heiner's Syndrome
Kathryn Neupert, MD
1:25 Question & Answer
1:30 A Novel WAS Mutation Presenting As Severe Combined Immune Deficiency
Katie Kennedy, MD
1:40 Question & Answer
Sunday, February 24, 2019

Workshop

3557 Interesting Cases Part II
12:30 to 1:45 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 159
Credit: 1.25 CME/CE
Moderators: Princess U. Ogbogu, MD FAAAAI
Canting Guo, MD

12:30 Bruton Agammaglobulinemia in a Child Masquerading as Cystic Fibrosis-Related Metabolic Syndrome
Daniel A Rosloff, MD

12:40 Question & Answer

12:45 Ataxia Telangiectasia Diagnosed on Newborn Screening: Case Cohort of 4 years Experience
Amarilla Bernadett Mandola, MD

12:55 Question & Answer

1:00 A Case of Hyper-IgM Immunodeficiency Presenting Initially as a Novel Syndromic Disorder
Amy Eapen, MD

1:10 Question & Answer

1:15 Autoimmune Enteropathy and Hypogammaglobulinemia in an Infant with Inducible Co-Stimulator (ICOS) Deficiency
Abduarahman Almutairi

1:25 Question & Answer

1:30 47 Year Follow-Up of Post-Transplant SCID Patient
Christin Deal, MD

1:40 Question & Answer
AAAAAI Advocacy: 2019 Priorities

• **Protect** in-office compounding of allergen extracts

• **Promote** penicillin allergy testing as a component of antibiotic stewardship

• **Educate** members of Congress on the practice of allergy, asthma and immunology

• **Advocate** for fair and equitable reimbursement of allergy and immunology services

• **Encourage** ongoing federal investment in allergy and immunology research

• **Enact** Asthma in Schools Legislation
Thursday, February 21

**Military Allergy/Immunology Symposium**
7:20 am - 3:15 pm

**Basic Aeroallergen Course**
9:00 am - 5:00 pm

**ABAI Study Course**
2:00 - 4:30 pm
### Symposium

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:20 am</td>
<td>Registration and Breakfast</td>
</tr>
<tr>
<td>7:50 am</td>
<td>Welcome and Overview</td>
</tr>
<tr>
<td>8:00 am</td>
<td>Morning Address: Biologics in the Treatment of Asthma</td>
</tr>
<tr>
<td>9:00 am</td>
<td>Break</td>
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<tr>
<td>9:15 am</td>
<td>Case Reports</td>
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<tr>
<td>9:35 am</td>
<td>Morning Address: Biologics in the Treatment of Asthma</td>
</tr>
<tr>
<td>9:00 am</td>
<td>Registration and Breakfast</td>
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<tr>
<td>9:50 am</td>
<td>Welcome and Overview</td>
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<tr>
<td>10:00 am</td>
<td>Welcome and Overview</td>
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<tr>
<td>10:15 am</td>
<td>Air Force</td>
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<tr>
<td>11:00 am</td>
<td>Lunch</td>
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<tr>
<td>11:55 am</td>
<td>British Lecture: Exercise-Induced Vocal Cord Dysfunction in Adolescents</td>
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<tr>
<td>12:55 pm</td>
<td>Consultants to the Surgeon General Updates</td>
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<tr>
<td>1:00 pm</td>
<td>VHA Allergy Committee</td>
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<tr>
<td>1:15 pm</td>
<td>Air Force</td>
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<tr>
<td>1:30 pm</td>
<td>Army</td>
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<tr>
<td>1:45 pm</td>
<td>Navy</td>
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<tr>
<td>2:00 pm</td>
<td>Interactive Small Group Discussion</td>
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<tr>
<td>2:25 pm</td>
<td>Life After Active Duty</td>
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<td>2:40 pm</td>
<td>US Air Force Reservist</td>
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<tr>
<td>2:45 pm</td>
<td>US Air Force Reservist</td>
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<tr>
<td>2:50 pm</td>
<td>US Air Force Reservist</td>
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<tr>
<td>2:55 pm</td>
<td>Business Meeting and Award Selection</td>
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### Courses

<table>
<thead>
<tr>
<th>Time</th>
<th>Course</th>
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<tbody>
<tr>
<td>9:00 am</td>
<td>Basic Aeroallergen Course</td>
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<tr>
<td>10:00 am</td>
<td>Welcome and Introduction to Course</td>
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<tr>
<td>11:00 am</td>
<td>Introduction to Fungal Aerobiology</td>
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<tr>
<td>12:00 pm</td>
<td>Lunch Break</td>
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<tr>
<td>1:00 pm</td>
<td>Value of Air Sampling for Your Practice and for the AAAAI</td>
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<tr>
<td>2:00 pm</td>
<td>Introduction to Pollen Aerobiology</td>
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<tr>
<td>3:30 pm</td>
<td>Pollen Morphology</td>
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<tr>
<td>4:30 pm</td>
<td>Hands-On Instruction/Question and Answer</td>
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<tr>
<td>2:00 pm</td>
<td>Immune Deficiency/Autoimmunity/Immune-Based Disorders</td>
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<tr>
<td>3:35 pm</td>
<td>Mast Cell Disorders/Eosinophilic Disorders/Anaphylaxis/Drug-Insect-Vaccine Allergy</td>
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<tr>
<td>3:10 pm</td>
<td>Asthma &amp; Other Lung Diseases/Allergy Testing &amp; Therapeutics/Rhinosinusitis/Ocular Allergy</td>
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<tr>
<td>3:45 pm</td>
<td>Food Allergy/Allergic &amp; Immunologic Skin Disorders/Urticaria-Angioedema</td>
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</tbody>
</table>

**Symposium**
- **0001** 33rd Annual Harold S. Nelson Military Allergy/Immunology Symposium
- **0011** Military Aeroallergen Extract Laboratory Updates
- **0012** Defense Health Agency: Immunization Healthcare Branch Update
- **0013** Morning Address: Biologics in the Treatment of Asthma
- **0014** British Lecture: Exercise-Induced Vocal Cord Dysfunction in Adolescents
- **0015** Consultants to the Surgeon General Updates
- **0016** VHA Allergy Committee
- **0017** Air Force
- **0018** Army
- **0019** Navy
- **0020** Interactive Small Group Discussion
- **0021** Life After Active Duty
- **0022** US Air Force Reservist
- **0023** US Air Force Reservist
- **0024** US Air Force Reservist
- **0025** US Air Force Reservist
- **0026** Business Meeting and Award Selection

**Courses**
- **0201** Basic Aeroallergen Course
- **0202** Welcome and Introduction to Course
- **0203** Introduction to Fungal Aerobiology
- **0204** Fungal Spore Morphology
- **0205** Hands-On Instruction/Question and Answer
- **0206** Lunch Break
- **0207** Value of Air Sampling for Your Practice and for the AAAAI
- **0208** Setting up a Sampling Station/Hands-On Sampler Demonstration
- **0209** Introduction to Pollen Aerobiology
- **0210** Pollen Morphology
- **0211** Hands-On Instruction/Question and Answer

**Courses Details**
- **0201** Basic Aeroallergen Course: 9:00 am to 5:00 pm
- **0202** Welcome and Introduction to Course: 9:00 am to 9:15 am
- **0203** Introduction to Fungal Aerobiology: 9:05 am to 11:15 am
- **0204** Fungal Spore Morphology: 9:45 am to 11:35 am
- **0205** Hands-On Instruction/Question and Answer: 10:20 am to 12:10 pm
- **0206** Lunch Break: 12:15 pm to 1:00 pm
- **0207** Value of Air Sampling for Your Practice and for the AAAAI: 1:05 pm to 2:00 pm
- **0208** Setting up a Sampling Station/Hands-On Sampler Demonstration: 2:05 pm to 3:55 pm
- **0209** Introduction to Pollen Aerobiology: 3:00 pm to 4:50 pm
- **0210** Pollen Morphology: 4:55 pm to 6:45 pm
- **0211** Hands-On Instruction/Question and Answer: 6:50 pm to 8:40 pm
“The Making IT Count courses encouraged our clinic to increase discussions about long-term outcomes with immunotherapy patients.”

Ensure you are up-to-date with best practices. Effective allergen immunotherapy (AIT) has been shown to improve asthma symptoms, quality of life and FEV1 scores.

Key topics include:
- Core Concepts in AIT
- AIT in Pregnant Patients
- Venom IT
- Dosing
- AIT in Pediatric Patients
- Rapid Buildup
- Patient Selection

Access the courses at: https://education.aaaai.org/MakingITCount

Making IT Count is funded through an educational grant from Merck & Co., Inc.
Friday, February 22

6:00 AM
Registration
6:30 am - 5:00 pm

7:00 AM
FIT Symposium
7:00 am - 1:30 pm

8:00 AM
Course: Allied Health Advance Practice
8:00 am - 12:30 pm

9:00 AM
Seminars
12:30 - 1:30 pm

10:00 AM
Courses
9:00 am - 12:00 pm

11:00 AM
Allied Health Workshops
9:30 - 10:45 am

12:00 PM
Workshops
12:45 - 2:00 pm

1:00 PM
Allied Health Seminars
12:30 - 1:30 pm

2:00 PM
Wider Plenary
2:15 - 3:45 pm

3:00 PM
Plenary Q&A
3:45 - 4:15 pm

4:00 PM
Symposia
4:15 - 5:30 pm

5:00 PM
Allied Health Plenary
4:15 - 5:30 pm

6:00 PM
## Friday Scientific Program

### Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>2019 FIT Symposium</th>
<th>7:00 am to 1:30 pm</th>
<th>Marriott, Lower B2 Level, Yerba Buena Salon 9</th>
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</thead>
<tbody>
<tr>
<td>1001</td>
<td>Pre-registration and ticket required. Attendance restricted to current allergy/immunology Fellows-in-Training only. No fee. Continental breakfast and box lunch included.</td>
<td></td>
<td>Moderator: Eric M. Schauberger, DO PhD</td>
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<tr>
<td>7:00</td>
<td>Networking Breakfast</td>
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<tr>
<td>7:45</td>
<td>Introductions</td>
<td>Eric M. Schauberger, DO PhD</td>
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<tr>
<td>7:50</td>
<td>Networking Organizations</td>
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<tr>
<td>8:05</td>
<td>American Board of Allergy and Immunology</td>
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<tr>
<td>8:15</td>
<td>Speaker-Facilitated Small Group Discussion: Pregnancy and Allergic Disease</td>
<td>Michael Schatz, MD MS FAAAAI</td>
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<tr>
<td>8:45</td>
<td>Break</td>
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<tr>
<td>9:00</td>
<td>Welcome from AAAAI President</td>
<td>Robert A. Wood, MD FAAAAI</td>
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<tr>
<td>9:15</td>
<td>Optimal Care of the Food Allergic Patient</td>
<td>Robert A. Wood, MD FAAAAI</td>
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<tr>
<td>9:45</td>
<td>The Latest on Biologics and Allergy</td>
<td>Monica Kraft, MD FAAAAI</td>
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<tr>
<td>10:15</td>
<td>Break</td>
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<tr>
<td>10:30</td>
<td>Career Panel: Industry</td>
<td>Kari R. Brown, MD</td>
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<tr>
<td>10:45</td>
<td>Career Panel: Government</td>
<td>Kelly D. Stone, MD PhD FAAAAI</td>
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<tr>
<td>11:00</td>
<td>Career Panel: Private</td>
<td>Toral A. Kamdar, MD</td>
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<tr>
<td>11:15</td>
<td>Career Panel: Academia</td>
<td>Vivian P. Hernandez-Trujillo, MD FAAAAI</td>
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<tr>
<td>11:30</td>
<td>Speaker-Facilitated Small Group Discussion: Interactive Contract Negotiations Session</td>
<td>Weily Soong, MD FAAAAI</td>
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<tr>
<td>12:30</td>
<td>Networking Lunch</td>
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<thead>
<tr>
<th>Course</th>
<th>2019 Chrysalis Project Program (Invite Only)</th>
<th>7:30 am to 1:45 pm</th>
<th>Marriott, Lower B2 Level, Yerba Buena Salon 6</th>
</tr>
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<tbody>
<tr>
<td>1050</td>
<td>Pre-registration and ticket required. Attendance restricted to selected participants of award program. No fee. Continental breakfast and box lunch included.</td>
<td></td>
<td>Moderator: Rebecca Saff, MD PhD FAAAAI</td>
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<tr>
<td>7:30</td>
<td>Breakfast</td>
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<tr>
<td>8:00</td>
<td>Welcome from the Chrysalis Project Chairs</td>
<td>A. Wesley Burks, MD FAAAAI</td>
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<tr>
<td>8:10</td>
<td>Welcome from the AAAAI President</td>
<td>Robert A. Wood, MD FAAAAI</td>
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<tr>
<td>8:15</td>
<td>Immune Deficiency</td>
<td>Thomas A. Fleisher, MD FAAAAI</td>
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<tr>
<td>8:45</td>
<td>Eosinophilic Disorders</td>
<td>Amy D. Kilon, MD</td>
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<tr>
<td>9:15</td>
<td>Food Allergy</td>
<td>A. Wesley Burks, MD FAAAAI</td>
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<tr>
<td>9:45</td>
<td>Asthma</td>
<td>Rohit Katial, MD FAAAAI</td>
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<tr>
<td>10:15</td>
<td>Break</td>
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<tr>
<td>10:25</td>
<td>Atopic Dermatitis</td>
<td>Mark Boguniewicz, MD FAAAAI</td>
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<td>10:55</td>
<td>Drug Allergy</td>
<td>Kimberly G. Blumenthal, MD MSc FAAAAI</td>
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<tr>
<td>11:25</td>
<td>Hot Topics Discussion Session: Drug Allergy</td>
<td>Kimberly G. Blumenthal, MD MSc FAAAAI and Amy M. Dowden, MD FAAAAI</td>
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<tr>
<td>11:45</td>
<td>Hot Topics Discussion Session: Food Allergy</td>
<td>Emily C. McGowan, MD PhD and Sarita U. Patil, MD</td>
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<tr>
<td>12:05</td>
<td>Hot Topics Discussion Session: Asthma</td>
<td>Katherine N. Cahill, MD and Timothy P. Moran, MD PhD</td>
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<td>12:25</td>
<td>Class Photo</td>
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<tr>
<td>12:35</td>
<td>Luncheon with FIT Mentors and Chrysalis Faculty</td>
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Courses (continued)

1103  Allied Health: Improving Asthma Control Through Telemedicine
8:00 to 9:15 am
Moscone Center South, Exhibition Level, Hall D9
Credit: 1.25 CME/CE
Moderator: Nathaniel D. Hare, MD FAAAAI
8:00 Telemedicine: Implementation and Evidence-Based Decision Making
Jennifer A. Shih, MD
8:20 Question & Answer
8:25 Telemedicine in the Allergy and Asthma Clinic
Michelle R. Dickens, MSN FNP-C AE-C
8:45 Question & Answer
8:50 The Cost: Billing and Coding for Telemedicine
Teresa Thompson, CPC CMSCS CCC
9:10 Question & Answer

Courses

1110 Boot Camp for Program Directors and Clinical Faculty: How to Develop and Maintain Excellence in Allergy/Immunology Fellowships
8:45 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 160
Credit: No CME/CE
Moderator: David A. Khan, MD FAAAAI
8:45 The Nuts & Bolts of Building an A/I Fellowship Program: The Present and New 2019 ACGME Requirements
Javed Sheikh, MD FAAAAI
9:15 Taking the Next Step: Teaching and Leadership Roles in Fellowship Training
Mary Beth Fasano, MD FAAAAI
9:45 Dates, Deadlines and Developing a Fellowship Year Calendar
Christopher D. Miller, MD
10:15 Coffee Break
10:30 Tools for Assessing Procedural Competency
Paul J. Dowling, MD FAAAAI
11:00 Enhancing Teaching: Using the New AAAAI Toolbox
Christopher Chang, MD PhD MBA FAAAAI
11:30 Directing an A/I Fellowship Program: Ask the Expert Panel Discussion

Allied Health Workshops

1102 Allied Health: Food Protein-Induced Enterocolitis Syndrome: Diagnosis and Management
8:00 to 9:15 am
Moscone Center South, Exhibition Level, Hall D10
Credit: 1.25 CME/CE
Moderator: Amy Arneson, RN
8:00 FPIES: Impact on the Family
Fallon Matney, MSW LCSW CAM
8:20 Question & Answer
8:25 Oral Food Challenges for FPIES
Jennifer Fishman, RN
8:45 Question & Answer
8:50 Overview and Current Research in FPIES
Anna H. Nowak-Wegrzyn, MD PhD FAAAAI
9:10 Question & Answer
### Friday Scientific Program

**Courses (continued)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Time</th>
<th>Location</th>
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<tbody>
<tr>
<td>1201</td>
<td>Difficult Cases</td>
<td>9:00 am to 12:00 pm</td>
<td>Moscone Center South, Upper Mezzanine Level, Esplanade 156</td>
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<td>Credit: 3.00 CME/CE</td>
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<td>Moderator: Ashwini Reddy, MD</td>
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<tr>
<td>9:00</td>
<td>FPIES/Non-IgE Mediated Food Allergy</td>
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<td>Junior Presenter: Gita Ram, MD</td>
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<td>9:25</td>
<td>Question &amp; Answer</td>
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<td>9:30</td>
<td>Very Early Onset Irritable Bowel Disorder/Immunodeficiency Overlap</td>
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<td>Junior Presenter: Margaret Redmond, MD</td>
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<td>9:55</td>
<td>Question &amp; Answer</td>
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<tr>
<td>10:00</td>
<td>Peanut Oral Immunotherapy for IgE-Mediated Food Allergy (Indications and Potential Complications)</td>
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<td>Junior Presenter: Justin C. Greiwe, MD FAAAAI</td>
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<td>Senior Presenter: Brian P. Vickery, MD FAAAAI</td>
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<td>10:25</td>
<td>Question &amp; Answer</td>
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<td>10:30</td>
<td>Unusual Anaphylaxis</td>
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<td>Junior Presenter: Edith Schussler, MD</td>
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<td>10:55</td>
<td>Question &amp; Answer</td>
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<td>11:00</td>
<td>Severe Asthma/Severe Exercise Induced Asthma</td>
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<td>Junior Presenter: Mar gee Louisias, MD MPH</td>
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<td>11:25</td>
<td>Question &amp; Answer</td>
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<td>11:30</td>
<td>Immunodeficiency Masqueraders</td>
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<td>Junior Presenter: Cullen M. Dutmer, MD</td>
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<td>Senior Presenter: Neil D. Romberg, MD</td>
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<td>12:55</td>
<td>Question &amp; Answer</td>
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<tr>
<td>1202</td>
<td>Problem-Based Learning: A Patient with Chronic Obstructive Pulmonary Disease, Severe Asthma or Both?</td>
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<td>9:00 am to 12:00 pm</td>
<td>Moscone Center South, Exhibition Level, Hall D12</td>
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<td>Pre-registration and ticket required. Fee: $20.</td>
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<td>Credit: 3.00 CME/CE</td>
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<td>Moderator: Don A. Bukstein, MD</td>
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<td>9:00</td>
<td>Patient with COPD, Severe Asthma or Both: PBL Case Presentation</td>
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<td></td>
<td>Don A. Bukstein, MD</td>
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<tr>
<td>9:50</td>
<td>Question &amp; Answer</td>
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<td>9:55</td>
<td>Is It COPD vs. Asthma vs. Overlap Syndrome?</td>
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<td>Juan Carlos Cardet, MD MPH</td>
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<tr>
<td>10:15</td>
<td>Question &amp; Answer</td>
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<tr>
<td>10:20</td>
<td>Update on Diagnosis for Asthma/COPD Overlap Syndrome</td>
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<td>Elliot Israel, MD FAAAAI</td>
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<td>10:40</td>
<td>Question &amp; Answer</td>
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<tr>
<td>10:45</td>
<td>Optimal Therapies for Asthma/COPD Overlap Syndrome</td>
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<td></td>
<td>John Oppenheimer, MD FAAAAI</td>
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<tr>
<td>11:05</td>
<td>Panel Discussion</td>
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<tbody>
<tr>
<td>1203</td>
<td>Introductory Course in Rhinolaryngoscopy with Hands-On Instruction</td>
<td>9:00 am to 12:00 pm</td>
<td>Moscone Center South, Exhibition Level, Hall D4</td>
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<td>Pre-registration and ticket required. Fee: $50.</td>
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<td>Moderator: Jerald W. Koepke, MD FAAAAI</td>
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<td>Allen D. Adinoff, MD FAAAAI</td>
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<td>1204</td>
<td>Best of the Practice Management Workshop: Expanding the Scope of Practice</td>
<td>9:00 am to 12:00 pm</td>
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<td>Moderator: A. Sean McKnight, MD FAAAAI</td>
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<td>Weily Soong, MD FAAAAI</td>
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<td>Jennifer A. Shih, MD</td>
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<td>Hereditary Angioedema and Intravenous Immune Globulin Therapies</td>
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<td>Proper Coding and Billing Procedures</td>
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<td>Teresa Thompson, CPC CMSCS CCC</td>
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<td>Managing Conflicts in Your Practice</td>
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<td>Priya J. Bansal, MD FAAAAI</td>
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Courses (continued)
Friday, February 22

Friday Scientific Program

Courses (continued)

1205 How Microbes Affect Allergic Illnesses
9:00 am to 12:00 pm
Moscone Center South, Level 3, Room 301
Credit: 3.00 CME/CE
Moderator: David I. Bernstein, MD FAAAAI
9:00 Environmental Exposures: The Gut Microbiome and the Development of Allergic Diseases
Yvonne Huang, MD
9:20 Question & Answer
9:25 The Respiratory Virome in Preschool Asthma
Nikolaos G. Papadopoulos, MD PhD FAAAAI
9:45 Question & Answer
9:50 Lung Function and the Airway Microbiome in Early Life
Kirsten M Kloepfer, MD MS
10:10 Question & Answer
10:15 Virus-Bacterial Interactions and the Onset of Childhood Asthma
James E. Gern, MD FAAAAI
10:35 Question & Answer
10:40 Hot Topics in Viruses and Asthma
Joshua L. Kennedy, MD
11:00 Question & Answer
11:05 Hot Topics in the Microbiome and Food Allergy
Christina E. Ciaccio, MD FAAAAI
11:25 Panel Discussion

1206 The Circus Surrounding Peanuts: The Genetic and Molecular Mechanisms Driving Peanut Allergy
9:00 am to 12:00 pm
Moscone Center South, Level 2, Room 203
Credit: 3.00 CME/CE
Moderator: Dawn C. Newcomb, PhD
9:00 The Importance of a Well-Characterized Patient Cohort for Food Allergy Research
Leah Claire Nesbitt Kottyan, PhD
9:20 Discussion
9:30 Skin Barrier Mutations and Food Allergy
Joan Cook-Mills, PhD
9:50 Discussion
10:00 Transcriptomic Analysis of Peanut Allergy
Supinda Bunyavanich, MD MPH FAAAAI
10:20 Discussion
10:30 Immunologic Tolerance to Foods
Sanita U. Patil, MD
10:50 Discussion
11:00 Epigenetics and Food Allergy
Kari C. Nadeau, MD PhD FAAAAI
11:20 Discussion
11:30 Immunodeficiency and Food Allergy
Amal H. Assa’ad, MD FAAAAI
11:50 Discussion

1207 Hands-On Workshop: IT Counts: Interactive Patient Cases
9:00 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 159
Pre-registration and ticket required. Fee: $20.
Credit: 3.00 CME/CE
Moderators: Peter S. Creticos, MD FAAAAI Linda S. Cox, MD FAAAAI
9:00 Welcoming Remarks
9:15 Virtual Patient Discussions: Attendees work through each virtual patient with a dedicated discussion leader. 20 minutes will be allotted for each patient.
Immunotherapy in the Pregnant Patient
Tolly Epstein, MD FAAAAI
Immunotherapy in a Peanut-Allergic Child
Anna H. Nowak-Wegrzyn, MD PhD FAAAAI
Immunotherapy in the Venom-Allergic Patient
Mike Tankersley, MD MBA FAAAAI
Safety of Rapid Immunotherapy
Christopher W. Calabria, MD FAAAAI
Immunotherapy in the Pediatric Patient
Andrew Abreo, MD
SLIT: Drops and Tablets
Oliver Ptarr, MD
11:45 Concluding Remarks

1208 Improving Your Merit-Based Incentive Payment System Score by Promoting Adherence to Asthma Therapy
9:00 am to 12:00 pm
Moscone Center South, Level 2, Room 201
Credit: 3.00 CME/CE
Moderator: Asriani M. Chiu, MD FAAAAI
9:00 Understanding the Relationship between Scoring High in MIPS and Achieving Adherence for Your Asthma Population
Gary C. Steven, MD PhD FAAAAI
9:20 Question & Answer
9:25 Evaluating Methods to Measure Asthma Patient Adherence
Andrea J. Apter, MD MA MSc FAAAAI
9:45 Question & Answer
9:50 Barriers and Behaviors Responsible for Non-Adherence
John B. Hagan, MD FAAAAI
10:10 Question & Answer
10:15 Effective Strategies to Reverse Non-Adherence and Promote Adherence to Asthma Therapy
Cynthia S. Rand, PhD
10:35 Question & Answer
10:40 Improving Adherence Using Shared Decision Making Communication Skills
Hazel Tapp, PhD
11:00 Question & Answer
11:05 Motivational Interviewing Improves Adherence to Asthma Therapy
Andrew G. Weinstein, MD FAAAAI
11:25 Question & Answer
11:30 Think/Pair/Share: Practicing Motivational Interviewing Skills
Courses (continued)

1209 An Old Topic Gets Hot: Lipid Control of Type 2 Immunity

9:00 am to 12:00 pm

Moscone Center South, Upper Mezzanine Level, Esplanade 151

Credit: 3.00 CME/CE

Moderator: Joshua A. Boyce, MD

9:00 Prostaglandin D2 in the Transcriptional Control of Th2 Development
Erik R. Wambre, PhD MBE

9:25 Question & Answer

9:35 Lipid Mediator-Dependent Homeostasis of Innate Lymphoid Cells
Taylor A. Doherty, MD FAAAAI

10:00 Question & Answer

10:10 Leukotriene-Dependent Regulation of Epithelial-Dependent Innate Type 2 Immunity
Lora Bankova, MD

10:35 Question & Answer

10:45 Pro-Resolving Lipids Control Type 2 Immunopathology
Stokes Peebles, Jr, MD FAAAAI

11:10 Question & Answer

11:20 The Role of COX-1–Derived Prostanoids in the Control of Innate Mast Cell Function
Dingxin Pan, PhD

11:45 Question & Answer

1210 Can There Be a Universal Approach to Food Allergy Prevention Guidelines?

9:00 am to 12:00 pm

Moscone Center South, Level 3, Room 305

Credit: 3.00 CME/CE

Moderator: David M. Fleischer, MD FAAAAI

9:00 What Foods Should We Be Introducing Early for Protection Against the Development of Food Allergy?
Edmond S. Chan, MD FAAAAI

9:20 Question & Answer

9:25 When Should We Start Early Introduction, and How Do We Balance this Within the Developmental Trajectories of Infants and WHO Breastfeeding Recommendations?
Debra J. Palmer, BSc BND PhD

9:45 Question & Answer

9:50 Should Implementation Strategies for Screening and the Role of Primary Care Differ Among Countries?
Anne K. Ellis, MD FRCPF FAAAAI

10:10 Question & Answer

10:15 Has the Voice of the Stakeholder Been Heard in Understanding How to Implement Early Introduction Recommendations?
Jonathan O’B. Hourihane, MD FAAAAI

10:35 Question & Answer

10:40 What Can We Offer the Family with a Child Who Fails Early Introduction?
Scott H. Sicherer, MD FAAAAI

11:00 Question & Answer

11:05 Where Do We Go from Here? What Is the Next Leap in Food Allergy Prevention?
Katrina Allen, MD PhD FAAAAI

11:25 Panel Discussion
Friday Scientific Program

1211 Single Cell Analysis in Human Disease: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Centers
9:00 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 3.00 CME/CE
Moderator: Christine M. Seroogy, MD FAAAAI
9:00 Introductory Remarks
9:10 Single Cell Analysis in Nasal Polyposis
Nora A. Barrett, MD
9:30 Question & Answer
9:35 Single Cell Analysis as a Window to Airway Epithelium Cell Function and Diversity
Walter Eckalbar, PhD
9:55 Question & Answer
10:00 Single Cell Analysis Reveals Immune Cell Heterogeniety
Kathleen M. Buchheit, MD
10:20 Question & Answer
10:25 Discovery of Th2A Cells By Single Cell Analysis
Erik R. Wambre, PhD MBE
10:45 Question & Answer
10:50 Transcriptional Profiling of Eosinophilic Esophagitis
Marc E. Rothenberg, MD PhD FAAAAI
11:10 Question & Answer
11:15 Single Cell RNA Profiling of Human Lung and Immune Cells in Health and Disease
Mark Krasnow, MD PhD
11:35 Question & Answer
11:40 Panel Discussion

1212 Approach to Delayed Drug Allergic Reactions
9:00 am to 12:00 pm
Moscone Center South, Level 2, Room 207
Credit: 3.00 CME/CE
Moderator: Ana Dioun Broyles, MD FAAAAI
9:00 Overview of Delayed Drug Reactions: Classification, Mechanisms and Clinical Approaches
Andreas J. Bircher, MD
9:20 Question & Answer
9:30 Approaches to Delayed Drug Reactions to Antibiotics: The Role of In Vivo Testing (Skin Testing and Oral Challenge)
Antonino Gaetano Romano, MD
9:50 Question & Answer
10:00 Management of Delayed Drug Reactions in Complex Treatment Populations
Michael Roger Ardern-Jones, MD PhD
10:20 Question & Answer
10:30 Case Based Illustration of Approaches to Delayed Drug Hypersensitivity
Paul L. Bigliardi, MD
10:50 Question & Answer
11:00 Approaches to Delayed Drug Reactions: The Role of Biomarkers, Genetics, Ex Vivo and In Vitro Laboratory Approaches
Elizabeth J. Phillips, MD FAAAAI
11:20 Panel Discussion

1301 Allied Health: Management Dilemmas and Strategies in Pediatric Food Challenges
9:30 to 10:45 am
Moscone Center South, Exhibition Level, Hall D10
Credit: 1.25 CME/CE
Moderator: Jodi A. Shroba, MSN APRN CPNP
9:30 Diagnostic Challenges in a Child with Multiple Food Allergies
Nicolette De Jong, PhD
9:50 Question & Answer
9:55 Safe Introduction after a Negative Food Challenge
Berber Vlieg-Boerstra, PhD RD
10:15 Question & Answer
10:20 Early Introduction of Allergens in the High Atopic Child
April Clark, RDN LD
10:40 Question & Answer

1302 Allied Health: Hot Topics in Allergy: What You May Have Missed in the Literature
9:30 to 10:45 am
Moscone Center South, Exhibition Level, Hall D9
Credit: 1.25 CME/CE
Moderator: Maria Crain, CPNP
9:30 What's New in Allergic Rhinitis
Elisa C. Thompson, APRN CNP AE-C
9:50 Question & Answer
9:55 What's New in Asthma
Brooke I. Polk, MD
10:15 Question & Answer
10:20 What's New in Atopic Dermatitis
Megan Ott Lewis, MSN CRNP
10:40 Question & Answer
Friday Scientific Program

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/CE

1501 Interaction of Irritants and Allergens in Allergic Rhinitis
Marriott, Lower B2 Level, Yerba Buena Salon 1
Discussion Leaders: David Diaz Sanchez, PhD
David B. Peden, MD MS FAAAAI

1502 Mast Cell Activation Syndrome: Navigating the Information Maze with Your Patient
Marriott, Lower B2 Level, Yerba Buena Salon 14
Discussion Leaders: Charity C. Fox, MD FAAAAI
Melody C. Carter, MD FAAAAI

1503 Understanding the Link between Immunodeficiency and Autoinflammation
Marriott, Lower B2 Level, Yerba Buena Salon 15
Discussion Leaders: Peter Arkwright, MD PhD FAAAAI
Joshua D. Milner, MD

1504 Approach to the Patient with Irritable Bowel Syndrome
Marriott, Lower B2 Level, Nob Hill A
Discussion Leaders: Anne Marie Ditto, MD FAAAAI
Mary C. Tobin, MD FAAAAI

1505 Asthma Over the Age of 65: All’s Well That Ends Well
Marriott, Lower B2 Level, Nob Hill C
Discussion Leaders: Alan P. Baptist, MD MPH FAAAAI
Paula J. Busse, MD FAAAAI

1506 Allied Health: Hands on Eczema: Trying Out the Toolbox
Moscone Center South, Exhibition Level, Hall D11
Discussion Leaders: Megan Ott Lewis, MSN CRNP
Karol G. Timmons, RN MS CPNP

Workshops

1510 JACI: In Practice Year-in-Review Workshop
12:45 to 2:00 pm
Moscone Center South, Level 3, Room 305
Credit: 1.25 CME/CE
Moderator: Michael Schatz, MD MS FAAAAI

12:45 Asthma
Robert S. Zeiger, MD PhD FAAAAI
1:05 Question & Answer
1:10 Food Allergy and Anaphylaxis
Scott H. Sicherer, MD FAAAAI
1:30 Question & Answer
1:35 Drug Allergy and Urticaria/Angioedema
David A. Khan, MD FAAAAI
1:55 Question & Answer

1511 Problem-Based Learning: Severe Atopic Dermatitis
12:45 to 2:00 pm
Moscone Center South, Exhibition Level, Hall D12
Pre-registration and ticket required. Fee: $40.
Credit: 1.25 CME/CE
Moderator: Ray S. Davis, MD FAAAAI

12:45 Interactive Problem-Based Learning Case Discussion
1:15 Pathophysiology and Differential Diagnosis of Severe Atopic Dermatitis
Anna De Benedetto, MD
1:30 Intense Skin Care Protocol for Severe Atopic Dermatitis
Kanwaljit K. Brar, MD
1:45 Question & Answer

1512 How to Use Online Genomics Tools and Datasets in Your Allergy and Immunology Research
12:45 to 2:00 pm
Moscone Center South, Level 3, Room 301
Credit: 1.25 CME/CE
Moderator: Melanie A. Ruffner, MD PhD

12:45 Data Sets Available for Your Clinical Research
Supinda Bunyavanich, MD MPH FAAAAI
1:05 Question & Answer
1:10 Using Public Data to Find Gene Expression and Modulators of Gene Expression
Leah Claire Nesbitt Kottyan, PhD
1:30 Question & Answer
1:35 Integrating Functional Genomic Data Starting with a Genomic Position
Matthew T. Weirauch, PhD
1:55 Question & Answer

1513 Clinical Management of Psychosocial Concerns Among Pediatric Patients with Food Allergy and Their Caregivers
12:45 to 2:00 pm
Moscone Center South, Level 2, Room 203
Credit: 1.25 CME/CE
Moderator: Todd David Green, MD FAAAAI

12:45 Mental Health Assessment for Patients with Food Allergy and Their Families
Linda Herbert, PhD
1:05 Question & Answer
1:10 Mental Health Interventions for Patients with Food Allergy and Their Families
Eyal Shemesh, MD
1:30 Question & Answer
1:35 Collaboration among Allergists and Mental Health Professionals to Address Mental Health Concerns among Patients with Food Allergy
Hemant P. Sharma, MD MHS FAAAAI
1:55 Question & Answer
Courses (continued)

1514 Advancing Care for Anaphylaxis and Food Allergy in Schools: Devil in the Details
12:45 to 2:00 pm
Moscone Center South, Level 2, Room 205
Credit: 1.25 CME/CE
Moderator: Susan Waserman, MD MSc FAAAAI
12:45 Understanding School Management of Anaphylaxis and Food Allergy: What Does Research Show?
Julie Wang, MD FAAAAI
1:05 Question & Answer
1:10 Using Research to Drive Policy
Carla M. Davis, MD FAAAAI
1:30 Question & Answer
1:35 Advocating for Improved Care in Schools: The Role of the Allergist
Michael Pistiner, MD MMSc
1:55 Question & Answer

1515 What is the Best Treatment Strategy for the Prevention and/or Treatment of Asthma Exacerbations in Children?
12:45 to 2:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 1.25 CME/CE
Moderator: Alkis Togias, MD FAAAAI
12:45 Effects of the Farming Environment on Immune Development and Childhood Respiratory Illnesses: Lessons from the MESA Study
Christine M. Seroogy, MD FAAAAI
1:05 Question & Answer
1:10 Identifying Asthma-Causing RSV Strains and Elucidating the Mechanisms of Respiratory Syncytial Virus Mediated Asthma Development: Lessons Learned from the Inspire Cohort
Tina V. Hartert, MD MPH
1:30 Question & Answer
1:35 Traffic Related Air Pollution and Childhood Asthma: Lessons from the CCAAPS Birth Cohort
Patrick H. Ryan, PhD
1:55 Question & Answer

1516 Early Life Environmental Exposures Regulate Host Allergic Immune Responses: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Center Birth Cohorts
12:45 to 2:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.25 CME/CE
Moderator: Alkis Togias, MD FAAAAI
12:45 Effects of the Farming Environment on Immune Development and Childhood Respiratory Illnesses: Lessons from the MESA Study
Christine M. Seroogy, MD FAAAAI
1:05 Question & Answer
1:10 Identifying Asthma-Causing RSV Strains and Elucidating the Mechanisms of Respiratory Syncytial Virus Mediated Asthma Development: Lessons Learned from the Inspire Cohort
Tina V. Hartert, MD MPH
1:30 Question & Answer
1:35 Traffic Related Air Pollution and Childhood Asthma: Lessons from the CCAAPS Birth Cohort
Patrick H. Ryan, PhD
1:55 Question & Answer

1517 Regulatory RNA in Allergic Diseases
12:45 to 2:00 pm
Moscone Center South, Level 2, Room 201
Credit: 1.25 CME/CE
Moderator: David D. Chaplin, MD PhD FAAAAI
12:45 Regulation of Type-2 Immunity by Long Non-Coding RNAs
Thomas M. Aune, PhD
1:05 Question & Answer
1:10 MicroRNA Regulation of Lymphocytes in Allergic Diseases
Madeleine Radinger, PhD
1:30 Question & Answer
1:35 MicroRNAs as Biomarkers in Allergic Diseases
Tania Maes, PhD
1:55 Question & Answer
### Basic Science Poster Discussion

1521  What’s New in ILC2  
12:45 to 2:00 pm  
**Moscone Center South, Exhibition Level, Hall D10**  
Credit: 1.25 CME/CE  
Moderators: Stokes Peebles, Jr., MD FAAAAI  
Atsushi Kato, PhD  

12:45 Poster Viewing  
1:25 Discussion of Following Posters  

1. Sex Differences in Type 2 Innate Lymphoid Cells in Adult Asthmatics  
   Michael J. Aw, BHSc  

2. Topical Application of the Quaternary Ammonium Compound Didecyldimethylammonium Chloride Activates Type 2 Innate Lymphoid Cells and Initiates a Mixed-type Allergic Response  
   Hillary L. Shane, PhD  

3. TNF Induces the Production of Type 2 Cytokines in Human Group 2 Innate Lymphoid Cells  
   Atsushi Kato, PhD  

4. Unconventional ST2- and CD127-negative lung ILC2 populations are induced by Alternaria  
   Kellen J. Cavagnero  

5. Estrogen receptor alpha signaling increases ILC2-mediated allergic airway inflammation  
   Jacqueline Cephus, MS  

### Presidential Plenary

1601  Optimal Care of the Food Allergic Patient  
2:15 to 3:45 pm  
**Moscone Center South, Exhibition Level, Hall A**  
Credit: 1.50 CME/CE  
Moderator: Robert A. Wood, MD FAAAAI

2:15 Introduction  
2:20 Optimal Diagnostic and Testing Strategies to Confirm Food Allergies  
   Robert A. Wood, MD FAAAAI  

2:45 Introduction  
2:50 Optimal Use of Emerging Treatments for Food Allergy  
   A. Wesley Burks, MD FAAAAI  

3:15 Introduction  
3:20 Novel Therapies in Development  
   Cecilia Berrin, PhD  

3:45 Plenary Q&A

### Symposia

1801  Gene Therapy, Gene Silencing and Gene Editing for the Clinical Allergist/Immunologist  
4:15 to 5:30 pm  
**Moscone Center South, Level 2, Room 205**  
Credit: 1.25 CME/CE  
Moderator: Neil D. Romberg, MD  

4:15 Clinical Trials of Gene Silencing with Anti-Sense DNAzymes for Asthma  
   Harald E. Renz, MD FAAAAI  

4:35 Question & Answer  

4:40 Gene Therapy Technology in Clinical Trials for Hereditary and Acquired Immune Deficiency  
   Jolan E. Walter, MD  

5:00 Question & Answer  

5:05 Gene Silencing and Gene Editing Technology in Development  
   David H. Dreyfus, MD PhD FAAAAI  

5:25 Question & Answer

1802  Environment and Allergic Disease: A Global Phenomenon with Particular Consequences for At-Risk Populations  
4:15 to 5:30 pm  
**Moscone Center South, Upper Mezzanine Level, Esplanade 155**  
Credit: 1.25 CME/CE  
Moderator: Anil Nanda, MD FAAAAI

4:15 The Association Between Environment and Asthma in the Inner City in Both the United States and Worldwide  
   William J. Sheehan, MD  

4:35 Question & Answer  

4:40 Environmental Controls in the Treatment of Allergic Diseases in Pediatric, Adult and Older Adult Populations  
   Elizabeth C. Matsui, MD MHS  

5:00 Question & Answer  

5:05 The Interaction Between Climate and Allergic Diseases, including Asthma, on a Worldwide Basis, with Specific Consequences for Pediatric, Adult and Older Adult Populations  
   Jill A. Poole, MD FAAAAI  

5:25 Question & Answer

1803  Generation of Antigen-Specific Immunoglobulin E: A Revolution in Novel Therapies for Allergic Diseases  
4:15 to 5:30 pm  
**Moscone Center South, Level 2, Room 203**  
Credit: 1.25 CME/CE  
Moderator: Rob C. Aalberse, PhD

4:15 What Makes IgE Producing B-Cells Different  
   Duane R. Wesemann, MD PhD  

4:35 Question & Answer  

4:40 Molecular Characterization of Naturally-Occurring Human Antigen-Specific IgE  
   Scott A. Smith, MD PhD  

5:00 Question & Answer  

5:05 Molecular Profiling of Human Serum Allergen-Specific IgE  
   Robert Anthony, PhD  

5:25 Question & Answer
Friday Scientific Program

Symposia (continued)

1804  An Update on the Efficacy and Safety of Subcutaneous (SCIT) and Sublingual (SLIT) Immunotherapy ▼
4:15 to 5:30 pm
Moscone Center South, Level 3, Room 305
Credit: 1.25 CME/CE
Moderator: Peter S. Creticos, MD FAAAAI
4:15 An Update on the Efficacy of Subcutaneous and Sublingual Allergen Immunotherapy
Linda S. Cox, MD FAAAAI
4:35 Question & Answer
4:40 Immune Alteration and Clinical Response with SLIT and SCIT
Stephen R. Durham, MD MA
5:00 Question & Answer
5:05 Practical Advice Regarding Protocols That Will Improve Tolerability and Adherence for Subcutaneous and Sublingual Allergen Immunotherapy
David I. Bernstein, MD FAAAAI
5:25 Question & Answer

1805  Environmental Yeasts: An Overlooked Exposure and Potential Aeroallergen Source in the United States
4:15 to 5:30 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.25 CME/CE
Moderator: W. Elliott Horner, PhD LEED AP FAAAAI
4:15 The Biology and Structure of Environmentally Sourced Yeast Species
Estelle Levetin, PhD FAAAAI
4:35 Question & Answer
4:40 What Have Culture Independent Studies Revealed about the Diversity of Yeast Species within U.S. Indoor, Outdoor and Occupational Environments?
Brett J. Green, PhD FAAAAI
5:00 Question & Answer
5:05 Health Hazards of Yeast Exposure: What Have We Learned from Epidemiological and Clinical Studies?
Karen C. Dannemiller, PhD
5:25 Question & Answer

1806  Food Allergy Prevention: To Screen or Not to Screen, that is the Question ▼
4:15 to 5:30 pm
Moscone Center South, Exhibition Level, Hall A
Credit: 1.25 CME/CE
Moderator: Jonathan M. Spergel, MD PhD FAAAAI
4:15 Who is Really High Risk for the Development of Food Allergy?
Elissa M. Abrams, MD
4:35 Question & Answer
4:40 Implementation of the US Peanut Allergy Prevention Guidelines By Allergists and Pediatricians
Corinne Keet, MD MS PhD
5:00 Question & Answer
5:05 Is Screening for Food Allergy Cost Effective?
Marcus S. Shaker, MD MS FAAAAI
5:25 Question & Answer

1807  The New International Urticaria Guidelines: Are They of Practical Use to the Clinical Allergist? ▼ ▼
4:15 to 5:30 pm
Moscone Center South, Level 2, Room 207
Credit: 1.25 CME/CE
Moderator: Sarbjit S. Saini, MD FAAAAI
Marcus Maurer, MD
4:35 Question & Answer
4:40 Similarities and Differences Between the International Urticaria Guidelines and the Joint Task Force Guidelines
Thomas B. Casale, MD FAAAAI
5:00 Question & Answer
5:05 Best Practice for Evaluation and Treatment of a Chronic Urticaria Patient: Should Allergists be Adherent to Guidelines?
David M. Lang, MD FAAAAI
5:25 Question & Answer

1810  Allied Health Plenary: Food Allergy Update
4:15 to 5:30 pm
Moscone Center South, Exhibition Level, Hall D8
Credit: 1.25 CME/CE
Moderator: Karen L. Gregory, DNP APRN-BC RRT AE-C
4:15 Food Allergy Diagnosis and Management
Julie Wang, MD FAAAAI
4:35 Question & Answer
4:40 Food Allergy Research: OIT, EPIT, SLIT and Early Introduction
Kim E. Mudd, RN MSN
5:00 Question & Answer
5:05 Psychosocial Concerns in Food Allergy Families
Linda Herbert, PhD
5:25 Question & Answer
### Federation of RS LAAIS Assembly Forum, Business Meeting & Reception

<table>
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<th>Time</th>
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| 4:45 to 6:30 pm | Moscone Center South, Exhibition Level, Hall D7  
  No CME/CE |
| 4:45 | Wine and Cheese Reception/Meet the RS LAAIS Governors Networking |
| 5:05 | RS LAAIS Assembly Business Meeting  
  Moderator: Denise DiPrimo-Kalman, DO FAAAAI  
  Special Guest: Robert Wood, MD FAAAAI |
| 5:30 | Overcoming Barriers to Optimal Patient Care  
  Moderator: Weily Soong, MD FAAAAI  
  Panelists:  
  Stuart L. Abramson, MD PhD FAAAAI  
  Susan Rudd Bailey, MD FAAAAI  
  Michael Rupp, MD FAAAAI  
  Paul V. Williams, MD FAAAAI |

### Program Directors Assembly (PDA) Business Meeting and Forum

<table>
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<th>Time</th>
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| 12:00 to 2:00 pm | Moscone Center South, Exhibition Level, Hall D7  
  Lunch |
| 12:15 | Program Directors Assembly Business Meeting  
  Paul J. Dowling, MD FAAAAI |
| 12:25 | 30th Anniversary of the Program Directors Assembly  
  Robert A. Wood, MD FAAAAI |
| 12:35 | WAO Centers of Excellence  
  Lanny J. Rosenwasser, MD FAAAAI |
| 12:40 | Physician Wellness in Allergy & Immunology: Where We Are and Where We Are Going  
  Moderator: Giselle Mosnaim, MD MS FAAAAI  
  Theresa A. Bingemann, MD FAAAAI, Anil Nanda, MD FAAAAI and Hemant P. Sharma, MD MHS FAAAAI |
| 1:40 | Other Business  
  Paul J. Dowling, MD FAAAAI |
| 2:00 | Adjourn |

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**Compounding:** Learn more about what to expect in the Updated USP Chapter <797>

**Coding:** Ask us your questions

**Advocacy:** Learn more and get involved in AAAAI priorities

**Payer Relations:** Talk with us about coverage

**Practice Management Workshop:** Register now to learn how to “Revitalize, Refresh and Reimagine your Practice”

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*Visit us during Expert Office Hours and Learn More about our Featured Questions:*

- **Saturday, February 23:** How does “Buy and Bill” work with biologics?
- **Sunday, February 24:** What do you need to do to prepare for the USP compounding rule changes?
- **Monday, February 25:** How can we make penicillin allergy testing work, financially as well as to benefit our patients?
Saturday Scientific Program

Saturday, February 23

6:00 AM
Registration

6:30 am - 5:00 pm

7:00 AM
Allied Health Workshops
6:45 - 8:00 am

7:00 AM
Seminars
7:00 - 8:00 am

7:00 AM
Plenary Session
8:15 - 9:45 am

7:00 am - 6:00 pm
Poster Hall

9:00 AM
Symposia
10:45 am - 12:00 pm

10:00 AM
Plenary Q&A
9:45 - 10:15 am

10:45 am - 3:15 pm
Exhibit Hall

11:00 AM
Poster Presentations &
Case Study Posters
9:45 - 10:45 am

11:00 AM
Symposia
10:45 am - 12:00 pm

12:00 PM
Allied Health Business
Meeting & Oral
Abstracts
12:15 - 1:45 pm

12:15 - 1:45 pm
Seminars & Pro/Con
Debates
12:30 - 1:30 pm

12:30 - 1:30 pm
Symposia
12:30 - 1:45 pm

12:30 - 1:45 pm
Interesting
Cases Part 1
12:30 - 1:45 pm

12:30 - 1:45 pm

12:30 - 1:45 pm

1:00 PM
Oral Abstracts & Allied Health Workshops
2:00 - 3:15 pm

2:00 PM
Keynote Speaker
3:30 - 4:30 pm

3:00 PM

3:00 PM

4:00 PM

4:00 PM

5:00 PM

5:00 PM

6:00 PM
Workshops
4:45 - 6:00 pm

6:00 PM
Seminars

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

2001 Aspirin and Nonsteroidal Anti-Inflammatory Drug Challenges in the Office
Marriott, Lower B2 Level, Yerba Buena Salon 1
Discussion Leaders: James L. Baldwin, MD FAAAAI
Whitney W. Stevens, MD PhD

2002 Inflammation in Eosinophilic Esophagitis: Beyond Eosinophils
Marriott, Lower B2 Level, Yerba Buena Salon 2
Discussion Leaders: Antonella Cianferoni, MD PhD FAAAAI
Seema S. Aceves, MD PhD

2003 E-Cigarettes: The Arc of the Evidence: Smoking Cessation to Harm Reduction to Harm Production
Marriott, Lower B2 Level, Yerba Buena Salon 3
Discussion Leaders: Neil Alexis, PhD
Andrew S. Nickels, MD

2004 Skin Testing to Drugs in the Outpatient Clinic
Marriott, Lower B2 Level, Yerba Buena Salon 4
Discussion Leaders: Roland Solensky, MD FAAAAI
Paige G. Wickner, MD MPH

2005 How to Best Use Component Testing For Food Allergy in Clinical Practice
Marriott, Lower B2 Level, Yerba Buena Salon 5
Discussion Leaders: Jacob D. Kattan, MD
Motohiro Ebisawa, MD PhD FAAAAI

2006 Evaluation and Treatment of Angioedema: An Approach to Difficult Cases
Marriott, Lower B2 Level, Yerba Buena Salon 6
Discussion Leaders: Aleena Banerji, MD FAAAAI
Paula J. Busse, MD FAAAAI

2007 New Solutions for Old Problems: Can Technology Improve Medication Adherence?
Marriott, Lower B2 Level, Yerba Buena Salon 10
Discussion Leaders: William C. Anderson III, MD FAAAAI
Giselle Mosnaim, MD MS FAAAAI

2008 Asthma and Allergy Health Disparities throughout the Lifespan
Marriott, Lower B2 Level, Yerba Buena Salon 11
Discussion Leaders: Alan P. Baptist, MD MPH FAAAAI
Carla M. Davis, MD FAAAAI

2009 How to Apply Component Based Testing in Your Practice: A Case-Based Presentation
Marriott, Lower B2 Level, Yerba Buena Salon 12
Discussion Leaders: Anne Marie Singh, MD
Jörg R. Kleine-Tebbe, MD FAAAAI

Workshops

2021 Allied Health: Take Your Spirometry Interpretation to the Next Level
6:45 to 8:00 am
Moscone Center South, Exhibition Level, Hall D9
Credit: 1.25 CME/CE
Moderator: Gregory M. Metz, MD FAAAAI

6:45 Remember the Ratio: The Key to Spirometry Interpretation in Asthma
Michelle R. Dickens, MSN FNP-C AE-C

7:05 Question & Answer

7:10 Beyond Asthma and COPD: Identifying Other Obstructive Patterns in the Airways
Karen L. Gregory, DNP APRN-BC RRT AE-C

7:30 Question & Answer

7:35 When Spirometry Is Normal: How to Choose the Right Bronchoprovocation Test for Your Patient
Marcia Rose Winston, MSN CPNP AE-C

7:55 Question & Answer

2022 Allied Health: Eosinophilic Esophagitis: Diagnosis and Management
6:45 to 8:00 am
Moscone Center South, Exhibition Level, Hall D10
Credit: 1.25 CME/CE
Moderator: Sally A. Noone, RN MSN

6:45 EoE: Diagnosis and Treatment
Mirna Chehade, MD MPH

7:05 Question & Answer

7:10 Dietary Management for EoE Patients
Raquel Z. Durban, MS RD CSP LDN

7:30 Question & Answer

7:35 Feeding Problems in EoE
April Clark, MS RD CSP LDN

7:55 Question & Answer

Allied Health Seminars

2023 Allied Health: Chronic Rhinosinusitis: Beyond the Basics
7:00 to 8:00 am
Moscone Center South, Exhibition Level, Hall D11
Discussion Leaders: Mahboobeh Mahdavinia, MD PhD
Joseph K. Han, MD FAAAAI
Saturday Scientific Program

Plenary

2101 Outcomes, Education and Healthcare Delivery in Allergic Diseases
8:15 to 9:45 am
Moscone Center South, Exhibition Level, Hall A
Credit: 1.50 CME/CE
Moderator: Asriani M. Chiu, MD FAAAAI

8:15 Introduction
8:20 Patient-Centered Outcomes in Allergic Diseases: Accounting for Quality of Life and Healthcare Disparities
Carla M. Davis, MD FAAAAI
8:45 Introduction
8:50 Educating Colleagues, Patients and their Families about Allergic Diseases
David R. Stukus, MD FAAAAI
9:15 Introduction
9:20 Shared Decision Making in Allergic Diseases
Maureen George, PhD RN AE-C

9:45 Saturday Plenary Q&A

Saturday Poster Sessions

9:45 to 10:45 am
Moscone Center South, Exhibition Level, Hall B
Credit: No CME/CE
Please refer to the 2019 AAAAI Annual Meeting Mobile App or www.jacionline.org for abstract details.

2201 Asthma Pathogenesis and Inflammation
2202 Asthma Diagnosis
2203 Humoral Immunodeficiency Disorders
2204 Insights in Basic and Clinical Immunology
2205 Effect of Exposure to Aeroallergens
2206 Particulates and Health
2207 Drug Allergy
2208 Insect Venom Allergy
2209 Urticaria and Angioedema
2210 Programs to Help Evaluate Asthma and Chronic Cough Outcomes
2211 Food Allergy and Quality of Life
2212 Skin Testing and Immunotherapy
2213 Allergic Rhinitis and Rhinosinusitis
2214 Markers of Disease in Inflammatory Skin Conditions
2215 Immune Mechanisms in Food Allergy
2216 Allied Health Saturday Poster Session

Symposia

2301 Asthma Care in the Era of Precision Medicine
10:45 am to 12:00 pm
Moscone Center South, Level 2, Room 207
Credit: 1.25 CME/CE
Moderator: Leonard B. Bacharier, MD FAAAAI

10:45 Available and Emerging Biomarkers as Tools to Identify Asthma Phenotypes
Matthew C. Altman, MD MPhil

11:05 Question & Answer

11:10 Asthma Phenotypes and Endotypes: Insights into Disease Causation and Mechanisms
Sally E. Wenzel, MD FAAAAI

11:30 Question & Answer

11:35 Personalized Medicine at the Patient and Population Levels
Stanley J. Szefler, MD FAAAAI

11:55 Question & Answer

2302 Primary Immunodeficiency Disease Outcomes: Are They Improving?
10:45 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 1.25 CME/CE
Moderator: Elena E. Perez, MD PhD FAAAAI

10:45 Classic Diseases: SCID, CVID, CGD, XLA and X-HigM
Kathleen E. Sullivan, MD PhD FAAAAI

11:05 Question & Answer

11:10 Quality of Life
Jordan Orange, MD PhD FAAAAI

11:30 Question & Answer

11:35 Healthcare Utilization
Mark Ballow, MD FAAAAI

11:55 Question & Answer

2303 Growing Your Practice while Earning MOC Credit with the AAAAI Clinical Rotation Curriculum
10:45 am to 12:00 pm
Moscone Center South, Level 3, Room 303
Credit: 1.25 CME/CE
Moderator: Gerald B. Lee, MD

10:45 How to Run an Allergy Elective in a Busy Allergy/Immunology Practice
Jeffrey G. Demain, MD FAAAAI

11:05 Question & Answer

11:10 Tips and Tricks on Teaching a New Generation of Learner
Edwin Kim, MD MS

11:30 Question & Answer

11:35 How to Earn ABAI Part IV MOC Credit Through Medical Education
Luz S. Fonacier, MD FAAAAI

11:55 Question & Answer
### Symposia (continued)

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Location</th>
<th>Credit</th>
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<tbody>
<tr>
<td>2304</td>
<td>Does Chronic Rhinosinusitis without Nasal Polyps Need a Different Approach?</td>
<td>10:45 am to 12:00 pm</td>
<td>Moscone Center South, Upper Mezzanine Level, Esplanade 156</td>
<td>1.25 CME/CE</td>
<td>Patricia Takach, MD FAAAAI</td>
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<td>11:10</td>
<td>Are Clinical Presentations of CRS without NP Different from CRS with NP?</td>
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<td>Seong Ho Cho, MD FAAAAI</td>
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<td>2305</td>
<td>World Allergy Forum: New Advances in Allergen Immunotherapy</td>
<td>10:45 am to 12:00 pm</td>
<td>Moscone Center South, Level 3, Room 305</td>
<td>1.25 CME/CE</td>
<td>Ignacio J. Ansotegui, MD PhD, Robert A. Wood, MD FAAAAI</td>
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<td>10:45</td>
<td>Current Knowledge of Allergen Immunotherapy Mechanisms</td>
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<td>Mübeccel Akdis, MD PhD</td>
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<td>11:10</td>
<td>Current Evidence of Allergen Immunotherapy in Asthma</td>
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<td>Victoria Cardona, MD PhD</td>
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<td>11:35</td>
<td>Food Immunotherapy</td>
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<td>Motohiro Ebisawa, MD PhD FAAAAI</td>
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<td>2306</td>
<td>Innate Immunity in Allergic Responses</td>
<td>10:45 am to 12:00 pm</td>
<td>Moscone Center South, Level 2, Room 201</td>
<td>1.25 CME/CE</td>
<td>Christina L. Nance, MD PhD FAAAAI</td>
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<td>10:45</td>
<td>Type 2 Innate Lymphoid Cells in Allergic Inflammation</td>
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<td>Donata Vercelli, MD</td>
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<td>11:10</td>
<td>Dendritic Cell Regulation in Allergic Responses</td>
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<td>Michelle A. Gill, MD PhD</td>
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<td>11:35</td>
<td>Impact of Epithelial-Derived Cytokines in Allergic Inflammation</td>
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<td>Erik R. Wambre, PhD MBE</td>
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<td>2307</td>
<td>Stories from the AAAAI Foundation</td>
<td>10:45 am to 12:00 pm</td>
<td>Moscone Center South, Level 2, Room 203</td>
<td>1.25 CME/CE</td>
<td>William W. Busse, MD FAAAAI</td>
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<td>10:45</td>
<td>Esophageal Remodeling in Eosinophilic Esophagitis</td>
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<td>Seema S. Aceves, MD PhD</td>
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<td>11:10</td>
<td>IgE Receptor Signaling in Food Allergy Pathogenesis</td>
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<td>Hans C. Oettgen, MD PhD FAAAAI</td>
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<td>11:35</td>
<td>Immune Mechanisms Regulating Food Allergy Pathogenesis</td>
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<td>Karl C. Nadeau, MD PhD FAAAAI</td>
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<td>2308</td>
<td>The Microbiome in Food Allergy</td>
<td>10:45 am to 12:00 pm</td>
<td>Moscone Center South, Level 2, Room 205</td>
<td>1.25 CME/CE</td>
<td>Diane R. Gold, MD MPH FAAAAI</td>
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<td>10:45</td>
<td>The Microbiome and Food Allergy: Lessons Learned from Human Cohort Studies</td>
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<td>Supinda Bunyavanich, MD MPH FAAAAI</td>
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<td>11:10</td>
<td>The Microbiome and Food Allergy: Lessons Learned from Murine Models</td>
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<td>Talal A. Chatila, MD MSc</td>
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<tr>
<td>11:35</td>
<td>Microbiologically-Derived Metabolites and Their Role in Food Allergy</td>
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<td>Liam O’Mahony, PhD</td>
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Symposia (continued)

2309 Implementation of Food Immunotherapy into Clinical Practice
- 10:45 am to 12:00 pm
- Moscone Center South, Exhibition Level, Hall A
- Credit: 1.25 CME/CE
- Moderator: Stacie M. Jones, MD
- 10:45 What Are Risks and Benefits, Advantages and Disadvantages of Each Food Immunotherapy?
  David M. Fleischer, MD FAAAAI
- 11:05 Question & Answer
- 11:10 Decision Making: Which Patients for Which Therapy?
  Matthew J. Greenhawt, MD MBA MSc
- 11:30 Question & Answer
- 11:35 Practical Implementation of Food IT Into Your Clinical Practice
  Hugh H. Windom, MD FAAAAI
- 11:55 Question & Answer

Workshops

2401 Practical Approaches to Adjunctive Management of Primary Immunodeficiency Diseases
- 12:00 to 2:00 pm
- Moscone Center South, Exhibition Level, Hall B Lobby
- Credit: 0.25 CME/CE
- 12:00 Hands-on Training Station
- Faculty
  Elena E. Perez, MD PhD FAAAAI
  Mark Ballow, MD FAAAAI
  Benjamin T. Prince, MD MSCI
  Maria A. Slack, MD
  William R. Blouin, ARNP
  Kenneth Paris, MD MPH
  Charlotte Cunningham-Rundles, MD PhD FAAAAI
  Francisco A. Bonilla, MD PhD FAAAAI

2402 Oral Food Challenges I
- 12:00 to 2:00 pm
- Moscone Center South, Exhibition Level, Hall B Lobby
- Credit: 0.25 CME/CE
- 12:00 Hands-on Training Station
- Faculty
  J. Andrew Bird, MD FAAAAI
  R. Sharon Chinthrajah, MD
  Gita Ram, MD
  Jacob D. Kattan, MD
  Lauren Kronisch, RD LD
  Megan Ott Lewis, MSN CRNP
  Marion E. Groetch, MS RDN
  Kim E. Mudd, RN MSN
  Amanda Louise Cox, MD FAAAAI
  Malika Gupta, MD
  S. Allan Bock, MD FAAAAI

Course

2405 Career Paths in Allergy and Immunology
- 12:00 to 1:45 pm
- Moscone Center South, Upper Mezzanine Level, Esplanade 160
- Pre-registration and ticket required. Attendance restricted to current allergy/immunology Fellows-in-Training only. No fee. Continental breakfast and box lunch included.
- Credit: No CME/CE
- Moderator: Rebecca Saff, MD PhD FAAAAI

- 12:00 Lunch
- 12:15 Welcome and Introduction
  Rebecca Saff, MD PhD FAAAAI
- 12:20 Academia: Clinical
  Amy M. Scurlock, MD
- 12:30 Academia: Research
  Mitchell H. Grayson, MD FAAAAI
- 12:40 Industry
  Dorothy S. Cheung, MD FAAAAI
- 12:50 Government
  Melody C. Carter, MD FAAAAI
- 1:00 Private Practice
  Andrew W. Murphy, MD FAAAAI
- 1:10 Summary
  Rebecca Saff, MD PhD FAAAAI
- 1:15 Breakout/Question & Answer

ATTEND THE AAAAI CAREER CONNECTIONS
JOB FAIR

Saturday, February 23:
- 9:45 am to 2:30 pm
- Moscone Center South Exhibition Level, Hall B

Sunday, February 24:
- 9:45 am to 2:30 pm
2411  Allied Health Professional Assembly Business Meeting and Oral Abstract Session
12:15 to 1:45 pm
Moscone Center South, Exhibition Level, Hall D8
Credit: 1.25 CME/CE
Moderators: Kim E. Mudd, RN MSN
Cheryl K. Bernstein, RN BSN CCRC

12:15  Business Meeting
12:30  The Impact of Allergic Disease in Adults with Chronic Idiopathic
Urticaria
Nicolle Cascone, RN

12:45  High Prevalence of Drug Allergy in Patients with Urticaria and
Angioedema
Theresa L. Nee, RN

1:00  School Personnel Apprehension Related To Stock Epinephrine In
Greater Houston Area
Daisy Tran, RN BSN

1:15  Hypertensive Disorders of Pregnancy and Recurrent Wheezing: 12 Month Follow-up of a Birth Cohort Study
Mariana Abduch Rahal

1:30  Wahoo Cool for School: Bridging the Clinic to the Classroom to Update Student-Specific Food Allergy Recommendations
Jesse B. Persily, BA

2501  There's an App for That: The Use of Mobile Technology in Clinical Practice
Marriott, Lower B2 Level, Yerba Buena Salon 1
Discussion Leaders: Melinda M. Rathkopf, MD FAAAAI
Nabeel Farooqui, MD FAAAAI

2502  Venom Allergy: When to Suspect Mastocytosis
Marriott, Lower B2 Level, Yerba Buena Salon 2
Discussion Leaders: David B.K. Golden, MD FAAAAI
Cem Akin, MD PhD FAAAAI

2503  Asthma in Preschool Children: Primary and Secondary Prevention and Management of Exacerbations
Marriott, Lower B2 Level, Yerba Buena Salon 3
Discussion Leaders: Avraham Beigelman, MD MSCI FAAAAI
William J. Sheehan, MD

2504  Hypereosinophilic Syndrome: Evaluation and Management Options
Marriott, Lower B2 Level, Yerba Buena Salon 4
Discussion Leaders: Sameer K. Mathur, MD PhD FAAAAI
Amy D. Klion, MD

2505  Case-Based Learning: Challenges in Food Protein-Induced Enterocolitis Syndrome Management
Marriott, Lower B2 Level, Yerba Buena Salon 5
Discussion Leaders: Qian Yuan, MD PhD
Elizabeth J. Feuille, MD

2506  Cannabis Sativa: Marijuana as Medicine and Allergen?
Marriott, Lower B2 Level, Yerba Buena Salon 6
Discussion Leaders: Ajay P. Nayak, PhD
William S. Silvers, MD FAAAAI
2507  Biologic Therapies and Occupational Asthma  
Marriott, Lower B2 Level, Yerba Buena Salon 10  
Discussion Leaders: Santiago Quirce, MD PhD  
Joaquin Sastre, MD PhD FAAAAI

2508  The Mechanic’s Guide to Nanoparticles in the Airways  
Marriott, Lower B2 Level, Yerba Buena Salon 11  
Discussion Leaders: Peter J. Pityn, PhD  
W. Elliott Horner, PhD LEED AP FAAAAI

2509  Adult Primary Immunodeficiencies  
Marriott, Lower B2 Level, Yerba Buena Salon 12  
Discussion Leaders: Jolan E. Walter, MD  
Manish J. Butte, MD PhD

Workshop

2510  Demystifying the National Institutes of Health Grant Submission/Peer Review Process  
Moscone Center South, Upper Mezzanine Level, Esplanade 151  
Discussion Leaders: Alok Mulky, PhD  
David P. Huston, MD FAAAAI

Pro/Con Debates

2551  Antibiotics are Effective Therapy for the Management of Acute Episodic Wheeze in Preschool Children  
12:30 to 1:30 pm  
Moscone Center South, Level 2, Room 207  
Credit: 1.00 CME/CE  
Moderator: Stokes Peebles Jr., MD FAAAAI  
Pro Speaker: Leonard B. Bacharier, MD FAAAAI  
Con Speaker: Jay M. Portnoy, MD FAAAAI

2552  Mast Cell Activation Syndrome is Over-Recognized  
12:30 to 1:30 pm  
Moscone Center South, Upper Mezzanine Level, Esplanade 156  
Credit: 1.00 CME/CE  
Moderator: Mariana C. Castells, MD PhD FAAAAI  
Pro Speaker: Catherine Randa Weiss, MD PhD FAAAAI  
Con Speaker: Patrizia Bonadonna, MD

2553  Interleukin-33, and Not Thymic Stromal Lymphopoietin, is the Primary Driver of the Innate Allergic Immune Response  
12:30 to 1:30 pm  
Moscone Center South, Level 3, Room 303  
Credit: 1.00 CME/CE  
Moderator: Taylor A. Doherty, MD FAAAAI  
Pro Speaker: Hirohito Kita, MD  
Con Speaker: Atsushi Kato, PhD

Symposia

2555  National Heart, Lung, and Blood Institute: Precision Medicine in Asthma  
12:30 to 1:45 pm  
Moscone Center South, Level 3, Room 305  
Credit: 1.25 CME/CE  
Moderator: Rosalind J. Wright, MD MPH

2556  National Institute of Allergy and Infectious Diseases: Allergic Sensitization and the March to Allergic Diseases  
12:30 to 1:45 pm  
Moscone Center South, Upper Mezzanine Level, Esplanade 155  
Credit: 1.25 CME/CE  
Moderator: Peter J. Gergen, MD MPH

12:50 Question & Answer

12:55 Allergic Sensitization and the Development of Allergic Disease in the First 10 Years of Life  
James E. Gern, MD FAAAAI

1:15 Question & Answer

1:20 Sensitization to Allergen Components and Its Relationship to the Phenotype of Allergic Disease  
Anna Pomés, PhD FAAAAI

1:40 Question & Answer
Workshops

2557 Interesting Cases Part I

12:30 to 1:45 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 159
Credit: 1.25 CME/CE
Moderators: Paul J. Dowling, MD FAAAAI
Eric M. Schauberger, DO PhD

12:30 Eosinophilic Mastitis: A Diagnostic and Therapeutic Conundrum
Alegra Grieb, MD

12:40 Question & Answer

12:45 Making Repeat Aspirin Desensitizations “Water under the Bridge”: Making a Case for Ibuprofen Bridge Therapy
Cali M. Reynolds, MD

12:55 Question & Answer

1:00 Hereditary Angioedema and Inducible Urticaria: Not Mutually Exclusive
Rachel Bean, MD

1:10 Question & Answer

1:15 Long Term Outcomes of an Infant with Food-Induced Pulmonary Hemosiderosis: Is EoE a Late Manifestation of Heiner’s Syndrome
Kathryn Neupert, MD

1:25 Question & Answer

1:30 A Novel WAS Mutation Presenting As Severe Combined Immune Deficiency
Katie Kennedy, MD

1:40 Question & Answer

Oral Abstract Sessions

2601 Asthma Epidemiology and Risk Factors

2:00 to 3:15 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.25 CME/CE
Moderators: Caroline C. Horner, MD FAAAAI
Bridgette L. Jones, MD FAAAAI

2:00 Preferred Medication Changes in High Risk Asthma Patients
Leads to Increased ED Visits and Hospitalizations
Christina M. Thomas, MD

2:15 Elevated Testosterone is Associated with Decreased Likelihood of Current Asthma Regardless of Gender
Kirk V. Shepard II, MD

2:30 Prenatal exposure to acid suppressant medications and the risk of recurrent wheeze at 3 years of age in children with a history of severe bronchiolitis
Lacey B. Robinson, MD

2:45 Identification of Two Early Life Eczema and Non-Eczema Phenotypes With High Risk For Asthma Development
Elisabet Johansson, PhD

3:00 Early Life Risk Factors for Asthma at Early Adulthood
David Peloza, MD

2602 Updates on Common Variable Immune Deficiency Syndrome and Humoral Immune Deficiency

2:00 to 3:15 pm
Moscone Center South, Level 3, Room 301
Credit: 1.25 CME/CE
Moderators: Elena E. Perez, MD PhD FAAAAI
Kenneth Paris, MD MPH

2:00 Replacement immunoglobulin trends amongst patients with CVID and concurrent autoimmunity: A report from the USIDNet registry
Katie Kennedy, MD

2:15 B Cell Activation in Specific Polysaccharide Antibody Deficiency
Stephen J. McGeady, MD FAAAAI

2:30 A study of cancer incidence in the most common immunodeficiency, common variable immunodeficiency (CVID)
Carolyn H. Baloh, MD

2:45 Lymphoproliferative Disease in CVID: A Report of Types and Prevalence from a United States Patient Registry
Elizabeth Yakaboski, MD

3:00 A Milder Variant of Transient Hypogammaglobulinemia of Infancy in Moderate to Severe Atopic Dermatitis
Carolyn Kwiat, MD MPH

2603 Air Pollutants and Toxicants

2:00 to 3:15 pm
Moscone Center South, Level 3, Room 303
Credit: 1.25 CME/CE
Moderators: Elizabeth C. Matsui, MD MHS
Cullen M. Dutmer, MD

2:00 Effect of Air Cleaners (Intense Pure Air® XL) on Early and Late Asthmatic Response in Asthmatic Subjects Sensitized to Cat in AILYATEC’s Environmental Exposure Chamber (EEC)
Frederic J. De Blay, MD

2:15 Wood Smoke Particles Increase Markers of Systemic Inflammation in Healthy Volunteers
Anusha Vadlamudi, MD

2:30 The Impact of a Prescribed Burn versus a Wildfire on the Immune and Cardiovascular Systems of Children
Mary Prunicki, MD PhD

2:45 Report of prenatal exposure to pesticide predicts infant rhinitis and watery eyes without a cold
Matthew S. Perzanowski, PhD

3:00 Effect of prenatal particulate matter exposure on atopic dermatitis in preschool children modified by cord blood vitamin D: COCOA study
Song-I Yang, MD
Oral Abstract Sessions (continued)

2604 Oral Immunotherapy Outcomes and Markers of Response
2:00 to 3:15 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 1.25 CME/CE
Moderators: Amal H. Assa’ad, MD FAAAAI
Susan Waserman, MD MSc FAAAAI
2:00 A 5-year Summary of Real-life Dietary Egg Consumption after Completion of a 4-year Egg OIT Protocol
Edwin Kim, MD MS
2:15 Successful Desensitisation and Sustained Unresponsiveness Using Modified Peanut: Results from the BOPI Study
Nandinee Patel, MD
2:30 Differential Gene Expression among Infants at High-Risk for Peanut Allergy
Ashley L. Devonshire, MD MPH
2:45 TCR Repertoire Analysis Reveals Public Motifs with High Probability for Allergen Epitope Specificity
Neal P. Smith
3:00 IgEhi Endophenotype in Those with Transient Desensitization after Peanut Oral Immunotherapy
Alexander R. Eaton, BS

2605 Healthcare Delivery for Patients with Food Allergy
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 205
Credit: 1.25 CME/CE
Moderators: Julie Wang, MD FAAAAI
Benjamin T. Prince, MD MSCI
2:00 Family History of Atopy in Food Allergy Development
Justin M. Zaslavsky
2:15 Characterization of Epinephrine Utilization in Michigan Public Schools 2014-17
Harvey L. Leo, MD FAAAAI
2:30 Implementation, Practices, and Barriers to the 2017 Peanut Allergy Prevention Guidelines Among Pediatricians
Ruchi S. Gupta, MD MPH
2:45 Improvement in Quality of Life (QOL) in Pediatric Patients with Food Allergy Associated Disease After Initial Clinic Evaluation
Vibha Szatron, MD
3:00 Factors Associated with Increased Food Allergy-associated Anxiety in Parents of Food-allergic Children
Lianne Soller, PhD

2606 Update in Rhinitis and Rhinosinusitis
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 201
Credit: 1.25 CME/CE
Moderators: Patricia Takach, MD FAAAAI
Mahboobeh Mahdvinia, MD PhD
2:00 Blocking Histone Deacetylase Activity as a Novel Target for Epithelial Barrier Defects in Allergic Rhinitis
Bracht Steelan, PhD
2:15 Age-related Endotype in Patients with Chronic Rhinosinusitis
Gwanghui Ryu
2:30 Expression and Functional Analysis of CST1 in Intractable Nasal Polyps
Yukinori Kato, MD PhD
2:45 Respiratory Virus Detection in Nasal Lavage Fluid of Chronic Rhinosinusitis Patients During Acute Exacerbations
Jason Kwah, MD
3:00 A Biomarker for Obstructive Sleep Apnea in Chronic Rhinosinusitis
Navid Salahi, MD

2607 Immune Pathways in the Development of Food Allergy
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 203
Credit: 1.25 CME/CE
Moderator: Stephen R. Durham, MD MA
Katrina Allen, MD PhD FAAAAI
2:00 A Low Prevalence of Pediatric Food Allergy (FA) Among Older Order Mennonites (OOM) Is Related to Robust IgA Production in Early Life
Kirs M. Jarvinen-Seppo, MD PhD FAAAAI
2:15 Gastrointestinal Staphylococcus Aureus: Immune Responses to its Enterotoxins and Regulatory T Cell Dysfunction in Childhood Food Allergy
Kristin A. Erickson
2:30 Peanut Allergy is Induced by Distinct Immunologic Pathways Dependent on the Routes of Allergen Exposure in Mice
Koji Iijima, PhD
2:45 Immune Progression Within the Memory CD4+ T Cell Compartment is a Marker of Heightened Clinical Sensitivity for Patients with Peanut Allergy
Bert Ruiter, PhD
3:00 Identification of an Antigenic Region involved in IgE Cross-reactivity Between Fatty Acid Binding Proteins (FABP) from Shrimp and Human
Marlon Munera, MSc
Saturday Scientific Program

Oral Abstract Sessions (continued)

2608  Late Breaking Oral Abstract: Clinical Focus
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 207
Credit: 1.25 CME/CE
Moderators: Thanai Pongdee, MD FAAAAI
David M. Fleisher, MD FAAAAI
2:00 Implementation of the 2017 Addendum Guidelines for Peanut Allergy Prevention Among AAAAI Allergists and Immunologists
Jacqueline Johnson, JrPH
2:15 The Natural History of Peanut and Egg Allergy and Predictors of Persistence: The Healthnuts Longitudinal Study, 6-Year-Old Follow-up
Rachel Peters, PhD
2:30 Earlier Ingestion of Peanuts Following Change to Infant Feeding Guidelines in Australia
Victoria Soriano
2:45 Efficacy and Safety of Dupilumab in Patients with Chronic Rhinosinusitis with Nasal Polyps: Results from the Randomized Phase 3 Sinus-24 Study
Joseph K. Han, MD FAAAAI
3:00 Fetal Outcomes Among Women with Asthma during Pregnancy: Evidence from a Large Healthcare Database in the United States
Jennifer J. Yland, MS

Allied Health Workshops

2611  Allied Health: Recurrent Infections, Severe Eczema, or Failure to Thrive: Is it Allergy or Immunodeficiency?  
2:00 to 3:15 pm
Moscone Center South, Exhibition Level, Hall D9
Credit: 1.25 CME/CE
Moderator: Vivian P. Hernandez-Trujillo, MD FAAAAI
2:00 Is it Allergy?
William R. Blouin, ARNP
2:20 Question & Answer
2:25 Is it Immunodeficiency?
Carla M. Duff, CPNP MSN IgCN
2:45 Question & Answer
2:50 There is a Diagnosis: Now What?
M. Elizabeth M. Younger, CRNP PhD
3:10 Question & Answer

2612  Allied Health: Update on Allergen Extract Compounding: Immunotherapy Survey Results and Coding
2:00 to 3:15 pm
Moscone Center South, Exhibition Level, Hall D12
Credit: 1.25 CME/CE
Moderator: Cheryl K. Bernstein, RN BSN CCRC
2:00 FDA Update on Allergen Extract Compounding
Andrew W. Murphy, MD FAAAAI
2:20 Question & Answer
2:25 Immunotherapy Survey Results
David I. Bernstein, MD FAAAAI
2:45 Question & Answer
2:50 Immunotherapy Coding: Problem Solving
Teresa Thompson, CPC CMSCS CCC
3:10 Question & Answer

Keynote

2701  inching Towards the Construction of Individualized Health Course Trajectories of Disease and Wellness
3:30 to 4:30 pm
Moscone Center South, Exhibition Level, Hall A
Credit: 1.00 CME/CE
Moderator: Robert A. Wood, MD FAAAAI
Speaker: Eric Schadt, PhD
Basic Science Poster Discussion

2721 Innate Immunity Regulates Allergic Disease
4:30 to 6:00 pm
Moscone Center South, Exhibition Level, Hall D10
Credit: 1.50 CME/CE
Moderators: Magdalena M. Gorska, MD PhD FAAAAI
Jill A. Poole, MD FAAAAI

4:30 Poster Viewing
5:10 Discussion of Following Posters
271 IL33 Contributes to Diesel Pollution-Induced Increase in Experimental Asthma Severity
Eric Brandt, PhD FAAAAI
272 Nasal Epithelial Brush Cells Generate Cysteinyl Leukotrienes in Response to Aeroallergens and Stress Signals
Saltanat Ualiyeva, MD
273 An Innate Adaptor Protein CARD9 Inhibits Type 2 Immune Responses in the Airways
Rinna Tel, MD
274 Disease-Associated KIF3A Genetic Variants Alter Gene Methylation and Expression Resulting in Skin Barrier Dysfunction and Increased Risk for Atopic Dermatitis
Mariana L. Stevens, PhD
275 Mast Cell-Dependent Adjuvant Activity is a Key Component of the Respiratory Immune Response to Inhaled Alternaria
Sachin K. Samuchilwal, PhD

Workshops

2801 Hot Topics in Pediatric Allergy & Immunology
4:45 to 6:00 pm
Moscone Center South, Level 2, Room 207
Credit: 1.25 CME/CE
Moderator: Elizabeth C. Matsui, MD MHS

4:45 Food Allergy
Pooja Varshney, MD
5:05 Question & Answer
5:10 Primary Immune Deficiency
Lisa R. Forbes, MD
5:30 Question & Answer
5:35 Asthma
Tamara T. Perry, MD
5:55 Question & Answer

2802 ABAI Continuous Assessment Program (CAP) Pilot: One Year Later
4:45 to 6:00 pm
Moscone Center South, Level 3, Room 303
Credit: 1.25 CME/CE
Moderator: Theodore M. Freeman, MD FAAAAI

4:45 ABAI’s CAP Pilot Program Description: The Article-Based Open-Book Examination
Theodore M. Freeman, MD FAAAAI
5:05 What the ABAI and Its Diplomates Have Learned after the First Year of CAP
Kathleem C. May, MD FAAAAI
5:25 Current and Proposed Changes to MOC Part IV Requirements
Mitchell H. Grayson, MD FAAAAI
5:45 Question & Answer

2803 Asthma and the Athlete: Insights from an Ironman Legend
4:45 to 6:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.25 CME/CE
Moderator: Justin C. Greiwe, MD FAAAAI

4:45 Asthma and the Athlete: Insights from an Ironman Legend
Joanna Zeiger, MS PhD
5:05 Question & Answer
5:00 Nuts and Bolts of Evaluating the Athlete with Dyspnea
Louis-Philippe Boulet, MD
5:20 Question & Answer
5:25 Guidelines of Treating the Athlete with EIB
Christopher C. Randolph, MD FAAAAI
5:45 Athletes and Asthma: Expert Panel Discussion and Audience Feedback

2804 Gender Disparities in Asthma: Are Hormones to Blame?
4:45 to 6:00 pm
Moscone Center South, Level 2, Room 205
Credit: 1.25 CME/CE
Moderator: Kathryn E. Hulse, PhD

4:45 Sex Differences in AERD: Lipid Mediator Biology and Beyond
Katherine N. Cahill, MD
5:05 Question & Answer
5:10 Sex Hormone Regulation of Inflammation in Asthma
Dawn C. Newcomb, PhD
5:30 Question & Answer
5:35 Hormonal Programing of Epithelium in Asthma Phenotypes
Serjejs Berdnikovs, PhD
5:55 Question & Answer

2805 Quality Reporting and the Quality Clinical Data Registry: A 2019 Update
4:45 to 6:00 pm
Moscone Center South, Level 2, Room 203
Credit: 1.25 CME/CE
Moderator: Andrew W. Murphy, MD FAAAAI

4:45 Merit-Based Incentive Payment System and Quality Reports: Where Are We Now?
Emily L. Graham, RHIA CCS-P
### Workshops (continued)

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<tr>
<th>Time</th>
<th>Session Title</th>
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<td>5:10</td>
<td>Alternative Payment Models for A/I Practice</td>
<td>Cindy H. Moon, MPP MPH</td>
<td>Moscone Center South, Level 3, Room 305</td>
<td>1.25 CME/CE</td>
<td>Zuhair K. Ballas, MD FAAAAI</td>
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<td>5:35</td>
<td>What Is a Quality Clinical Data Registry and How Can It Help You?</td>
<td>Gary C. Steven, MD PhD</td>
<td>Moscone Center South, Level 3, Room 305</td>
<td>1.25 CME/CE</td>
<td>Zuhair K. Ballas, MD FAAAAI</td>
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<td>5:05</td>
<td>JACI Year-in-Review Workshop</td>
<td>Corinne Keet, MD MS PhD</td>
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<td>Food Allergy</td>
<td>Corinne Keet, MD MS PhD</td>
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<td>Biologics in Asthma</td>
<td>Stokes Peebles, Jr., MD FAAAAI</td>
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<td>5:05</td>
<td>A Review of Cross-Reactivity Patterns, Extract Stability, Optimal Dosing and Mixing for Subcutaneous Allergen Immunotherapy: A Case-Based Immunotherapy Prescription Mixing Workshop</td>
<td>Tolly Epstein, MD FAAAAI</td>
<td>Moscone Center South, Level 2, Room 201</td>
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<td>Mike Tankersley, MD MBA FAAAAI</td>
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<td>5:10</td>
<td>Cross-Reactivity Patterns and Allergen Stability Relevant to Prescribing Allergen Immunotherapy</td>
<td>Tolly Epstein, MD FAAAAI</td>
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<td>Updated Math-Free Guidelines for Allergen Immunotherapy Doses and Glycerin Concentrations</td>
<td>Punita Ponda, MD FAAAAI</td>
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<td>5:05</td>
<td>An Open Discussion of Case Scenarios that Will Augment Your Existing Immunotherapy Prescribing Patterns</td>
<td>Christopher W. Calabria, MD FAAAAI</td>
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<td>Sputum Transcriptomics of Neutrophilic Asthma</td>
<td>Timothy S. Hinks, MD PhD</td>
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<td>Sanjiv Sur, MD</td>
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<td>Bronchoalveolar Lavage (BAL) and Serum Proteomic-Based Mechanistic Insights into Airway Neutrophilic Inflammation in Refractory Asthma</td>
<td>Rateul Alam, MD PhD FAAAAI</td>
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<td>5:05</td>
<td>The Effect of Health Disparities on Allergy and Immunology Practice</td>
<td>Julie Wang, MD FAAAAI</td>
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<td>5:10</td>
<td>What Are Health Disparities and Why Do They Occur?</td>
<td>Julie Wang, MD FAAAAI</td>
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<td>Recognizing Health Disparities in Allergy and Immunology</td>
<td>Andrea J. Apter, MD MA MSc FAAAAI</td>
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<td>Taking a Closer Look at Venom Immunotherapy from Several Angles</td>
<td>Desiree E.S. Larenas Linnemann, MD FAAAAI</td>
<td>Moscone Center South, Upper Mezzanine Level, Esplanade 151</td>
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<td>Desiree E.S. Larenas Linnemann, MD FAAAAI</td>
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<td>Who Really Need VIT?</td>
<td>Desiree E.S. Larenas Linnemann, MD FAAAAI</td>
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<td>VIT in Highly Reactive Patients and in Patients with Special Medical Conditions</td>
<td>James M. Tracy, DO FAAAAI</td>
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<td>5:05</td>
<td>VIT: Classic and Alternative Administration Schedules</td>
<td>David B.K. Golden, MD FAAAAI</td>
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Sunday At-A-Glance

Sunday, February 24

6:00 AM
Registration 6:30 am - 5:00 pm

7:00 AM
Seminars
7:00 - 8:00 am

8:00 AM

9:00 AM
Plenary Session
8:15 - 9:45 am

10:00 AM
Plenary Q&A
9:45 - 10:15 am
Poster Presentations & Case Study Posters
9:45 - 10:45 am
Symposia
10:45 am - 12:00 pm

11:00 AM

12:00 PM
Seminars & Pro/Con Debates
12:30 - 1:30 pm
Workshops
12:30 - 1:45 pm
Interesting Cases Part 2
12:30 - 1:45 pm
Training Stations
12:00 - 2:00 pm

01:00 PM
Oral Abstracts
2:00 - 3:15 pm

02:00 PM

03:00 PM
Interest Section Forums
3:30 - 4:30 pm

04:00 PM

05:00 PM
Featured Posters
4:35 - 6:00 pm

06:00 PM

Sunday Scientific Program

Seminars

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

3001 Non-immunoglobulin E-Mediated Food Allergy: A Practical Approach for Recognition and Treatment
Marriott, Lower B2 Level, Yerba Buena Salon 10
Discussion Leaders: Terri F. Brown-Whitehorn, MD FAAAAI
Antonella Cianferoni, MD PhD FAAAAI

3002 Refractory Chronic Rhinosinusitis: When Does My Patient Need Surgery?
Marriott, Lower B2 Level, Yerba Buena Salon 2
Discussion Leaders: Robert C. Kern, MD
Joseph K. Han, MD FAAAAI

3003 Making QI Work for You: How to Begin, Complete and Publish Your Ideas in Quality Improvement
Marriott, Lower B2 Level, Yerba Buena Salon 3
Discussion Leaders: Sujani Kakumanu, MD FAAAAI
Paige G. Wickner, MD MPH

3004 Toxic Mold: Health Effects and Home Assessment
Marriott, Lower B2 Level, Yerba Buena Salon 4
Discussion Leaders: Jay M. Portnoy, MD FAAAAI
James J. Anderson, MLT

3005 Nutritional Concerns in Children with IgE-Mediated Food Allergies
Marriott, Lower B2 Level, Yerba Buena Salon 5
Discussion Leaders: Kristin C. Sokol, MD MS MPH
Lauren Kronisch, RD LD

3006 Introducing the New 2017 ATS Updates to the 2005 ATS/ERS Guidelines: How to Perform, Interpret and Report Spirometry
Marriott, Lower B2 Level, Yerba Buena Salon 6
Discussion Leaders: James M. Quinn, MD FAAAAI
Karla E. Adams, MD

3007 Big Data Approaches in the Allergy Field
Marriott, Lower B2 Level, Yerba Buena Salon 1
Discussion Leaders: Ting Wen, PhD
Leah Claire Nesbitt Kottyan, PhD

3008 Multi-Organ Involvement in Systemic Mastocytosis
Marriott, Lower B2 Level, Yerba Buena Salon 11
Discussion Leaders: Jonathan A. Bernstein, MD FAAAAI
Mariana C. Castells, MD PhD FAAAAI

3009 Update on Health Care Reform, Registries, Measures and Guidelines
Marriott, Lower B2 Level, Yerba Buena Salon 12
Discussion Leaders: Gary C. Steven, MD PhD FAAAAI
Emily L. Graham, RHIA CCS-P

3010 Caring for Your Severe Combined Immunodeficiency Patient Post-Transplant
Marriott, Lower B2 Level, Yerba Buena Salon 13
Discussion Leaders: Jennifer Heimall, MD
Morton J. Cowan, MD

Plenary

3101 Systemic Regulation of Susceptibility and Pathogenesis of Allergic Inflammation
8:15 to 9:45am
Moscone Center South, Exhibition Level, Hall A
Credit: 1.50 CME/CE
Moderator: Marsha Wills-Karp, PhD

8:15 Introduction
8:20 Skin Exposure Drives Allergen Sensitization
Raif S. Geha, MD FAAAAI
8:45 Introduction
8:50 Systemically Available Gut Microbiome Derived Products as Modifiers of Allergic Inflammation
Cathryn R. Nagler, PhD
9:15 Introduction
9:20 Systemic Hormones and the Unified Barrier Hypothesis of Allergy
Sergejs Berdnikovs, PhD
9:45 Saturday Plenary Q&A

Sunday Poster Sessions

9:45 to 10:45 am
Moscone Center South, Exhibition Level, Hall B
Credit: No CME/CE
Please refer to the 2019 AAAAI Annual Meeting Mobile App or www.jacionline.org for abstract details.

3201 Asthma Therapy
3202 Asthma Epidemiology
3203 Insights in Basic and Clinical Immunology 2
3204 The Spectrum of Immunodeficiency Disorders
3205 Occupational and Immunologic Mechanisms
3206 Consequences of Environmental Triggers
3207 Atopic Dermatitis
3208 Eosinophilic GI Diseases
3209 Anaphylaxis
3210 Epidemiology of FADDA Disorders
3211 Food Challenges
3212 Digital Programs to Help Evaluate Asthma and Chronic Cough Outcomes
3213 Anaphylaxis and Angioedema
3214 Rhinitis and Conjunctivitis
3215 Rhinitis and Sinusitis
3216 Role and Regulation of Mast Cells in Disease
3217 Immune Players in the Development of Allergy
Symposia

3301 Precision Medicine in the Era of Primary Immunodysregulatory Diseases
10:45 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 1.25 CME/CE
Moderator: Karin Chen, MD

10:45 Clinical Manifestations of Primary Immunodysregulatory Diseases
Megan A. Cooper, MD PhD

11:05 Question & Answer

11:10 Therapy in the Treatment of Primary Immunodysregulatory Diseases: Has the Era of Precision Medicine Arrived Yet?
Joshua D. Milner, MD

11:30 Question & Answer

11:35 Strategy and Outcomes of Hematopoietic Stem Cell Transplantation for Primary Immunodysregulatory Diseases
Lisa R. Forbes, MD

11:55 Question & Answer

3302 Allied Health: Words Will Never Hurt Me: Empowering Food Allergic Patients to Handle Bullying and School Related Problems
10:45 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.25 CME/CE
Moderator: Karol G. Timmons, RN MS CPNP

10:45 Bullying at School
Jodi A. Shroba, MSN APRN CPNP

11:05 Question & Answer

11:10 Food Allergy Management in Schools
Megan Ott Lewis, MSN CRNP

11:30 Question & Answer

11:35 Coping Strategies and Techniques to Handle Bullying
Maria Crain, CPNP

11:55 Question & Answer

3303 EAACI: Novel Developments in Endotype-Driven Approach for Allergic Diseases
10:45 am to 12:00 pm
Moscone Center South, Level 2, Room 207
Credit: 1.25 CME/CE
Moderator: Ioana O. Agache, MD PhD

10:45 Nasal Hypereactivity: A Special Endotype
Peter W. Hellings, MD PhD

11:05 Question & Answer

11:10 Biomarkers for Monitoring the Efficacy of Allergen Immunotherapy
Mohamed H. Shamji, BSc MSc PhD FAAAAI

11:30 Question & Answer

11:35 Atopic Dermatitis Endotypes: Ready for the Clinics?
Peter Schmid-Grendelmeier, MD

11:55 Question & Answer

3304 Biologics for Severe Asthma: Treatment-Specific Effects Important in Choosing a Specific Agent
10:45 am to 12:00 pm
Moscone Center South, Exhibition Level, Hall A
Credit: 1.25 CME/CE
Moderator: Thomas B. Casale, MD FAAAAI

10:45 Exacerbation Prone Patients
Loren Denlinger, MD PhD

11:05 Question & Answer

11:10 Fixed Airway Obstructed Patients Including COPD
Jonathan Corren, MD FAAAAI

11:30 Question & Answer

11:35 Corticosteroid-Dependent Patients
Elliot Israel, MD FAAAAI

11:55 Question & Answer

3305 Physician Health and Wellness: “We Need to Talk”
10:45 am to 12:00 pm
Moscone Center South, Level 2, Room 203
Credit: 1.25 CME/CE
Moderator: Sharon B. Markovics, MD FAAAAI

10:45 The Individual Physician’s Guide to Resiliency in the Current Healthcare Climate
Anil Nanda, MD FAAAAI

11:05 Question & Answer

11:10 Evidence-Based Strategies to Improve Professional Satisfaction Through Efficiencies of Practice
Hemant P. Sharma, MD MHS FAAAAI

11:30 Question & Answer

11:35 Utilizing Support from the Greater Medical Community at Large to Further Enhance Wellness
Theresa A. Bingemann, MD FAAAAI

11:55 Question & Answer

3306 Is Eosinophilic Esophagitis a Primary Barrier Defect?
10:45 am to 12:00 pm
Moscone Center South, Level 2, Room 205
Credit: 1.25 CME/CE
Moderator: Antonella Cianferoni, MD PhD FAAAAI

10:45 Epithelium in Eosinophilic Esophagitis
Carine Blanchard, PhD

11:05 Question & Answer

11:10 Barrier Dysfunction in Eosinophilic Esophagitis
Hans-Uwe Simon, MD PhD FAAAAI

11:30 Question & Answer

11:35 Can the Epithelium Shape the Immune Response in Eosinophilic Esophagitis?
Jonathan M. Spergel, MD PhD FAAAAI

11:55 Question & Answer
Symposia (continued)

3307  Neuroimmune Interactions in the Allergic Immune Response

10:45 am to 12:00 pm
Moscone Center South, Level 3, Room 303
Credit: 1.25 CME/CE
Moderator: Caroline L. Sokol, MD PhD

10:45  Neuron-ILC2 Interactions as Triggers of Allergic Inflammation
Antonia Wallrapp

11:05  Question & Answer

11:10  Sensory Neurons Promote the Allergic Immune Response
Sebastien Talbot, PhD

11:30  Question & Answer

11:35  MRGPR Receptors in Allergic Reactions
Ethan A. Lerner, MD PhD

11:55  Question & Answer

3308  Translational Drug Allergy

10:45 am to 12:00 pm
Moscone Center South, Level 3, Room 305
Credit: 1.25 CME/CE
Moderator: Allison Ramsey, MD FAAAAI

10:45  Novel Approaches in the Management of the Complex Drug Allergic Patient
Jonathan G. Peter, MD PhD

11:05  Question & Answer

11:10  Defining the Risk of Delayed Reactions: HLA and Beyond
Elizabeth J. Phillips, MD FAAAAI

11:30  Question & Answer

11:35  Antibiotic Allergy: Is Cross-Reactivity a Clinical Concern?
Jason A. Trubiano, MD PhD

11:55  Question & Answer

3309  Genetic and Environmental Impact on Immune System Variability and Disease

10:45 am to 12:00 pm
Moscone Center South, Level 2, Room 201
Credit: 1.25 CME/CE
Moderator: Christine M. Seroogy, MD FAAAAI

10:45  Development of Tissue Resident Memory CD4 T-Cells
Donna L. Farber, PhD

11:05  Question & Answer

11:10  Immunophenotype Mapping of Human Dendritic Cells in the Context of Respiratory Virus Exposure
Michelle A. Gill, MD PhD

11:30  Question & Answer

11:35  Environmental and Genetic Influences on Innate Immune Cell Phenotypes
Matthew Albert, PhD

11:55  Question & Answer

3310  Allied Health: Multidisciplinary Approach to Treating the Severe Pediatric Asthma Patient

10:45 am to 12:00 pm
Moscone Center South, Exhibition Level, Hall D8
Credit: 1.25 CME/CE
Moderator: Pooja Varshney, MD

10:45  Multidisciplinary Approach with Severe Pediatric Asthma: Psychosocial Challenges
Melissa T. Korenblat-Hanin, ACSW LCSW

11:05  Question & Answer

11:10  Evaluation of the Pediatric Patient with Severe Asthma
Leonard B. Bacharier, MD FAAAAI

11:30  Question & Answer

11:35  Advanced Therapies, including Biologics, for Severe Asthma
Lila C. Kertz, MSN RN CPNP

11:55  Question & Answer

Workshops

3401  Asthma Medication Delivery Devices: How to Use Them and How to Teach Them

12:00 to 2:00 pm
Moscone Center South, Exhibition Level, Hall B Lobby
Credit: 0.25 CME/CE

12:00  Hands-on Training Station
Sharmilee M. Nyenhuis, MD FAAAAI
Caroline C. Horner, MD FAAAAI
Brooke I. Polk, MD
Evelyn L. Angulo, MD
Anne E. Borngmeyer, DNP RN CPNP AE-C
Lila C. Kertz, MSN RN CPNP
Marc L. Rubin, BScPharm, RPh

3402  Oral Food Challenges II

12:00 to 2:00 pm
Moscone Center South, Exhibition Level, Hall B Lobby
Credit: 0.25 CME/CE

12:00  Hands-On Training Station
Faculty
J. Andrew Bird, MD FAAAAI
Rushani W. Saltzman, MD
Sara Anvari, MD MSc
Anne M. Hiegel, APRN
S. Shahzad Mustafa, MD FAAAAI
Amy M. Scurlock, MD
Roxanne C. Oriel, MD
S. Allan Bock, MD FAAAAI
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/CE

3501 Should I Test My Patient with Atopic Dermatitis for Food Allergies?
Marriott, Lower B2 Level, Yerba Buena Salon 2
Discussion Leaders: Irene Mikhail, MD
Anne Marie Singh, MD

3502 What to Do with a Patient with Severe Chronic Rhinosinusitis
Marriott, Lower B2 Level, Yerba Buena Salon 3
Discussion Leaders: Robert C. Kern, MD
Anju T. Peters, MD FAAAAI

3503 Eosinophil Phenotypes: Location Matters
Marriott, Lower B2 Level, Yerba Buena Salon 4
Discussion Leaders: Patricia C. Fulkerson, MD PhD
Lisa A. Spencer, PhD FAAAAI

3504 Anti-Eosinophil Therapies for Severe Asthma and Beyond
Marriott, Lower B2 Level, Yerba Buena Salon 5
Discussion Leaders: Sameer K. Mathur, MD PhD FAAAAI
Praveen Akuthota, MD

3505 Innovative Methods to Improve the Collection of Patient-Reported Outcomes (PROs)
Marriott, Lower B2 Level, Yerba Buena Salon 1
Discussion Leaders: Sunit P. Jariwala, MD FAAAAI
Christopher D. Codispoti, MD PhD FAAAAI

3506 The Role of the Practicing Allergist in the Management of Eosinophilic Esophagitis
Marriott, Lower B2 Level, Yerba Buena Salon 6
Discussion Leaders: Ellen R. Sher, MD FAAAAI
Douglas T. Johnston, DO FAAAAI

3507 Autoimmune Mimics of Allergic Disease
Marriott, Lower B2 Level, Yerba Buena Salon 10
Discussion Leaders: Mildred Kwan, MD PhD
Teresa K. Tarrant, MD FAAAAI

3508 Approach to the Patient with Multiple Drug Allergies
Marriott, Lower B2 Level, Yerba Buena Salon 11
Discussion Leaders: Allison Ramsey, MD FAAAAI
Elizabeth J. Phillips, MD FAAAAI

3509 Diagnosis and Management of Contact Dermatitis in Patients
Marriott, Lower B2 Level, Yerba Buena Salon 12
Discussion Leaders: Jonathan I. Silverberg, MD PhD MPH
Marcella R. Aquino, MD FAAAAI

3510 Detergents in Allergic Sensitization
Marriott, Lower B2 Level, Yerba Buena Salon 13
Discussion Leaders: Cezmi A. Akdis, MD FAAAAI
Joan Cook-Mills, PhD

3511 Allied Health: Where Are We with Allergy Prevention?
Moscone Center South, Exhibition Level, Hall D11
Discussion Leaders: David R. Stukus, MD FAAAAI
Carina Venter, PhD RD

Pro/Con Debate

3550 Oral Immunotherapy is Essential for Food Allergy Management
12:30 to 1:30 pm
Moscone Center South, Exhibition Level, Hall A
Credit: 1.00 CME/CE
Moderator: Stacie M. Jones, MD
Pro Speaker: Richard L. Wasserman, MD PhD FAAAAI
Con Speaker: Robert A. Wood, MD FAAAAI

3551 The Severe Asthma Patient with Eosinophilic Phenotype Should Always Be Treated with Anti-Interleukin-5 Therapies
12:30 to 1:30 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.00 CME/CE
Moderator: Mario Castro, MD MPH
Pro Speaker: Sally E. Wenzel, MD FAAAAI
Con Speaker: Thomas B. Casale, MD FAAAAI

3552 Injectable Epinephrine for Subcutaneous Immunotherapy: To Prescribe or Not?
12:30 to 1:30 pm
Moscone Center South, Level 2, Room 207
Credit: 1.00 CME/CE
Moderator: Desiree E.S. Larenas Linnemann, MD FAAAAI
Pro Speaker: David I. Bernstein, MD FAAAAI
Con Speaker: Mike Tankersley, MD MBA FAAAAI

3553 Skin Testing is Necessary Prior to Oral Penicillin Challenge in all Patients
12:30 to 1:30 pm
Moscone Center South, Level 3, Room 305
Credit: 1.00 CME/CE
Moderator: Kimberly G. Blumenthal, MD MSc FAAAAI
Pro Speaker: Kimberly A. Risma, MD PhD FAAAAI
Con Speaker: Moshe Ben-Shoshan, MD FAAAAI
## Sunday Scientific Program

### Symposia

<table>
<thead>
<tr>
<th>Symposium</th>
<th>Title</th>
<th>Time</th>
<th>Location</th>
<th>Credit</th>
<th>Moderator</th>
</tr>
</thead>
<tbody>
<tr>
<td>3554</td>
<td>National Institute of Environmental Health Sciences: Novel Pathways Involved in Regulation of Airway Inflammation</td>
<td>12:30 to 1:45 pm</td>
<td>Moscone Center South, Level 2, Room 203</td>
<td>1.25 CME/CE</td>
<td>Donald Cook, PhD</td>
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<tr>
<td>3555</td>
<td>Interferons Contribute to Allergic Disease: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Center</td>
<td>12:30 to 1:45 pm</td>
<td>Moscone Center South, Upper Mezzanine Level, Esplanade 155</td>
<td>1.25 CME/CE</td>
<td>Wendy F. Davidson, PhD</td>
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### Workshop

<table>
<thead>
<tr>
<th>Workshop</th>
<th>Title</th>
<th>Time</th>
<th>Location</th>
<th>Credit</th>
<th>Moderators</th>
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<tbody>
<tr>
<td>3557</td>
<td>Interesting Cases Part II</td>
<td>12:30 to 1:45 pm</td>
<td>Moscone Center South, Upper Mezzanine Level, Esplanade 159</td>
<td>1.25 CME/CE</td>
<td>Princess U. Ogbogu, MD FAAAAI, Canting Guo, MD</td>
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### Oral Abstract Sessions

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Location</th>
<th>Credit</th>
<th>Moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>3601</td>
<td>Asthma and Airway Immunology</td>
<td>2:00 to 3:15 pm</td>
<td>Moscone Center South, Upper Mezzanine Level, Esplanade 156</td>
<td>1.25 CME/CE</td>
<td>Timothy J. Craig, DO FAAAAI, Tolly Epstein, MD FAAAAI</td>
</tr>
<tr>
<td>3602</td>
<td>Sputum autoantibody-mediated macrophage dysfunction in severe eosinophilic asthmatics with recurrent infections</td>
<td>2:15</td>
<td></td>
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<td>Manali Mukherjee, MSc PhD</td>
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<tr>
<td>3603</td>
<td>Systemic Neutrophilic Responses Do Not Correlate With LPS-induced Neutrophilic Airway Inflammation</td>
<td>2:30</td>
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<td>Amika K. Sood, MD</td>
</tr>
<tr>
<td>3604</td>
<td>Clara Cell 10-kd Protein (CC10) Modulates Superoxide Generation and Arachidonic Acid Metabolism via Formyl Peptide Receptor-Like 1 (FPRL1)</td>
<td>2:45</td>
<td></td>
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<td>Li-Chen Chen, MD</td>
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<tr>
<td>3605</td>
<td>Elevation of Th17 and Th17/Treg Ratio is Associated with Airway Hyperresponsiveness in Asthmatic Children</td>
<td>3:00</td>
<td></td>
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<td>Rong-Ying Zheng, MD</td>
</tr>
</tbody>
</table>
Sunday Scientific Program

Oral Abstract Sessions (continued)

3602 The Best of Basic Immunology
2:00 to 3:15 pm
Moscone Center South, Level 3, Room 303
Credit: 1.25 CME/CE
Moderators: Neil D. Romberg, MD
Maria A. Slack, MD
2:00 Nanoemulsion adjuvant augments retinaldehyde dehydrogenase activity in dendritic cells via MyD88 pathway
Mohammed Farazuddin
2:15 Prostaglandin I2 signaling promotes Treg function during allergic inflammation
Allison E. Norlander
2:30 In vivo tracking of rhesus macaque eosinophils to assess migration in response to glucocorticoids
Fanny Legrand, PhD PharmD
2:45 Rhinovirus-Specific B-Cells Display Signature and Functionality Consistent With Age-Associated B-Cells
Jacob D. Eccles, BA
3:00 Surfactant Protein D (SP-D) Inhibits Neutrophil Extracellular DNA Trap Formation: Effects of S-nitrosylation
Shida Yousefi, PhD

3603 Airborne Aeroallergens
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 205
Credit: 1.25 CME/CE
Moderators: William J. Sheehan, MD
Daniel A. Searing, MD
2:00 Report on Understanding the National Allergy Bureau as a Public Health Surveillance System
Audrey F. Pennington, PhD MPH
2:15 Investigating discordance between diagnostic tests for laboratory animal allergy
Jennifer Canizales
2:30 A Volumetric Survey of Aeroallergens in San Antonio, Texas From 2012-2017: Not All Allergens Fit the Mold
Priya Nath, MD
2:45 In-Vitro Setup to Test Hydroxy-Propyl-Methyl-Cellulose as Allergen Barrier over a Span of 360 Minutes
Todor A. Popov, MD PhD
3:00 Mouse Allergen Levels in Schools in Two Inner City Asthma Studies: Past versus Present
Nicole Akar-Ghibril, MD

3604 Drug Allergy: Different Agents, Different Populations
2:00 to 3:15 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 1.25 CME/CE
Moderators: Kimberly A. Risma, MD PhD FAAAAI
Allison Ramsey, MD FAAAAI
2:00 Novel strategy for the prevention of recurrent hypersensitivity reactions to radiocontrast media based on skin testing
Ji-Hyang Lee, MD
2:15 Multiple Interventions Can Reduce Rates of False Penicillin “Allergy” Relabeling after Negative Testing
Shazia Lutteea, MD
2:30 Diagnosis of Cephalosporin Allergy Through Graded Oral Challenge
Zafia Atta
2:45 Clinical impact of reported non-steroidal anti-inflammatory drug allergy on opioid use disorder in patients with osteoarthritis or low back pain
Lily Li, MD
3:00 Penicillin and clindamycin associated anaphylaxis and serious cutaneous adverse reactions
Emily H. Liang, MD

3605 Economics, Medications, and Outcomes in Asthma
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 201
Credit: 1.25 CME/CE
Moderators: Bruce G. Bender, PhD FAAAAI
Kristin C. Sokol, MD MS MPH
2:00 Assessing Asthma Management Knowledge in Caregivers of Children with Moderate-to-Severe Asthma
Madeleine K. Kanaley, BA
2:15 Evaluating Proper Inhaler Technique in Children with Moderate-to-Severe Asthma
Alexandria Bozen, BS
2:30 Housing-Based Socioeconomic Status (HOUSES) Index as a Recruitment Tool for Integrating Under-represented Populations in Clinical Research
Chung-II Wi, MD
2:45 Can the morbidly obese asthmatic child be well controlled? The Breathmobile program
Stanley P. Galant, MD FAAAAI
3:00 A Short Acting Beta-Agonist Reduction Program and Its Effects on Asthma Care in a Large Cohort
Melissa Itsara, MD
Sunday Scientific Program

Oral Abstract Sessions (continued)

3606  Allergic Rhinitis and Sublingual Immunotherapy
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 203
Credit: 1.25 CME/CE
Moderators: Mike Tankersley, MD MBA FAAAAI
           Jay M. Portnoy, MD FAAAAI
2:00  Vocal Cord Dysfunction in Patients with Predominant Upper
      Airway Symptoms
Russell S. Traister, MD PhD
2:15  Early Life Sensitization Patterns and Risk for Allergic Rhinitis in
      the WHEALS Birth Cohort
Zeinab Saleh, MD
2:30  Enhanced chemosensory sensitivity in idiopathic rhinitis patients
      and its reversal by nasal capsaicin treatment.
Laura H. Van Gerven, MD PhD
2:45  Safety Of 300IR 5-Grass Tablet In Grass Pollen-Allergic Children
      With or Without Controlled Asthma: Further Data from a Post-
      Marketing Observational Study
David B.K. Golden, MD FAAAAI
3:00  Efficacy of House Dust Mite Sublingual Immunotherapy-Tablet in
      Tree and/or Grass Poly-Sensitized Subjects
David I. Bernstein, MD

3607  Modulation of Innate Immunity
2:00 to 3:15 pm
Moscone Center South, Level 3, Room 301
Credit: 1.25 CME/CE
Moderators: Roma Sehmi, PhD FAAAAI
           Hirohito Kita, MD
2:00  Complement component 3 modulates cockroach allergen-
      induced allergic inflammation
Danh C. Do, PhD
2:15  Innate Lymphoid Cells (ILCs) Generate Memory for Pathogen-
      Associated Molecular Patterns (PAMPs) of Allergens, Which
      Contributes to Asthma
Mukesh Verma, PhD
2:30  The role of NADPH oxidase on the production of epithelial-derived
      cytokine (IL-25, IL-33, TSLP)
Hideaki Kouzaki, MD PhD
2:45  17β-estradiol promotes a DUOX-1-mediated release of IL-33 from
      human airway epithelial cells
Ruchi Shah, MD
3:00  Inflammasome Modulation Ameliorates Neonatal RSV-induced
      Immunopathology
Charles Schuler, MD

3608  Novel Issues in the Management of Food Allergy
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 207
Credit: 1.25 CME/CE
Moderators: Carla M. Davis, MD FAAAAI
           Antonella Cianferoni, MD PhD FAAAAI
2:00  Anaphylaxis-related posttraumatic stress disorder
Yuval Tal, MD PhD
2:15  An Analysis of Value-Based Costs of Undesignated, Stock School
      Epinephrine Policies
Matthew J. Greenhawt, MD MBA MSc
2:30  Food-Protein Induced Allergic Proctocolitis is Prospectively
      Associated with IgE-Mediated Milk and Egg Allergies by Age 3
Neelam A. Phadke, MD
2:45  Reaction thresholds in in peanut-allergic adults and the influence
      of exercise and sleep deprivation: a randomised controlled trial
Shelley Dua, PhD
3:00  Epidemiology of Sesame Allergy in the United States
Avneet S. Chadha, BS

3609  Late Breaking Oral Abstract Session: Basic Focus
2:00 to 3:15 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 151
Credit: 1.25 CME/CE
Moderators: Christine L. Nance, PhD MA FAAAAI
           Dawn C. Newcomb, PhD
2:00  Biomarkers and Outcomes in Omalizumab-Treated Patients with
      Allergic Asthma: A Real-World Study in a Large Allergy Practice
      in the United States (US)
Benjamin Ortiz, MD
2:15  Changes in Whole Blood Transcriptome during Peanut-Induced
      Anaphylaxis and Correlation with Symptoms
Paul J. Turner, FRACP PhD
2:30  Immunoglobulin Concentrations Differ According to Sex, Race
      and Age
Tyler Harkness, BS
2:45  Utilizing Members of the CD300 Multigene Family to Inhibit Mast
      Cell Degranulation in Peanut Allergy
Jada Suber
3:00  Selective Deletion of Group V Phospholipase a2 in Macrophages
      Reduces Alternaria-Induced Pulmonary Inflammation
Sachin K. Samuchiwal, PhD

Interest Section Forums

3701  ADT: Asthma Education, Asthma Action Plans, and Peak
      Flow Meters: Which Strategies Actually Work?
3:30 to 4:30 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 0.50 CME/CE
Moderator: Caroline C. Horner, MD FAAAAI
3:30  Business Meeting
Caroline C. Horner, MD FAAAAI
4:00  Asthma Education, Asthma Action Plans and Peak Flow Meters:
      Which Strategies Actually Work?
Valerie G. Press, MD MPH
4:25  Question & Answer
Sunday Scientific Program

Interest Section Forum (continued)

3702  BCI: What’s New In Vaccines  ▼
      3:30 to 4:30 pm
      Moscone Center South, Level 3, Room 303
      Credit: 0.50 CME/CE
      Moderator: Elena E. Perez, MD PhD FAAAAI
      3:30  Business Meeting
            Elena E. Perez, MD PhD FAAAAI
      3:55  Communicating Risk: Counseling the Vaccine Hesitant Patient
            Jay R. Montgomery, MD FAAAAI
      4:25  Question & Answer

3703  EORD: Microbiome, Metabolome and Asthma: Clues for Treatment and Prevention  ▼
      3:30 to 4:30 pm
      Moscone Center South, Level 2, Room 203
      Credit: 0.50 CME/CE
      Moderator: Wanda Phipatanakul, MD MS FAAAAI
      3:30  Business Meeting
            Wanda Phipatanakul, MD MS FAAAAI
      4:00  Presenter
            Susan V. Lynch, PhD
      4:25  Question & Answer

3704  FADDA: Hereditary Angioedema and Eosinophilic Esophagitis: Management in 2019  ▼
      3:30 to 4:30 pm
      Moscone Center South, Level 2, Room 207
      Credit: 0.50 CME/CE
      Moderator: Lynda C. Schneider, MD FAAAAI
      3:30  Business Meeting
            Lynda C. Schneider, MD FAAAAI
      3:55  New Medications for HAE
            Aleena Banerji, MD FAAAAI
      4:10  EoE Therapies
            Jonathan M. Spergel, MD PhD FAAAAI
      4:25  Question & Answer

3705  HEDQ: Effect the Change You Wish to See in the Allergy Clinic  ▼
      3:30 to 4:30 pm
      Moscone Center South, Level 3, Room 301
      Credit: 0.50 CME/CE
      Moderator: Asriani M. Chiu, MD FAAAAI
      3:30  Business Meeting
            Asriani M. Chiu, MD FAAAAI
      3:55  Changing Provider Behaviors
            Lily Pien, MD MHPE FAAAAI
      4:10  Changing Patient Behaviors
            Gerald B. Lee, MD
      4:25  Question & Answer

3706  IRSO: Update in Rhinitis and Rhinosinusitis  ▼
      3:30 to 4:30 pm
      Moscone Center South, Upper Mezzanine Level, Esplanade 156
      Credit: 0.50 CME/CE
      Moderator: Anju T. Peters, MD FAAAAI
      3:30  Business Meeting
            Anju T. Peters, MD FAAAAI
      3:55  Nasal Epithelial Behavior and Innate Immune Dysregulation in Rhinovirus-Induced Asthma Exacerbations
            Larry Borish, MD FAAAAI
      4:10  Update on Aspirin Exacerbated Respiratory Disease
            Tanya M. Laidlaw, MD FAAAAI
      4:25  Question & Answer

3707  MAAI: New Directions in Mast Cell Research  ▼
      3:30 to 4:30 pm
      Moscone Center South, Upper Mezzanine Level, Esplanade 151
      Credit: 0.50 CME/CE
      Moderator: Kari C. Nadeau, MD PhD
      3:30  Business Meeting
            Kari C. Nadeau, MD PhD FAAAAI
      4:00  Mast Cell Diversity and Implications for Allergic Disease
            Mechanisms and Therapy
            K. Frank Austen, MD FAAAAI and Daniel F. Dwyer, PhD
      4:25  Question & Answer

Featured Poster Session and Reception

4:30 to 6:00 pm
Moscone Center South, Lobby Level
Credit: No CME/CE

3801  New Insights in Asthma Genomics

3802  Top Topics in Basic and Clinical Immunology

3803  Mechanisms of Adverse Responses to Environment

3804  Best of FADDA

3805  Management Assessment Tools for Asthma: From Home to Inpatient

3806  The Best of Rhinitis and Rhinosinusitis

3807  Highlights from Research in MAAI

3811  Food Allergy at School
**More to Love!**

*JACI: In Practice* is increasing the number of issues we’re publishing as follows:

- 8 issues in 2019
- 10 issues in 2020
- Monthly in 2021

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**More to Find!**

The *JACI: In Practice* website at jaci-inpractice.org has so much to offer:

- Collections gather all of our articles together by topic.
- Alerts can be set up so you can keep updated with the latest Collection additions, Table of Contents, and citations on your articles.
- PowerPoint images from our articles can be accessed by clicking on the article and then on “Download Images.”

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**More Opportunities to Contribute!**

*JACI: In Practice* needs more reviewers. If you have an interest in bolstering your knowledge in allergy and/or asthma and helping the Journal, please contact our Editorial Office at InPractice@aaaai.org and let us know.

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**More CME!**

*JACI: In Practice* offers many ways to gain CME credit*:

- Reviewers can claim 3 credits per eligible review.
- Every issue typically has at least 3 CME activities, each of which are worth 1.00 *AMA PRA Category 1 Credit™.*
- The Difficult Cases features offer one MOC CME credit.
- Virtual Journal Club webinars, both past and present, offer 1 credit each.

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*Accreditation Statement*

The American Academy of Allergy, Asthma & Immunology (AAAAI) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.
Monday At-A-Glance

Monday, February 25

6:00 AM
Registration

7:00 AM
Seminars
7:00 - 8:00 am

Plenary Session
8:15 - 9:45 am

Poster Presentations & Case Study Posters
9:45 - 10:45 am

8:00 AM
Plenary Q&A
9:45 - 10:15 am

Symposia
10:45 am - 12:00 pm

9:00 AM
Exhibit Hall
9:45 am - 2:00 pm

Plenary Session
8:15 - 9:45 am

AAAIAI Business Meeting
12:30 - 1:30 pm

10:00 AM
Oral Abstracts
2:00 - 3:15 pm

11:00 AM
Symposia
10:45 am - 12:00 pm

12:00 PM
AAAI Business Meeting
12:30 - 1:30 pm

1:00 PM
AAAI Business Meeting
12:30 - 1:30 pm

2:00 PM
Seminars
3:30 - 4:30 pm

3:00 PM
Workshops
3:30 - 4:45 pm

4:00 PM
Seminars
3:30 - 4:30 pm

5:00 PM

6:00 PM

Day Summary:

- Pre-reading material
- Audience response system
- Ticket required
- Fee required
- Included in the Virtual Annual Meeting
Monday Scientific Program

Seminars

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

4001 Cross-Reactivity Patterns, Extract Stability, Optimal Dosing and Mixing for Subcutaneous Immunotherapy: A Case-Based Review of Immunotherapy Prescription Mixing
Marriott, Lower B2 Level, Yerba Buena Salon 2
Discussion Leaders: Olga Luengo, MD PhD
Tolly Epstein, MD FAAAAI

4002 Asthma/Chronic Obstructive Pulmonary Disease Overlap Syndrome (ACOS) with and without Occupational Causes
Marriott, Lower B2 Level, Yerba Buena Salon 3
Discussion Leaders: Bryan L. Martin, DO FAAAAI
John Oppenheimer, MD FAAAAI

4003 Management of Food Allergy in a Breastfed Infant
Marriott, Lower B2 Level, Yerba Buena Salon 4
Discussion Leaders: Puja Sood Rajani, MD
Marion E. Groetch, MS RDN

4004 Up-to-Date Perspectives on Exercise Induced Bronchoconstriction
Marriott, Lower B2 Level, Yerba Buena Salon 5
Discussion Leaders: Justin C. Greiwe, MD FAAAAI
John M. Weiler, MD FAAAAI

4005 Diagnosis and Treatment of Common Skin Conditions and Cutaneous Drug Allergy in Older Adults
Marriott, Lower B2 Level, Yerba Buena Salon 1
Discussion Leaders: Anil Nanda, MD FAAAAI
David R. Weldon, MD FAAAAI

4006 Writing Orders for Immunoglobulin Therapy
Marriott, Lower B2 Level, Yerba Buena Salon 6
Discussion Leaders: Elena E. Perez, MD PhD FAAAAI
Kenneth Paris, MD MPH

4007 Mast Cell Tryptases and Alpha-Tryptasemia
Marriott, Lower B2 Level, Yerba Buena Salon 10
Discussion Leaders: Jonathan J. Lyons, MD
Dean D. Metcalfe, MD FAAAAI

4008 Idiopathic Anaphylaxis: The Overlap with Chronic Idiopathic Urticaria/Angioedema and Approach to Patient Care
Marriott, Lower B2 Level, Yerba Buena Salon 11
Discussion Leaders: Anne Marie Ditto, MD FAAAAI
Mariana C. Castells, MD PhD FAAAAI

4009 Genetics 101 for the Practicing Immunologist
Marriott, Lower B2 Level, Yerba Buena Salon 12
Discussion Leaders: Manish J. Butte, MD PhD
Attila Kumanovics, MD

4010 Current and Future Directions in Rhinitis and Sinusitis in Children
Marriott, Lower B2 Level, Yerba Buena Salon 13
Discussion Leaders: Fuad M. Baroody, MD FAAAAI
Daniel L. Hamilos, MD FAAAAI

Plenary

4101 Atopic Dermatitis: Bench to Bedside and Back
8:15 to 9:45 am
Moscone Center South, Exhibition Level, Hall A
Credit: 1.50 CME/CE
Moderator: Mark Boguniewicz, MD FAAAAI

8:15 Introduction
8:20 Atopic Dermatitis: Diagnosis, Heterogeneity, and Comorbidities
Jonathan I. Silverberg, MD PhD MPH

8:45 Introduction
8:50 Underlying Mechanisms of Atopic Dermatitis
Lisa A. Beck, MD FAAAAI

9:15 Introduction
9:20 Emerging Therapies and Potential for Personalized Medicine Approaches
Emma Guttman-Yassky, MD PhD

Monday Poster Sessions

9:45 to 10:45 am
Moscone Center South, Exhibition Level, Hall B
Credit: No CME/CE
Please refer to the 2019 AAAAI Annual Meeting Mobile App or www.jacionline.org for abstract details.

4201 Asthma and Airway Immunology
4202 Asthma Control, Intervention, and Public Health
4203 The Immunology of Allergic Disease
4204 Topics in Basic and Clinical Immunology
4205 Environmental Exposure
4206 Mechanisms of Environmental Effects
4207 Food Allergen Structures
4208 Food Immunotherapy
4209 Food Allergy and Treatment
4210 Allergic Rhinitis, Drug Allergy and Allergic Risk
4211 Allergy/Immunology Outreach, Electives and Career Development
4212 Rhinosinusitis
4213 Rhinitis and Immunotherapy
4214 Advances in Eosinophil Biology
4215 Update on Immune Mechanisms in Type 2 Inflammatory Responses
4216 Late Breaking Poster Session
Symposia

4301 Asthma Development: The Environment and Prevention in Early Life
10:45 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 1.25 CME/CE
Moderator: Andrew H. Liu, MD FAAAAI
10:45 Asthma Inception: Children's Respiratory and Environmental Workgroup (CREW) and Environmental Influences on Child Health Outcomes (ECHO) Programs
James E. Gern, MD FAAAAI
11:05 Question & Answer
11:10 Asthma Development in Early Life: Urban Environment and Childhood Asthma (URECA)
Leonard B. Bacharier, MD FAAAAI
11:30 Question & Answer
11:35 Asthma Prevention: Moving the Needle Towards Preventing and Modifying Disease Expression
Wanda Phipatanakul, MD MS FAAAAI
11:55 Question & Answer

4302 Difficulties in the Management of Older Patients with Asthma
10:45 am to 12:00 pm
Moscone Center South, Level 2, Room 201
Credit: 1.25 CME/CE
Moderator: Sharmilee M. Nyenhuis, MD FAAAAI
10:45 Asthma Self-Management: Addressing Barriers in Older Patients with Asthma
Alex Federman, MD MPH
11:05 Question & Answer
11:10 Inflammatory Pathways in Older Patients with Asthma: Implications for Management
Paula J. Busse, MD FAAAAI
11:30 Question & Answer
11:35 Diagnostic Challenges in the Aged Patient with Asthma
Carol A. Saltoun, MD FAAAAI
11:55 Question & Answer

4303 Schools and Tools: How We Can Advance the Management of Asthma, Food Allergies and Anaphylaxis
10:45 am to 12:00 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.25 CME/CE
Moderators: Stanley J. Szefler, MD FAAAAI
Robert F. Lemanske, Jr., MD FAAAAI
10:45 Policy and Partnerships: How Community Partnerships and Federal/State Legislation Are Advancing Implementation
Andrea A. Pappalardo, MD FAAAAI
11:05 Question & Answer
11:10 Food Allergies: Improving Our Tools to Manage Food Allergies and Anaphylaxis in Schools
Julie Wang, MD FAAAAI
11:30 Question & Answer
11:35 Digital Health: How Digital Tools Can Improve Data Sharing and Disease Management in Schools
Sujani Kakumanu, MD FAAAAI
11:55 Question & Answer

4304 Emerging Food Allergy Therapies
10:45 am to 12:00 pm
Moscone Center South, Exhibition Level, Hall A
Credit: 1.25 CME/CE
Moderator: Rima A. Rachid, MD FAAAAI
10:45 Oral Immunotherapy: Efficacy and Patient Selection
Brian P. Vickery, MD FAAAAI
11:05 Epicutaneous Immunotherapy: Efficacy and Patient Selection
Jacqueline A. Pongracic, MD FAAAAI
11:25 Sublingual Immunotherapy: Efficacy and Patient Selection
Edwin Kim, MD MS
11:45 Panel Discussion

4305 Targeting the Outside: Moving in on Atopic Dermatitis
10:45 am to 12:00 pm
Moscone Center South, Level 3, Room 305
Credit: 1.25 CME/CE
Moderator: Anil Nanda, MD FAAAAI
10:45 My Patient Is Not Eligible for Biologics: Current Non-Biologic Therapies for Atopic Dermatitis
Mark Boguniewicz, MD FAAAAI
11:05 Question & Answer
Lisa A. Beck, MD FAAAAI
11:30 Question & Answer
11:35 What Is Upcoming in the Pipeline for Atopic Dermatitis?
Michael D. Howell, PhD
11:55 Question & Answer
**Monday Scientific Program**

**Symposia (continued)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Location</th>
<th>Credit</th>
<th>Moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:45 am</td>
<td>Hot Topics in Immunotherapy</td>
<td>Moscone Center South, Level 2</td>
<td>1.25 CME/CE</td>
<td>Punita Ponda, MD FAAAAI</td>
</tr>
<tr>
<td>11:05 am</td>
<td>Cluster Immunotherapy: The Benefits and Risks and How to Implement It in Your Practice</td>
<td></td>
<td></td>
<td>Linda S. Cox, MD FAAAAI</td>
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<tr>
<td>11:10 am</td>
<td>Changes in USP Guidelines and What It Means for Your Office</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Andrew W. Murphy, MD FAAAAI</td>
</tr>
<tr>
<td>11:30 am</td>
<td>Evidence Based Use of Oral Sublingual Immunotherapy</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Anne K. Ellis, MD FAAAAI</td>
</tr>
<tr>
<td>10:45 am</td>
<td>The Initiation of Allergic Immunity: From Innate Sensors to Initiation of Adaptive Immune Responses</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Sarah E. Henrickson, MD PhD</td>
</tr>
<tr>
<td>10:45 am</td>
<td>Dendritic Cell Control of Type-2 Immunity</td>
<td>Moscone Center South, Level 2</td>
<td>1.25 CME/CE</td>
<td>Caroline L. Sokol, MD PhD</td>
</tr>
<tr>
<td>10:45 am</td>
<td>Type 2 Immunity Elicited by Airway Allergens</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Nora A. Barrett, MD</td>
</tr>
<tr>
<td>11:05 am</td>
<td>The Role of Gut Tuft Cells in Type 2 Immune Initiation</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Jakob von Moltke, PhD</td>
</tr>
<tr>
<td>11:30 am</td>
<td>Type 2 Immunity Elicited by Airway Allergens</td>
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**Oral Abstract Sessions**

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<th>Credit</th>
<th>Moderators</th>
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</thead>
<tbody>
<tr>
<td>4601</td>
<td>Asthma Epidemiology and Outcomes</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Sharmilee M. Nyenhuis, MD FAAAAI</td>
</tr>
<tr>
<td>4602</td>
<td>The Role of Environmental Exposures on the Immune System</td>
<td>Moscone Center South, Level 2</td>
<td>1.25 CME/CE</td>
<td>Alessandro G. Fiocchi, MD FAAAAI</td>
</tr>
<tr>
<td>4306</td>
<td>Location of Pulmonary Mast Cells Predicts Asthma Outcomes</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Wanda Phipatanakul, MD MS FAAAAI</td>
</tr>
<tr>
<td>4307</td>
<td>Association study in African-admixed populations across the Americas recapitulates asthma risk loci in non-African populations</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Michelle Daya, PhD</td>
</tr>
<tr>
<td>4601</td>
<td>Spirometry and Impulse Oscillometry Trajectories in an Inner-City Longitudinal Birth Cohort at High Risk for Asthma</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Sima Ramratnam, MD MPH</td>
</tr>
<tr>
<td>4602</td>
<td>Characterization of Allergen Sensitization Patterns in Canadian Preschool Children with Severe Wheezing</td>
<td>Moscone Center South, Level 3</td>
<td>1.25 CME/CE</td>
<td>Jennifer A. Hoang</td>
</tr>
<tr>
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<td>1.25 CME/CE</td>
<td>Jennifer A. Hoang</td>
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</tbody>
</table>

**Attend the 2019 AAAAI Annual Business Meeting**

to include the induction of all new Fellows and members approved in 2018

Monday, February 25, 2019
12:30 to 1:30 pm
Moscone Center South, Level 2, Room 203
Oral Abstract Sessions (continued)

4603 Mechanisms of Environmental Exposures
2:00 to 3:15 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 151
Credit: 1.25 CME/CE
Moderator: Nathan Rabinovitch, MD

2:00 A game of cat and mouse: cat ownership and the relationship between mouse exposure and respiratory outcomes among dual-sensitized inner-city children with asthma
Meghan F. Davis, PhD DVM MPH

2:15 Rhinovirus Infection Does Not Alter Bronchodilation in Human Precision Cut Lung Slices from Asthma Donors
Katherine Caid, BS

2:30 “Undetectable” Climate Change Impact on Grass Pollens in SW Ontario
James J. Anderson, MLT

2:45 Relationship of serological reactivity to cytoplasmic extracts from spores of Ganoderma applanatum and commercial extracts of indoor, mitosporic fungi, and farm animal allergens among Puerto Rican subjects
Felix E. Rivera-Mariani

3:00 A Combined Epidemiologic and Mechanistic Study of Endotoxin and Food Allergen Sensitization
Angela Tsuang, MD MSc

4604 Urticaria and Eczema Pathogenesis and Management
2:00 to 3:15 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 155
Credit: 1.25 CME/CE
Moderators: Anne Marie Ditto, MD FAAAAI
Christina E. Ciaccio, MD FAAAAI

2:00 Management of Chronic Urticaria in a Pediatric Population
Sofianne Gabrielli, MSc

2:15 Strategies for Discontinuing Omalizumab in Patients with Chronic Urticaria: Real-World Findings
Sara Seghezzo, MD

2:30 Deciphering the microbiome and virome composition of patients with Atopic Dermatitis and Eczema Herpeticum (ADEH+)
Liva S. Zaramela, PhD

2:45 IL-17A and IL-4/IL-13 Exert Distinct Changes in Skin Lipids
Elena Goleva, PhD

3:00 Nonlesional Atopic Dermatitis Skin Shows Alterations in Langerhans Cells in Close Proximity to Tight Junction Fragmentation
Takeshi Yoshida, PhD

4605 Harnessing the Power of Secondary Database Analysis
2:00 to 3:15 pm
Moscone Center South, Level 3, Room 303
Credit: 1.25 CME/CE
Moderators: John B. Hagan, MD FAAAAI
Christopher D. Codispoti, MD PhD FAAAAI

2:00 The Protective Effects of Eosinophilia and High IgE on Cancer Diagnoses in the National Health and Nutrition Examination Surveys (2005-2016)
Sairaman Nagarajan, MD MPH

2:15 Incidence of Hypersensitivity to Cetuximab
Saira Q. Zafar, MD

2:30 Re-Evaluation of Need and Tapering of Omalizumab in Chronic Idiopathic Urticaria
Juliana Regan, RN

2:45 Optimizing Approaches to Drug Allergies in the Pediatric Inpatient Setting
Nesey Dahan, MD

3:00 Impact of electronic health record transition on drug allergy labels: gains, losses, alterations and learning opportunities
Christine Rukasin, MD

4606 Update on Rhinitis and Immunotherapy
2:00 to 3:15 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 156
Credit: 1.25 CME/CE
Moderators: Anil Nanda, MD FAAAAI
Mohamed H. Shamji, BSc MSc PhD FAAAAI

2:00 Sublingual Immunotherapy Tablets Do Not Alter Skin Prick Responses During Treatment
Jennifer C. Simonaire, DO

2:15 Long-Term Clinical Effect Of Grass-Allergen Immunotherapy In Local Allergic Rhinitis, And Its Capacity to Modify The Natural Course Of The Disease.
Ibon Eguiluz-Gracia, MD PhD

2:30 Improved Tolerance Of Subcutaneous Immunotherapy In Pediatric Patients Through The Use Of Comfort Devices: A Quality Improvement Project
Mollie Alpren, MD

2:45 Strong Dose-response On Immunoglobulin Makers During a Phase II Allergen Immunotherapy Study With Subcutaneously Administered Tyrosine Adsorbed Modified Grass Allergen + MPL
Sabine Lassmann

3:00 Experience with Pharmacist Prepared Pre-filled SCIT Dosing in an Urban Allergy Clinic
Rory Nicolaides, MD
Oral Abstract Sessions (continued)

**4607 Effects of Obesity on Immune Function in Asthma**
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 201
Credit: 1.25 CME/CE
Moderators: Cem Akin, MD PhD FAAAAI
Angela Haczku, MD PhD FAAAAI

2:00 Obesity Dysregulates Immunometabolic Status in Asthma and Impacts Vaccine Responses
Sarah E. Henrickson, MD PhD

2:15 Sleeve gastrectomy surgery reduces airway resistance and inflammation in chronically allergen-challenged obese mice
Mark Ihrie, PhD

2:30 Therapeutic effects of pravastatin on asthmatic airway inflammation in high fat diet induced obese mouse asthma model
Hwayoung Lee, MD PhD

2:45 Glucose metabolism dictates murine eosinophil differentiation, chemotaxis, and IL-4 expression
Maria Andreina Marques-Mejias, MD

3:00 Eosinophils Display Subtype-specific Metabolic Profiles
Sergei I. Ochkur, PhD

**4608 Eosinophilic Esophagitis**
2:00 to 3:15 pm
Moscone Center South, Level 2, Room 207
Credit: 1.25 CME/CE
Moderators: Melanie A. Ruffner, MD PhD
Seema S. Aceves, MD PhD

2:00 Efficacy of RPC4046, an Anti-Interleukin-13 Monoclonal Antibody, in Patients With Active Eosinophilic Esophagitis: Analysis of the Steroid-Refractory Subgroup From the HEROES Study
Ikuo Hirano, MD

2:15 The 1-Hour Esophageal String Test: A Non-Endoscopic Minimally Invasive Test to Accurately Detect Disease Activity in Eosinophilic Esophagitis
Steven J. Ackerman, PhD

2:30 Effect of a 4-Food Elimination Diet and Omeprazole in Children with Eosinophilic Esophagitis – A Randomized, Controlled Trial
Ralf G. Heine, MD FRACP

2:45 Esophageal Eosinophilia is Present in Some Peanut Allergic Patients
R. Sharon Chinthrajah, MD

3:00 Image Analysis of Esophageal Biopsies and Cytosponge Specimens Stained for Eosinophil Peroxidase Identifies Subjects with Eosinophilic Esophagitis
Suzanne M. Barshow, MD

Focus on Food Allergy
An Online Course Series for Continuing Education Credit
education.aaaai.org/focusonfoodallergy

Review the latest evidence-based recommendations for diagnosing and treating patients with food allergy:

- Peanut Allergy
- Atopic Dermatitis
- Eosinophilic Esophagitis
- Non-IgE Adverse Reactions to Foods
- IgE-Mediated Cow’s Milk Allergy
- Food-Dependent Exercise-Induced Anaphylaxis
- Component Testing
- Oral Immunotherapy
- Risks of Elimination Diets
- Food Allergen Labeling

Courses authored by the AAAAI Adverse Reactions to Foods Committee
Monday Scientific Program

Seminars

3:30 to 4:30pm
Pre-registration and ticket required. Fee: $40. Refreshments included. Sessions and refreshments are limited to 30 people.
Credit: 1.00 CME/CE

4701 A Nuts and Bolts Approach to the Workup of Immunodeficiency Disorders in Children
Marriott, Level 2, Foothill F
Discussion Leaders: Kimberly A. Risma, MD PhD FAAAAI
M. Teresa De La Morena, MD

4702 Evaluating Systemic Side Effects in Children Receiving Inhaled Corticosteroids
Marriott, Level 2, Foothill G
Discussion Leaders: Heather K. Lehman, MD FAAAAI
Nelson Augusto Rosario, MD PhD FAAAAI

4703 Biomarkers in Occupational Lung Disease
Marriott, Level 2, Foothill E
Discussion Leaders: Susan M. Tarlo, MBBS FAAAAI
David I. Bernstein, MD FAAAAI

Workshops

4711 Update from the US Food and Drug Administration
3:30 to 4:45 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 151
Credit: 1.25 CME/CE
Moderator: Paul A. Greenberger, MD FAAAAI
3:30 Challenges in Clinical Trials: Expanding the Range of Data in Support of Licensure of New Allergen Immunotherapy Products
Joohee Lee, MD
3:50 Question & Answer
3:55 Update on HAE Therapies
Stacy Chin, MD
4:15 Question & Answer
4:20 Use of Real World Evidence in Drug Development
Miya O. Paterniti, MD
4:40 Question & Answer

4712 Telemedicine in Practice: From Contemplation to Implementation
3:30 to 4:45 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 152
Credit: 1.25 CME/CE
Moderator: Evan Atkinson, MD MS
3:30 Introduction to Telemedicine
Reena S. Mehta, MD
3:50 Question & Answer
3:55 Telemedicine Pearls and Pitfalls: Practical Advice from an Experienced Provider
Jay M. Portnoy, MD FAAAAI
4:15 Question & Answer
4:20 Hands On Demo: Live Demonstration of a Synchronous Telemedicine Visit
Sakina S. Bajowala, MD FAAAAI
4:40 Question & Answer

4713 Laryngeal Syndromes Presenting as Asthma at Home and in the Workplace
3:30 to 4:45 pm
Moscone Center South, Upper Mezzanine Level, Esplanade 159
Credit: 1.25 CME/CE
Moderator: Karin A. Pacheco, MD MSPH FAAAAI
3:30 When to Suspect a Laryngeal Cause for Respiratory Symptoms and How Common Is This?
Ryan F. Hoy, MBBS MOccEnvHlth
3:50 Question & Answer
3:55 Diagnostic Approaches for Laryngeal Syndromes for the Allergist
Jennifer Anderson, MD MSc
4:15 Question & Answer
4:20 How to Manage Laryngeal Syndromes and Associated Outcomes
Marta de Luca, MOCSc SLP(c)
4:40 Question & Answer

4714 Pathways to Approval for New or Novel Hymenoptera Venom Allergenics
3:30 to 4:45 pm
Moscone Center South, Level 2, Room 201
Credit: 1.25 CME/CE
Moderator: Jay E. Slater, MD
3:30 Clinical Use and Outcome Measures for Hymenoptera Venoms
David B.K. Golden, MD FAAAAI
3:45 Approval of New and Novel Venom AIT Products: Efficacy Assessments
Anubha Tripathi, MD
4:00 Sting Challenge in the Potential Assessment of Venom AIT in Europe
Jörg R. Kleine-Tebbe, MD FAAAAI
4:15 Biomarkers in the Assessment of Venom AIT
Markus W. Ollert, MD
4:30 Question & Answer
Translate what you learn into new ideas to take home.

American Academy of Allergy Asthma & Immunology
ANNUAL MEETING
PHILADELPHIA, PA - MARCH 13-16, 2020

annualmeeting.aaaaai.org
#AAAAI20
ACGME Competency Index

To contribute to the development of our members as lifelong learners and to enhance the effectiveness of the CME activities it provides, the AAAAI uses the six competencies defined by the Accreditation Council for Graduate Medical Education (ACGME) to guide its educational programming decisions. The six competencies are:

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice

All sessions at the Annual Meeting address the competencies of Patient Care and Medical Knowledge. Below is a list of sessions that address the other competencies:

**Interpersonal and Communication Skills**
1204, 1208, 1513, 2007, 2010, 2101, 3302, 3305

**Professionalism**
1001, 1110, 1204, 1208, 2303, 2510, 2802, 3003, 3305, 4303

**Systems-Based Practice**
2101, 2805, 2809, 3003, 3009, 3505, 3705, 4303, 4712

For more information about the ACGME’s physician competencies, visit http://www.acgme.org.
Abbott Nutrition
3300 Stelzer Road
Columbus, OH 43219
(614) 624-7677
https://abbottnutrition.com
Booth #1008
Other
Abbott is one of the world’s leading authorities in science-based nutrition for all stages of life. As your nutrition partner, we invite you to explore our portfolio of products, including EleCare, PediaSure, PediaSure Harvest, PediaSure Peptide, Alimentum, and Similac to help your patients grow. Visit www.AbbottNutrition.com to find additional information.

AbbVie
26525 North Riverwoods Boulevard
Mettawa, IL 60045
(847) 772-8810
https://www.abbvie.com/
Booth #1518
Pharmaceuticals
AbbVie, a global, research-based biopharmaceutical company, is committed to addressing some of today’s toughest health challenges. Our novel treatments and compelling pipeline in Immunology are designed to target complex, unmet medical needs for patients suffering from difficult-to-treat autoimmune or immune-mediated inflammatory diseases.

Absolute Allergy Products
3164 Medinah Circle East
Lake Worth, FL 33467
(561) 629-5618 / 1-833-NOMITES
http://www.absoluteallergyproducts.com
Booth #1118
Environmental Products
Absolute Allergy Products patient catalogs and website serving the USA/Canada includes the highest quality 100 percent sealed HEPA air purifiers, HEPA vacuum cleaners, dust mite proof bedding, nebulizer compressors, air filters and more! Free USA shipping, great prices, deals with unequalled customer service! Allergy product industry leaders since 1989.

Accredo
1640 Century Center Parkway
Memphis, TN 38134
(901) 381-5719
https://www.accredo.com
Booth #1218
Other
Accredo is a full-service specialty pharmacy dedicated to the treatment of rare and complex conditions. Our comprehensive therapy management programs engage trained pharmacists, nurses, reimbursement specialists, and patient care representatives who provide enhanced support services to patients, their families and healthcare professionals.

Aimmune Therapeutics
8000 Marina Boulevard
Floor 3
Brisbane, CA 94005
(650) 614-5220
https://www.aimmune.com
Booth #815
Pharmaceuticals
Aimmune Therapeutics is a biopharmaceutical company developing treatments for life-threatening food allergies. The company’s approach is intended to provide meaningful levels of protection against allergic reactions resulting from accidental exposure to food allergens by desensitizing patients with defined, precise amounts of key allergens. For more information, please see www.aimmune.com.

ALK, Inc.
135 US Highway 202/206
Suite 3
Bedminster, NJ 07921
(908) 842-8359
https://www.alk.net/us
Booth #723
Allergenic Extracts
ALK, Inc. is the world leader in Allergy Immunotherapy and is devoted to improving the quality of life for people with allergies. Our goal is to build an effective future growth platform to engage with allergic patients and connect them with allergy specialists earlier in the disease progression.

Allergy & Asthma Network
8229 Boone Boulevard
Suite 260
Vienna, VA 22182
(703) 641-9595
http://www.allergyasthmanetwork.org
Booth #1531
Patient/Public Education
Allergy & Asthma Network is the Nation’s leading patient advocacy organization that works to connect the collaborative care team for people who suffer with allergies, asthma and related conditions. The Network’s mission is to end needless death due to allergies, asthma, food allergies and related conditions through outreach, education, advocacy and research.
Allergy and Asthma Proceedings
450 Veterans Memorial Parkway
Building 15
East Providence, RI 02914
(401) 331-2510
http://allergyandasthmaproceedings.com
Booth #1019

Publications
Allergy & Asthma Proceedings publishes articles with the highest degree of clinical relevance for the practicing allergist/immunologist. Additionally, the Proceedings encourages the submission of manuscripts by Allergy/Immunology FIT. The Proceedings has established a 39 year reputation as an NLM/Medline indexed journal. Print circulation: 5,000; Impact factor: 2.213.

Allergy Partners
1978 Hendersonville Road
Suite 130
Asheville, NC 28803
(828) 277-1300
http://www.allergypartners.com
Booth #1029

Physician Recruitment
Allergy Partners is the nation’s largest allergy, asthma, and immunology practice. Our network spans 21 states and encompasses over 137 total locations of care. As our reputation continues to grow, we are committed to our vision and to bringing only the best physicians and practices into our network.

AllergyEHR
2233 Watt Avenue
Suite 360
Sacramento, CA 95825
(530) 852-0306
https://allergyehr.com
Booth #1214

Computer Hardware/Software
AllergyEHR is an all-inclusive system for allergists that integrates powerful immunotherapy features into a customizable EMR and Practice Management solution. Created by medical professionals with allergists in mind, the mobile-friendly solution offers several notable features such as a skin test module, a shot module, shot schedule templates and automated immunotherapy billing.

American Board of Allergy and Immunology
1835 Market Street
Suite 1210
Philadelphia, PA 19103
(215) 592-9466
https://www.abai.org/
Booth #1525

Physician Education
The ABAI was established in 1971 as a Conjoint Board of the ABIM and ABP. The internal medicine subspecialty existed from 1936-1971 and the pediatric subspecialty existed from 1944-1971. The ABAI is committed to working closely with its parent boards to maintain the highest educational and clinical standards in the specialty of allergy/immunology.

American Partnership for Eosinophilic Disorders
PO Box 29545
Atlanta, GA 30359
(713) 493-7749
https://www.apfed.org
Booth #1533

Patient/Public Education
APFED is a non-profit advocacy organization for those living with eosinophilic esophagitis, eosinophilic gastroenteritis, eosinophilic colitis, hypereosinophilic syndrome and other eosinophilic disorders. We are a resource for patients, their families, physicians and the medical community.

Association of PAs in Allergy, Asthma & Immunology
PO Box 90434
San Antonio, TX 78209
(844) 444-0575
https://www.aapaaai.org
Booth #1539

Other
Our association was formed to promote the growth and development of physician assistants who have an active interest in the field of allergy, asthma, and immunology. We provide the general membership with a forum for informal assembly regarding the issues that relate to physician assistants in allergy, asthma, and immunology.

Asthma and Allergy Foundation of America
8201 Corporate Drive
Suite 1000
Landover, MD 20785
(202) 466-7643
http://www.aafa.org
Booth #1423

Patient/Public Education
The Asthma and Allergy Foundation of America (AAFA) is the oldest and largest nonprofit patient organization dedicated to improving the quality of life for people with asthma, allergies and related conditions through education, advocacy and research. Visit www.aafa.org or www.kidswithfoodallergies.org to learn more.
AstraZeneca
1800 Concord Pike
Wilmington, DE 19803
(800) 236-9933
https://www.astrazeneca-us.com
Booth #110
Pharmaceuticals
Visit booth #110 for a boost in our cafe while exploring AstraZeneca’s respiratory portfolio. For more information about AstraZeneca, please visit www.astrazeneca-us.com or follow us on Twitter @AstraZeneca.

Autoinflammatory Alliance
PO Box 590354
San Francisco, CA 94159
(415) 831-8782
http://autoinflammatory.org
Booth #1541
Patient/Public Education
The Autoinflammatory Alliance is a non-profit dedicated to promoting awareness, proper diagnosis, treatment, and improved care for people with autoinflammatory diseases. Our free autoinflammatory-search.org comparative chart database is a leading tool for doctors to learn and compare these conditions, plus our other printed materials on autoinflammatory diseases.

Belay
122 Willow Street
Brooklyn, NY 11201
(416) 618-8615
http://www.WeBelay.com
Booth #1135
Patient/Public Education
Belay is a free mobile app devoted to helping children and families manage life-threatening food allergies. Belay’s mission is to make life easier for parents and keep children safe by bringing the best in design and technology to digital health.

BriovaRx Infusion Services
15529 College Boulevard
Lenexa, KS 66219
(913) 747-3700
http://briovarxinfusion.com/
Booth #1422
Immunotherapy
BriovaRx Infusion Services is a home infusion care provider with a national network of pharmacies. We specialize in Immune Globulin (Ig), Parenteral Nutrition (PN), Anti-infectives, Hydration, Biologics and other specialty infusions. Our comprehensive services include specially trained on-staff nurses and pharmacists, around-the-clock clinical support, reimbursement specialists and on-going patient education.

Circassia Pharmaceuticals, Inc.
5151 McCrimmon Parkway
Suite 260
Morrisville, NC 27560
(866) 275-6469
https://www.circassia.com
Booth #528
Diagnostic Testing
Circassia is a specialty pharmaceutical company focused on respiratory disease. Their growing commercial organization promotes NIOX®, an innovative diagnostic and monitoring tool to aid in asthma management, directly to healthcare providers. They also market the chronic obstructive pulmonary disease (COPD) product Tudorza® in the United States.

Clinical Immunology Society
555 East Wells Street
Suite 1100
Milwaukee, WI 53202
(414) 224-8095
https://clinimmsoc.org/CIS.htm
Booth #1523
Other
The Clinical Immunology Society (CIS) is devoted to fostering developments in the science and practice of clinical immunology. CIS is an international professional organization with more than 800 members. Our mission is to facilitate education, research and novel approaches to therapy to promote excellent care for patients with immunologic/inflammatory disorders.

Covis Pharma
Grafenauweg 12
CH-6300 Zug
Switzerland
(502) 640-5682
https://www.covispharma.com/
Booth #1131
Pharmaceuticals
Covis Pharma is a global specialty pharmaceutical company. Our patients are our paramount concern. We market therapeutic solutions for patients with life-threatening conditions and chronic illnesses.

CSL Behring
1020 1st Avenue
King of Prussia, PA 19406-0901
(610) 878-4000
https://www.cslbehring.com
Booth #526
Pharmaceuticals
CSL Behring is a leading global biotherapeutics company with a broad range of innovative plasma-derived and recombinant therapies. For over a century, we have been driven by our promise to save lives. Today, our therapies include those to treat hereditary angioedema, primary immune deficiencies and coagulation disorders among others.
CSL Behring
1020 1st Avenue
King of Prussia, PA 19406-0901
(610) 878-4000
https://www.cslbehring.com
Booth #523
Pharmaceuticals
CSL Behring is a leading global biotherapeutics company with a broad range of innovative plasma-derived and recombinant therapies. For over a century, we have been driven by our promise to save lives. Today, our therapies include those to treat hereditary angioedema, primary immune deficiencies, and coagulation disorders among others.

CVS Specialty
1 CVS Drive
Woonsocket, RI 02895
(800) 237-2767
https://www.cvsspecialty.com
Booth #1010
Other
CVS Specialty and Coram provide personalized, compassionate, high-quality infusion care to patients where they live, work or travel. With more than 30 years of experience and nearly 1,200 skilled clinicians, Coram CVS Specialty Infusion Services leads with commitment from the heart. The company maintains a 96 percent patient satisfaction rating.

DBV Technologies
25 Deforest Avenue
Suite 203
Summit, NJ 07901
(484) 357-7850
https://www.dbv-technologies.com/
Booth #429
Immunotherapy
DBV Technologies is a clinical-stage biopharmaceutical company focused on changing the field of immunotherapy. We are committed to developing safe and effective therapies for food allergic patients. DBV is currently developing epicutaneous immunotherapy, or EPIT®, which delivers biologically active compounds to the immune system through intact skin.

Dove Medical Press Ltd.
Beechfield House
Winterton Way
Macclesfield, SK11 0LP
United Kingdom
+44 1625 509147
https://www.dovepress.com
Booth #1208
Publications
Dove Medical Press (www.dovepress.com) is an open access Publisher of 90+ peer reviewed biomedical and scientific journals, which focus on medicine, drug treatment, clinical risk management, outcomes research and adherence across a breadth of disease states and technologies, biology and basic sciences.

DrChrono, Inc.
328 Gibraltar Drive
Sunnyvale, CA 94089
(844) 569-8628
https://www.drchrono.com
Booth #1009
Computer Hardware/Software
DrChrono is a medical practice platform company. Our technology integrates EHR, practice management, Revenue Cycle Management and medical billing into one seamless platform. We design essential technology to make care more informed, more personalized, more interactive, and more adaptable.

EAACI
Hagenholzstrasse 111
3rd Floor
Zurich, 8050
Switzerland
+41 44 205 55 33
https://www.eaaci.org
Booth #1522
Other
EAACI is a non-profit organisation active in the field of allergic and immunologic diseases. With over 10,000 members from 122 countries, as well as 60 national and international member societies, EAACI is the largest medical association in Europe focusing on allergy and clinical immunology.
The eClinicalWorks EHR/PM is a complete solution for your healthcare IT needs, including everything providers need for the testing and treatment of allergies. Allergy module contains configurable worksheets for the antigen tests needed to document wheal/flare or impression. Once skin tests are complete, providers can write formulations for the vials to be prepared.

Edge Pharmaceuticals
7264 Northwest 63rd Terrace
Parkland, FL 33067
(877) 580-3343
http://www.edgepharmaceuticals.com
Booth #932
Immunotherapy
We specialize in sublingual (SLIT) metered dose delivery systems, allergy testing and treatment materials and specialty pharmacy compounding services. We look forward to meeting with you. Please stop by our booth to see us.

Elsevier
1600 John F. Kennedy Boulevard
Suite 1600
Philadelphia, PA 19103
(215) 239-3900
http://www.elsevierhealth.com
Booth #436
Publications
Elsevier is a world-leading provider of information solutions that enhance the performance of science, health, and technology professionals, empowering them to make better decisions, and deliver better care.

Enjoy Life Foods
8770 West Bryn Mawr Avenue
Suite 1100
Chicago, IL 60631
(773) 632-1987
http://www.enjoylifefoods.com
Booth #1115
Other
Enjoy Life Foods, the leading brand in the Free-From food category, features over 70 products that are Certified Gluten Free, Non-GMO Project Verified and free-from 14 allergens. All products are manufactured in a dedicated nut free and certified gluten free facility. Over 20 products have been recently certified FODMAP Friendly.

Food Allergy & Anaphylaxis Connection Team (FAACT)
PO Box 511
West Chester, OH 45071
(815) 276-3015
https://www.foodallergyawareness.org/
Booth #1537
Other
FAACT's mission is to educate, advocate, and raise awareness for all individuals and families affected by food allergies and life-threatening anaphylaxis. FAACT has all the facts you need to manage food allergies at school, dining out, issues in the workplace, as well as preparing for college, bullying and traveling.

Food Allergy Research & Education
7901 Jones Branch Drive
Suite 240
McLean, VA 22102
(800) 929-4040
https://www.foodallergy.org/
Booth #1527
Patient/Public Education
Food Allergy Research & Education (FARE) works on behalf of the 15 million Americans with food allergies, including those at risk for anaphylaxis. FARE’s mission is to improve the quality of life and the health of individuals with food allergies, and to provide them hope through the promise of new treatments.

Genentech - Novartis
1 DNA Way
South San Francisco, CA 94080
(650) 225-1000
https://www.gene.com/
Booth #413
Pharmaceuticals
For more than 40 years, we’ve been following the science, seeking solutions to unmet medical needs. As a proud member of the Roche Group, we make medicines to treat patients with serious medical conditions. We are headquartered in South San Francisco, California.

Glenmark Therapeutics
461 From Road
Paramus, NJ 07652
(201) 331-4218
http://www.glenmarkpharma-us.com
Booth #1412
Pharmaceuticals
Glenmark Therapeutics Inc., USA (GTI), a wholly-owned subsidiary of Glenmark Holding SA, is dedicated to building a branded portfolio for Glenmark Pharmaceuticals. GTI will initially focus on commercializing assets in dermatology and respiratory. GTI also has a robust pipeline of investigational medicines intended to meet the needs of patients.
Physician Education

Are you afraid to start OIT in your practice? The Founders of GFT are board certified allergists who have combined experience of 10 years of doing Food OIT. The GFT resources will help you to save time and energy needed to implement OIT in your practice.

Pharmaceuticals

GSK is a science-led global healthcare company with a mission to help people do more, feel better, live longer. We research, manufacture and make available a broad range of medicines, vaccines and consumer healthcare products. Visit our exhibit for information about our products and resources.

Other

We are a science-led global healthcare company with a special purpose: to help people do more, feel better, live longer. Our strategy is to bring differentiated, high-quality and needed healthcare products to as many people as possible, with our three global businesses, scientific and technical know-how and talented people.

HollisterStier Allergy is dedicated to being your partner in allergy management. Our complete line of high quality allergenic products and testing supplies allow allergy professionals to provide patients with the best possible care. Our product line includes extracts for diagnostic testing and immunotherapy, skin testing systems, and other ancillary supplies.

Other

Offering affordable, reliable, high quality HEPA filtration products for over 25 years, Honeywell Air Purifiers are frequently recommended by Allergists as part of a patient’s overall treatment plan.

Pharmaceuticals

Horizon Pharma plc is a biopharmaceutical company focused on improving patients’ lives by identifying, developing, acquiring and commercializing differentiated and accessible medicines that address unmet medical needs. We market 11 medicines through our rare disease, rheumatology and primary care business units.

Pharmaceuticals

Drug free, prescription allergy relief has finally arrived! Introducing, ALZAIR Allergy Blocker. A clinically proven nasal powder spray that works to strengthen resistance to airborne allergens. Visit www.Alzair.com for more information.
Hycor Biomedical
7272 Chapman Avenue
Garden Grove, CA 92841
(714) 933-3119
http://www.hycorbiomedical.com
Booth #1117
Diagnostic Testing
Hycor is a global manufacturer of in vitro diagnostics products. Hycor markets the HYTEC® products and the NOVEOS™ system which received FDA clearance in the United States. The company is focused on delivering quality products that provide the highest value through innovation, reliability and customer service.

Immune Deficiency Foundation
110 West Road
Suite 300
Towson, MD 21204
(443) 377-7449
https://primaryimmune.org
Booth #1543
Patient/Public Education
The Immune Deficiency Foundation is dedicated to improving the diagnosis, treatment and quality of life of persons with primary immunodeficiencies.

Immune Epitope Database and Analysis Resource
9420 Athena Circle
La Jolla, CA 92037
(858) 752-6959
https://www.iedb.org/
Booth #1530
Computer Hardware/Software
The IEDB is an NIH-supported, freely available resource that provides access to published data related to antibody and T cell epitopes, as well as online tools for prediction and further analysis of immune epitopes. The IEDB has data for infectious and autoimmune diseases, allergens, and alloantigens. Stand-alone tools also available upon request.

Indoor Biotechnologies, Inc.
700 Harris Street
Charlottesville, VA 22903
(434) 984-2304
https://inbio.com
Booth #1116
Other
Indoor Biotechnologies specializes in allergens and immunoassay products/services for the food industry, indoor air quality and biopharmaceutical industries, academic and government researchers, and Fortune 500 companies. Our mission is to improve patient care through research, education and developing cutting-edge technologies that serve our customers worldwide.

Integrity Continuing Education
106 Apple Street
Suite 300
Tinton Falls, NJ 07724
(855) 835-4004
http://integrityce.com
Booth #1317
Physician Education
Integrity CE is a full-service, ACCME-accredited provider of CME, with years of experience in the continuing medical education industry. The goal of our program is to provide busy healthcare providers with CME activities in order to affect change in clinical practice by improving competence, performance, and ultimately, patient outcomes.

International Eosinophil Society, Inc.
555 East Wells Street
Suite 1100
Milwaukee, WI 53202
(414) 276-6445
http://www.eosinophil-society.org
Booth #1532
Clinical Research Organizations
The International Eosinophil Society, Inc. (IES, Inc.) has been established to bring together scientists around the world who are engaged in research in the field of Eosinophil Biology and Eosinophil Disorders with a view to facilitating the exchange of ideas and information about this fascinating inflammatory cell type and its role in diseases.

International FPIES Association (I-FPIES)
319 Richmond Avenue
Point Pleasant Beach, NJ 08742
(908) 910-4419
http://www.fpies.org
Booth #1535
Patient/Public Education
The International FPIES Association (I-FPIES) is a 501(c)(3) patient organization dedicated to improving the diagnosis, treatment and quality of life for those with Food Protein-Induced Enterocolitis Syndrome (FPIES) through advocacy, education, support, and research.

International Institute for the Advancement of Medicine
125 May Street
Edison, NJ 08837
(800) 486-4426
http://www.iiam.org/
Booth #1232
Clinical Research Organizations
IIAM is the world-leading provider of non-transplantable, healthy and diseased, human organs and tissues for medical research, education and development. These tissues are recovered with minimal ischemia, stored in preservation and delivered in 12-24 hours to qualified researchers, scientists, healthcare and biotech professionals for medical advancement. Visit our website, www.iiam.org.
Invitae
1400 16th Street
San Francisco, CA 94103
(415) 374-7782
http://invitae.com
Booth #1210
Diagnostic Testing
Invitae’s mission is to bring comprehensive genetic information into mainstream medical practice to improve the quality of healthcare for billions of people. Our goal is to aggregate most of the world’s genetic tests into a single service with higher quality, faster turnaround time and lower prices. Visit www.invitae.com.

Johnson & Johnson Consumer Inc.
7050 Camp Hill Road
Fort Washington, PA 19034
(866) 948-6883
https://www.rhinocortprofessional.com/
Booth #1110
Pharmaceuticals
Johnson & Johnson Consumer Inc. markets a broad range of well-known and trusted over-the-counter (OTC) products. Johnson & Johnson Consumer Inc. brands include TYLENOL®, MOTRIN® pain relievers and fever reducers; BENADRYL®, RHINOCORT®, ZYRTEC® and ZYRTEC®-D allergy medicines; IMODIUM® anti-diarrheal products; and SUDAFED® and SUDAFED PE® nasal decongestants.

Kaléo
111 Virginia Street
Suite 300
Richmond, VA 23219
(804) 545-6380
https://kaleopharma.com/
Booth #709
Pharmaceuticals
Kaléo is a pharmaceutical company dedicated to building innovative solutions that can help empower patients with certain serious, life-threatening medical conditions and their caregivers. Kaléo products combine established drugs with innovative delivery platforms, with the goal of achieving safety, efficacy and cost effectiveness. Kaléo is privately-held, and headquartered in Richmond, Virginia. www.kaleopharma.com.

Karger Publishers
26 West Avon Road
PO Box 529
Unionville, CT 06085
(860) 675-7834
https://www.karger.com
Booth #909
Publications
Publications include the book series Chemical Immunology and Allergy and Progress in Respiratory Research; and the journals Dermatology, International Archives of Allergy and Immunology, Journal of Innate Immunity, Neuroimmunomodulation, and Respiration.

Kedrion Biopharma Inc.
400 Kelby Street
11th Floor
Fort Lee, NJ 07024
(610) 909-7862
https://www.kedrion.us/
Booth #933
Pharmaceuticals
Kedrion Biopharma, an international biopharmaceutical company with corporate headquarters in Tuscany, Italy, specializes in the production of plasma-derived therapies for rare diseases and conditions such as hemophilia and primary immunodeficiency. Kedrion Biopharma’s US headquarters are in Fort Lee, New Jersey with a global presence in about 100 countries.

Latitude Food Allergy Care
570 Price Avenue
Suite 400
Redwood City, CA 94063
(650) 466-6224
http://www.latitudefac.com
Booth #1418
Other
Latitude Food Allergy Care is a specialty clinic solely focused on food allergy. We are committed to changing the lives of families living with food allergies by creating access to exceptional care from diagnosis to lifesaving treatments to long-term support.

Leadiant Biosciences, Inc.
9841 Washingtonian Boulevard
Suite 500
Gaithersburg, MD 20878
(800) 447-0169
http://leadiant.com
Booth #1318
Pharmaceuticals
Leadiant Biosciences, Inc. is a rare corporation dedicated to creating novel medicines for the unmet needs of patients with rare diseases. Truly unique in its field, Leadiant Biosciences places its considerable scientific resources behind the discovery of compounds that benefit the few; simply because it’s the right thing to do.

Lincoln Diagnostics, Inc.
240 East Hickory Point Road
Decatur, IL 62526
(800) 537-1336
http://lincolndiagnostics.com
Booth #423
Diagnostic Testing
Lincoln Diagnostics is displaying state-of-the-art, safety-engineered skin testing devices manufactured under ISO 13485 quality standards; Multi-Test PC (Pain Control), UniTest PC, Duotip-Test II, Multi-Test II, Multi-Test, and Duotip-Test. Lincoln’s devices are the most widely used and most extensively published on devices available.
Low Derma Technology
PT 7836, Jalan Haji Abdul Manan/ KU8, Kawasan Perindustrian Meru Selatan, Selangor Darul Ehsan, Malaysia. Klang, 41050 Malaysia
+60 33392 3013
https://www.lowderma.com
Booth #1430
Equipment/Supplies
LOW DERMA™ patented Technology is an innovation breakthrough accentuating the fundamental needs for CLEAN and SAFE protection. - No natural rubber latex (cause of Type I Hypersensitivity) - No chemical accelerators such as Thiram, Thiazoles & Carbamates (common cause of Type IV Hypersensitivity) - No Sulphur Added.

Mead Johnson Nutrition
2400 West Lloyd Expressway
Evansville, IN 47721
(812) 429-5514
https://www.meadjohnson.com/pediatrics
Booth #1128
Other
The Mead Johnson name has been associated with science-based pediatric nutrition products for over 100 years. Visit booth #1128 or meadjohnson.com/pediatrics to learn more about our Enfamil portfolio of products and our professional educational programs. Our representatives look forward to meeting you.

Med Care Pharmaceuticals
8383 Wilshire Boulevard
Beverley Hills, CA 90211
(858) 260-7075
http://medcarepharmaceuticals.com
Booth #1323
Pharmaceuticals
We are a research-based biopharmaceutical company dedicated to finding innovative, safe and affordable prescription medications and OTC (over-the-counter) solutions for our clients. Led by compassion, expertise, dedication and resolve, our team works tirelessly to improve health and wellness worldwide with an unwavering focus on changing the future of medicine and humanity.

Mead Lazer
1110 Brickell Avenue
Suite 430
Miami, FL 33131
(305) 847-9044
https://medilazer.net/
Booth #1311
Equipment/Supplies
Medi Laser provides a variety of healthcare solutions to many different industries. We work on developing and identifying the best medical care to help diverse professional groups overcome their challenges.

Medical College of Wisconsin - Clinical Immunodiagnostic Research Laboratory
8701 West Watertown Plank Road
MFRC 5072
Milwaukee, WI 53226
(414) 955-4165
http://www.mcw.edu/CIRL
Booth #1327
Diagnostic Testing
The Clinical Immunodiagnostic and Research Laboratory (CIRL) provides a comprehensive panel of diagnostic services to aid in the screening and diagnosis of primary immunodeficiencies using flow cytometric-based assays. The Allergy Immunology Diagnostic Lab (AIDL) utilizes serologic assays for the diagnosis of hypersensitivity pneumonitis, APBA, latex allergy, and responses to the polysaccharide Salmonella typhi vaccine.

Medical Practice Purchasing Group (MPPG)
29525 Canwood Street
Suite 250
Agoura Hills, CA 91301
(714) 469-5296
http://www.mppg.net
Booth #1332
Office Management
An Allergy & Asthma Physician Buying Group on a mission to improve medical practices' bottom line profitability through cost reduction. Obtains discounts for practices purchasing directly from Stallergenes/Greer, Circassia-Niox Vero, Sanofi Pasteur and more!
Methapharm, Inc.
11772 West Sample Road
Coral Springs, FL 33065
(519) 751-3602
http://www.provocholine.com
Booth #930
Diagnostic Testing
Provocholine is the leader and only FDA Approved methacholine chloride for the diagnosis of bronchial airway hyper responsiveness in patients who are suspected of having asthma.

Micro Direct, Inc.
803 Webster Street
Lewiston, ME 04240
(800) 588-3381
https://mdspiro.com/
Booth #934
Spirometry
Micro Direct is pleased to offer Total Spirometry Solutions with models priced from $695 to $2,495, all designed to meet your needs; and each with your choice of inexpensive cardboard mouthpieces, one-way mouthpieces or full protection pulmonary filters. Micro Direct also offers an inexpensive peak flow meter and screening spirometers.

MIR-Medical International Research
5462 South Westridge Drive
New Berlin, WI 53151
(844) 464-7872
https://www.spirometry.com
Booth #1322
Diagnostic Equipment
MIR - Medical International Research is an Italian company founded in 1993 that today is a leader in the field of design, production and international sales of diagnostic spirometry devices and applications for the analysis of lung function. In particular MIR specializes in: Spirometry, Oximetry, Telemedicine and Connected Devices for Clinical Trials and/or third parties integrators.

Mission: Allergy, Inc.
28 Hawleyville Road
PO Box 45
Hawleyville, CT 06440
(203) 364-1570 x 2000
https://www.missionallergy.com
Booth #823
Environmental Products
Leading allergists recommend Mission: Allergy for its scientific accuracy and its highest quality microfiber pillow and mattress encasings and other products for allergen avoidance. Please stop by our booth to request your free supply of our informative allergy self-help guide for patients, and to view live dust mites in High-Definition.

ModuleMD
8359 Office Park Drive
Grand Blanc, MI 48439
(877) 347-7978
http://www.modulemd.com
Booth #809
Computer Hardware/Software
ModuleMD enhances clinical, operational and financial performance of Allergy Practices. The ModuleMD WISE™ suite includes a Certified EHR, Skin Testing, Immunotherapy, Practice Management, Revenue Management, ePrescribe, Telehealth and Patient Engagement software. In addition to technology, ModuleMD offers comprehensive billing and RCM services. Providing solutions…not just software. Contact us: info@modulemd.com.

Molekule
1184 Harrison Street
San Francisco, CA 94103
(407) 490-2758
https://molekule.com
Booth #1313
Environmental Products
Meet Molekule, the world’s first molecular air purifier. Molekule uses nanotechnology to break down and completely eliminate pollutants on a molecular level, while current air purifiers try to catch pollutants in filters. Allergens, mold, bacteria, viruses, and airborne chemicals are completely destroyed by breaking them down.

Morgan Scientific, Inc.
151 Essex Street
Suite 8
Haverhill, MA 01832
(978) 521-4440
http://www.morgansci.com
Booth #1314
Spirometry
Morgan Scientific provides top line hardware for pulmonary function diagnostic testing and the corresponding ComPAS software for testing at the click of a space bar. We offer incentives for top patient efforts, and customized reports and workflow enhancements for quick and paperless interpretations. Come by for a demo of our Pneumotrac spirometer and meet our dragon!
MotherToBaby Pregnancy Studies conducted by OTIS
9500 Gilman Drive
Mail Code 0828
La Jolla, CA 92037
(877) 311-8972
http://www.mothertobaby.org
Booth #1528
Patient/Public Education
MotherToBaby is the nation’s leading authority and most trusted source of evidence-based information on the safety of medications and other exposures during pregnancy and while breastfeeding. MotherToBaby Pregnancy Studies is evaluating the effects of Asthma and Atopic Dermatitis along with the medications used to treat these diseases during pregnancy.

MY Biomedical
7698 Pyrenees Park Drive
Las Vegas, NV 89113
(702) 302-8853
http://mybiomedical.info/
Booth #1107
Skincare
MY Biomedical is the premier healthcare company focused on delivering the highest quality care. We offer a range of services and products for skin allergies. These include facials, the best collagen treatment and LED Light Therapy.

National Allergy / Allergy Control Products
3575 Koger Boulevard
Suite 240
Duluth, GA 30096
(770) 495-3353
http://www.NationalAllergy.com
Booth #1334
Equipment/Supplies
National Allergy and Allergy Control Products is one of the nation’s largest asthma, sinus and allergy products suppliers and physician educational partners. Our goal is to help make your environment allergen free.

National Death Index
3311 Toledo Road
Room 5292
Hyattsville, MD 20782
(301) 458-4240
http://www.cdc.gov/nchs/ndi/index.htm
Booth #1312
Other
The NDI is a resource to aid epidemiologists and other health and medical investigators with mortality ascertainment.

National Eczema Association
4460 Redwood Highway
Suite 16-D
San Rafael, CA 94903-1953
(415) 499-3474
http://nationaleczema.org/
Booth #1529
Other
The National Eczema Association (NEA) is a non-profit, 501(c)(3) organization with a mission to improve the health and quality of life for individuals with eczema through research, support, and education.

NeilMed Pharmaceuticals
601 Aviation Boulevard
Santa Rosa, CA 95403
(707) 525-3784
https://www.neilmed.com
Booth #533
Pharmaceuticals
The mission of the company is to create and maintain safe, affordable and effective products to sustain long-term growth and create drug-free and effective nasal/sinus, ear and wound care devices for millions of consumers worldwide. Please visit the website www.neilmed.com for more details.

Nestle Health Science
1007 US Highway 202/206
Building JR2
Bridgewater, NJ 08807
(908) 848-6115
http://www.nestlehealthscience.com
Booth #1213
Other
Nestlé Health Science, a wholly owned subsidiary of Nestlé S.A., is engaged in advancing the role of nutritional therapy in healthcare. Through investing in innovation and leveraging leading edge science, we bring forward innovative nutritional solutions with clinical, health economic value and quality of life benefits. (www.nestlehealthscience.us)

Novartis Pharmaceuticals
One Health Plaza
East Hanover, NJ 07936
(862) 778-2100
https://www.pharma.us.novartis.com/
Booth #833
Pharmaceuticals
Novartis Pharmaceuticals Corporation (NPC) offers a broad range of medicines for cancer, cardiovascular disease, endocrine disease, eye care, inflammatory disease, infectious disease, neurological disease, organ transplantation, psychiatric disease, respiratory disease and skin conditions. The company’s mission is to improve people’s lives by pioneering novel healthcare solutions.
Novartis Pharmaceuticals Corporation
One Health Plaza
East Hanover, NJ 07936
(862) 778-8300
https://www.novartis.com
Booth #633

Pharmaceuticals
Novartis Pharmaceuticals Corporation (NPC) offers a broad range of medicines for cancer, cardiovascular disease, endocrine disease, eye care, inflammatory disease, infectious disease, neurological disease, organ transplantation, psychiatric disease, respiratory disease and skin conditions. The company’s mission is to improve people’s lives by pioneering novel healthcare solutions. For more information, visit https://www.pharma.us.novartis.com/

Novartis Pharmaceuticals Corporation
One Health Plaza
434/1330F
East Hanover, NJ 07936
(862) 309-1708
https://www.novartis.com
Booth #733

Pharmaceuticals
Novartis Pharmaceuticals Corporation (NPC) offers a broad range of medicines for cancer, cardiovascular disease, endocrine disease, eye care, inflammatory disease, infectious disease, neurological disease, organ transplantation, psychiatric disease, respiratory disease and skin conditions. The company’s mission is to improve people’s lives by pioneering novel healthcare solutions. For more information, visit https://www.pharma.us.novartis.com/

nSpire Health
1830 Lefthand Circle
Longmont, CO 80501
(800) 574-7374
http://www.nspirehealth.com
Booth #811

Spirometry
nSpire Health™ is a global respiratory information systems software developer and medical device manufacturing company. We are the exclusive provider and developer of Iris™, the world’s first Integrated Respiratory Information System; and KoKo® pulmonary function testing, diagnostic spirometry, and respiratory home monitoring devices.

Nutricia North America
9900 Belward Campus Drive
Suite 100
Rockville, MD 20850
(301) 503-1457
https://www.neocate.com/
Booth #922

Other
Neocate®, brought to you by Nutricia, is a range of amino acid-based products, proven effective in the nutritional management of gastrointestinal (GI) and food allergy-related conditions, such as SBS, CMA, MFPI, EoE, FPIES and GER.

Officite
3010 Highland Parkway
Suite 200
Downers Grove, IL 60515
(888) 817-4010
http://www.Officite.com
Booth #1109

Office Management
Officite helps physicians grow their practices and generate more new patient referrals through efficient online marketing. Their websites are powerful and backed by unlimited support of a Web Presence Advisor. Visit Officite.com to see all they have to offer, including responsive mobile designs, search engine marketing (SEO & PPC), reputation tracking, social media, and more.

OptiNose US, Inc.
1020 Stony Hill Road
Suite 300
Yardley, PA 19067
(267) 364-3505
https://xhance.com
Booth #1123

Pharmaceuticals
XHANCE® (fluticasone propionate) nasal spray is a corticosteroid indicated for the treatment of nasal polyps in adults 18 years of age or older. XHANCE uses an Optinose® Exhalation Delivery System that is designed to deliver medication high and deep in the nasal passages to regions where nasal polyps originate and sinuses drain and ventilate.

Panatrex, Inc.
1648 Sierra Madre Circle
Placentia, CA 92870-6626
(714) 630-5582
http://panatrexinc.com
Booth #1111

Equipment/Supplies
Quanti-Test System: Quick-Test Applicators, Quanti-Wells, and Quanti-Trayboxes.
Pfizer
235 East 42nd Street
New York, NY 10017
(212) 733-2323
http://www.pfizer.com
Booth #1414
Pharmaceuticals
Pfizer Inc.: Working together for a healthier world.® At Pfizer, we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety and value in the discovery, development and manufacture of health care products.

Phadia AB
Rapsgatan 7P
P.O. Box 6460
Thermo Fisher Scientific
Uppsala, SE-751 37
Sweden
+46 721421262
https://www.thermofisher.com
Booth #911
Diagnostic Testing
As the ImmunoDiagnostics experts within Thermo Fisher Scientific, we develop, manufacture and market complete blood systems to support the clinical diagnosis and monitoring of allergy, asthma and autoimmune diseases.

Pharming Healthcare Inc.
685 Route 202/206
Suite 202
Bridgewater, NJ 08807
(908) 524-0294
https://www.pharming.com/aboutus/
Booth #715
Pharmaceuticals
Pharming Healthcare, Inc. is dedicated to providing life-changing solutions to patients. Pharming is currently involved in the development of drugs for rare diseases, including hereditary angioedema, through a validated technology platform capable of producing industrial quantities of pure recombinant human proteins. Pharming’s lead product is approved in the United States, Europe, South America, and South Korea.

Propeller Health
47 Maiden Lane
Third Floor
San Francisco, CA 94108
(877) 251-5451
https://www.propellerhealth.com/
Booth #1219
Other
Propeller is an FDA-cleared solution helping people with asthma or COPD maximize symptom-free days. Propeller makes sensors that attach to inhalers and track medication use. Inhaler information is sent to the Propeller app where robust analytics and easy-to-use tools provide members personalized insight and support.

PulmOne USA
2711 Centerville Road
Suite 400
Wilmington, DE 19808
(844) 785-6663
https://www.pulm-one.com/
Booth #1319
Diagnostic Equipment
Learn more about the MiniBox+: Complete Pulmonary Function Testing (PFT) in your office practice or hospital clinic: Desktop, Cabinless and Gasless Lung Volume Measurements, as well as Spirometry and DLCO testing. Clinically proven, fully reimbursable, used by physicians in 30+ states. Live demos at our booth during exhibition hours.

Quidel Corporation
10165 McKellar Court
San Diego, CA 92009
(619) 552-7984
https://www.quidel.com/
Booth #1230
Other
Quidel SPG is the option for your research, biosafety, and cytotoxicity testing needs. Quidel MicroVue products are well-established in immune system monitoring and assays for the assessment of Complement activation. Quidel offers products such as ELISA assays, depleted sera, proteins, monoclonal and polyclonal antibodies, antisera, antigens, controls, and special reagents.
Rabbit Air
125 North Raymond Avenue
Suite 308
Pasadena, CA 91103
(626) 396-9197
https://www.rabbitair.com
Booth #1023
Environmental Products
Rabbit Air is an innovative, Los Angeles-based air purifying company that develops stylish yet inconspicuous air purifiers to target airborne pollutants and improve the indoor environment. One of the most customer-centric companies in the industry, Rabbit Air offers customer service around the clock, and handles everything from product design to after-sales assistance.

RB
399 Interpace Parkway
Parsippany, NJ 07054
(973) 404-2529
https://www.rb.com/
Booth #1234
Pharmaceuticals
RB, a global force in health, hygiene and home products, will be exhibiting cough and cold over-the-counter products including Mucinex, the #1 doctor recommended cough and cold brand.

Red Maple Trials Inc.
2935 Conroy Road
Unit 110
Ottawa, ON K1G 6C6
Canada
(613) 368-4320
http://www.redmapletrials.com/
Booth #1126
Clinical Research Organizations
Red Maple Trials provides specialty services in allergy, asthma and immunology clinical research, highlighted by our Allergen Challenge Theatre and Naturalistic Exposure Chamber. Our experienced team provides leading CRO services on Phase I through IV studies in order to fulfill the challenging demands of our biopharmaceutical partners.

Regeneron and Sanofi Genzyme
777 Old Saw Mill River Road
Tarrytown, NY 10591
(914) 847-7600
http://www.regeneron.com
http://www.sanofi.com
Booth #122
Pharmaceuticals
Regeneron Pharmaceuticals is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Sanofi is dedicated to supporting people through their health challenges. We are a global biopharmaceutical company focused on human health. Since 2007, Sanofi and Regeneron have collaborated to develop and commercialize fully human monoclonal antibodies utilizing proprietary technologies.

Regeneron and Sanofi Genzyme
777 Old Saw Mill River Road
Tarrytown, NY 10591
(914) 847-7600
http://sanofi.com
Booth #522
Pharmaceuticals
Regeneron Pharmaceuticals is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Sanofi is dedicated to supporting people through their health challenges. We are a global biopharmaceutical company focused on human health. Since 2007, Sanofi and Regeneron have collaborated to develop and commercialize fully human monoclonal antibodies utilizing proprietary technologies.

Rosch Visionary Systems, Inc.
1601 11th Avenue
Suite 102
Altoona, PA 16601
(800) 307-3320
http://www.roschvisionary.com
Booth #1315
Computer Hardware/Software
Rosch Visionary Systems is the leading provider of allergy software. Rosch Immunotherapy is designed to manage allergy extract mixing, injections and reactions. Rosch Skin Testing records prick and intradermal using the results to build the immunotherapy prescription. Visionary Allergy Tracker will remind patients when they are due for their injection(s) via text and email notifications.
Sanofi Consumer Healthcare (Formerly Chattem, Inc)
55 Corporate Drive
Bridgewater, NJ 08807
(800) 981-2491
https://www.sanofi.us
Booth #1011
Pharmaceuticals
Sanofi is dedicated to supporting people through their health challenges. We are a global biopharmaceutical company focused on human health. We prevent illness with vaccines, provide innovative treatments to fight pain and ease suffering. We stand by the few who suffer from rare diseases and the millions with long-term chronic conditions. Sanofi, Empowering Life.

Shire, Now Part of Takeda
300 Shire Way
Lexington, MA 02421
(617) 349-0200
https://www.shire.com
Booth #223
Pharmaceuticals
Shire is the global biotechnology leader serving patients with rare diseases and specialized conditions. We seek to push boundaries through discovering and delivering new possibilities for patient’s communities across our portfolio of therapeutic areas including Immunology, Hematology, Genetic Diseases, Internal Medicine, Ophthalmics, Oncology, and neuropsychiatry disorders.

Simply Peanut by Allergenic Solutions
PO Box 72
Draper, UT 84020
(801) 573-6774
https://www.simply-peanut.com
Booth #1217
Pharmaceuticals
Simply Peanut is a worry-free way to introduce a baby to peanuts while avoiding the choking hazards of peanuts and peanut butter. Developed following the methodologies of the LEAP study, Simply Peanut is an evidence-based product created to reduce a baby’s chance of developing a peanut allergy.

SmartPractice
3400 East McDowell Road
Phoenix, AZ 85008
(800) 878-3837
http://smartpractice.com
Booth #908
Patient/Public Education
SmartPractice® is committed to providing your practice innovative products to help diagnose allergic contact dermatitis and find solutions to help your patients live healthier, happier lives. Our Why: Because Patients Deserve a Diagnosis™

Springer
233 Spring Street
New York, NY 10013
(212) 726-9636
https://www.springernature.com
Booth #1017
Publications
Springer Nature is one of the world’s leading global research, educational and professional publishers, home to an array of respected and trusted brands providing quality content through a range of innovative products and services. Springer Nature is the world’s largest academic book publisher and numbers almost 13,000 staff in over 50 countries. www.springernature.com

Stallergenes Greer
639 Nuway Circle Northeast
PO Box 800
Lenoir, NC 28645
(828) 754-5327
http://www.stallergenesgreer.com
Booth #1324
Allergenic Extracts
Headquartered in London (UK), Stallergenes Greer plc is a global healthcare company specializing in the diagnosis and treatment of allergies through the development and commercialization of allergy diagnostic and immunotherapy products and services. Stallergenes Greer plc is the parent company of GREER Laboratories, Inc.

Stallergenes Greer
639 Nuway Circle Northeast
PO Box 800
Lenoir, NC 28645
(828) 754-5327
http://www.stallergenesgreer.com
Booth #1316
Allergenic Extracts
Headquartered in London (UK), Stallergenes Greer plc is a global healthcare company specializing in the diagnosis and treatment of allergies through the development and commercialization of allergy diagnostic and immunotherapy products and services. Stallergenes Greer plc is the parent company of GREER Laboratories, Inc. Additional information is available at www.stallergenesgreer.com
Teva Respiratory
41 Moores Road
Frazer, PA 19355
(816) 718-1624
http://tevapharm.com
Booth #211
Pharmaceuticals
Teva Respiratory develops and delivers high-quality treatment options for respiratory conditions, including asthma, COPD and allergic rhinitis. Our portfolio of products is centered on optimizing respiratory treatment for patients and healthcare providers through the development of novel delivery systems and therapies that help address unmet needs.

The Emmes Corporation
401 North Washington Street
Suite 700
Rockville, MD 20850
(301) 251-1161
http://www.emmes.com
Booth #1206
Clinical Research Organizations
A full service CRO, Emmes is a valued strategic collaborator for planning and conducting clinical trials and bioinformatics research. Over our 40 year history, we have supported numerous trials in allergy and asthma including trials with SLIT, EPIT, single and multi OIT, and combination therapies for treatment of food allergies.

The Mastocytosis Society, Inc.
P.O. Box 416
Sterling, MA 01564
(617) 285-6156
http://www.tmsforacure.org
Booth #1526
Patient/Public Education
The Mastocytosis Society is a non-profit dedicated to supporting patients affected by Mastocytosis or Mast Cell Activation Disorders as well as their families, caregivers, and physicians through research, education, and advocacy. Please visit our booth for the latest information on mast cell diseases including treatments, diagnostic criteria, and contact information for our MAB. http://www.tmsforacure.org

Thorasy Thoracic Medical Systems Inc.
6560 Avenue de Leesplanade
Suite 103
Montreal, QC H2V4L5
Canada
(514) 384-8555
http://www.thorasys.com
Booth #1215
Diagnostic Equipment
THORASYS designs, manufactures and commercializes pulmonary function test equipment for the diagnosis and monitoring of lung diseases such as Asthma and COPD. Our tremoFlo™ C-100 Airwave Oscillometry System (AOS) ™ is a compact and portable medical device that provides an effortless assessment of lung function.

Ursatec Verpackung GmbH
Schillerstr. 4
St. Wendel, 66606
Germany
+49 685180 26 0
http://www.ursatec.com
Booth #910
Pharmaceuticals
URSATEC stands for innovative developments in preservative-free pharmaceutical, medical device and cosmetic products such as oral and nasal sprays. Safe protection against contamination by microorganisms, even after the opening of a package, is guaranteed by the dual microbiological protection of the patented dosing systems 3K®, COMFORT® and SoftBreezer®.

US Hereditary Angioedema Association
10560 Main Street
Suite PS40
Fairfax City, VA 22030
(866) 798-5598
https://www.haea.org
Booth #1524
Patient/Public Education
The US HAEA is a non-profit patient advocacy organization serving Hereditary Angioedema patients. Our Association was founded and staffed by HAE patients and caregivers. We provide the HAE community with a personalized support network and a wide range of services to help them lead a normal life.

USIDNET
110 West Road
Suite 300
Towson, MD 21204
(800) 296-4433
https://usidnet.org/
Booth #1540
Clinical Research Organizations
The United States Immune Deficiency Network (USIDNET) is a research consortium established to advance scientific research in the field of primary immunodeficiency diseases (PI).
Vitalograph, Inc.
13310 West 99th Street
Lenexa, KS 66215
(913) 730-3216
https://vitalograph.com/
Booth #434
Diagnostic Equipment
Vitalograph is a world leading provider of outstanding quality cardio-respiratory diagnostic devices, clinical trials and medical equipment servicing with over 50 years of experience. Our extensive respiratory range includes PFT equipment, spirometers, peak flow meters, COPD screeners, asthma monitors, e-diaries, inhaler trainers and resuscitation devices.

Wiley
101 Stations Landing
Suite 300
Medford, MA 02155
(781) 388-8200
http://www.wiley.com
Booth #926
Publications
Wiley, a global company, helps people and organizations develop the skills and knowledge they need to succeed. Our online scientific, technical, medical, and scholarly journals, combined with our digital learning, assessment and certification solutions help universities, societies, businesses, governments, and individuals increase the academic and professional impact of their work.

World Allergy Organization
555 East Wells Street
Suite 1100
Milwaukee, WI 53202-3823
(414) 276-1791
http://www.worldallergy.org/
Booth #1536
Physician Education
WAO is an international umbrella organization whose members consist of 99 regional and national allergology and clinical immunology societies from around the world. For more information on educational programs and upcoming meetings, visit WorldAllergy.org.

Xtract Solutions
9954 Southwest Arctic Drive
Beaverton, OR 97005
(503) 379-0110
http://xtractolutions.com
Booth #1331
Computer Hardware/Software
Xtract Solutions allergy software helps clinics manage allergy injections, patient flow, and all details involving testing, ordering, preparation, labeling, filing and delivering immunotherapy. Our solutions save multiple hours per week of nursing and doctor time, and reduces the potentially life-threatening human errors that are unfortunately inherent to allergy injection administration.
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Floor Plan

Level 3

Level 2

Upper Mezzanine

South Lobby

Lower Mezzanine

Exhibition Level
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Abreo, Andrew, MD, Nashville, TN, USA - 1207
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Adcock, Ian M., PhD, London, United Kingdom - 2808
Adinoff, Allen D., MD FAAAAI, Greenwood Village, CO, USA - 1203
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Alexis, Neil, PhD, Chapel Hill, NC, USA - 2003
Allen, Katrina, MD PhD FAAAAI, Melbourne, VIC, Australia - 1210, 2607
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Bajowala, Sakina S., MD FAAAAI, North Aurora, IL, USA - 4712
Baldwin, James L., MD FAAAAI, Ann Arbor, MI, USA - 2001
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Ballow, Mark, MD FAAAAI, St. Petersburg, FL, USA - 2302, 2401
Baloh, Carolyn H., MD, Durham NC - 2602
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Bansal, Priya J., MD FAAAAI, Bloomington, IL, USA - 1204
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Burks, A. Wesley, MD FAAAAI, Chapel Hill, NC, USA - 1050, 1601
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Cahill, Katherine N., MD, Nashville, TN, USA - 1050, 2804
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Cardet, Juan Carlos, MD MPH, Tampa, FL, USA - 1202
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Castells, Mariana C., MD PhD FAAAAI, Boston, MA, USA - 2552, 3008, 4008
Castro, Mario, MD MPH, St. Louis, MO, USA - 3551
Chan, Edmond S., MD FAAAAI, Vancouver, BC, Canada - 1210
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INDICATION
DUPIXENT is indicated for the treatment of adult patients with moderate-to-severe atopic dermatitis whose disease is not adequately controlled with topical prescription therapies or when those therapies are not advisable. DUPIXENT can be used with or without topical corticosteroids.

IMPORTANT SAFETY INFORMATION
CONTRAINDICATION: DUPIXENT is contraindicated in patients with known hypersensitivity to dupilumab or any of its excipients.

WARNINGS AND PRECAUTIONS
Hypersensitivity: Hypersensitivity reactions, including generalized urticaria, rash, erythema nodosum, anaphylaxis and serum sickness or serum sickness-like reactions, were reported in <1% of subjects who received DUPIXENT in clinical trials. If a clinically significant hypersensitivity reaction occurs, institute appropriate therapy and discontinue DUPIXENT.

Conjunctivitis and Keratitis: Conjunctivitis and keratitis occurred more frequently in atopic dermatitis subjects who received DUPIXENT. Conjunctivitis was the most frequently reported eye disorder in these patients. Advise patients to report new onset or worsening eye symptoms to their healthcare provider.

Reduction of Corticosteroid Dosage: Do not discontinue systemic, topical or inhaled corticosteroids abruptly upon initiation with DUPIXENT. Reductions in corticosteroid dose, if appropriate, should be gradual and performed under the direct supervision of a physician. Reduction in corticosteroid dose may be associated with systemic withdrawal symptoms and/or unmask conditions previously suppressed by systemic corticosteroid therapy.

Atopic Dermatitis Patients with Comorbid Asthma: Advise patients not to adjust or stop their asthma treatments without consultation with their physicians.

Parasitic (Helminth) Infections: It is unknown if DUPIXENT will influence the immune response against helminth infections. Treat patients with pre-existing helminth infections before initiating therapy with DUPIXENT. If patients become infected while receiving treatment with DUPIXENT and do not respond to anti-helminth treatment, discontinue treatment with DUPIXENT until the infection resolves.

ADVERSE REACTIONS: The most common adverse reactions (incidence >1%) in atopic dermatitis patients are injection site reactions, conjunctivitis, blepharitis, oral herpes, keratitis, eye pruritus, other herpes simplex virus infection, and dry eye.

Please see additional Important Safety Information and brief summary of full Prescribing Information on the following pages.
TRIAL DESIGNS: A total of 917 adult patients in Trials 1 and 2 (16-week trials) and 421 adult patients in Trial 3 (52-week trial) with moderate-to-severe atopic dermatitis not adequately controlled with topical prescription treatments were randomized to DUPIXENT 300 mg Q2W or placebo. For all patients in Trial 3, lesions were treated with concomitant TCS. Eligible patients had an IGA score ≥3 (overall atopic dermatitis lesion severity scale of 0 to 4), an EASI score ≥16 on a scale of 0 to 72, and body surface area involvement of ≥10%. At baseline, 52% of subjects had an IGA score of 3 (moderate atopic dermatitis), 48% of subjects had an IGA of 4 (severe atopic dermatitis), mean EASI score was 33, and weekly averaged peak pruritus NRS was 7 on a scale of 0 to 10.1

The primary endpoint was the change from baseline in the proportion of subjects with an IGA 0 (clear) or 1 (almost clear) and ≥2-point improvement at Week 16 (38% and 36% with DUPIXENT vs 10% and 9% with placebo in Trials 1 and 2, respectively, P<0.0001; 39% with DUPIXENT + TCS vs 12% with placebo + TCS in Trial 3, P<0.0001). Other endpoints included the proportion of subjects with an IGA 0 or 1 and ≥2-point improvement from baseline at Week 52 in Trial 3 (36% with DUPIXENT + TCS vs 13% with placebo + TCS, P<0.0001), change from baseline in the proportion of subjects with EASI-75 at Week 16 (improvement of ≥75%; 51% and 44% with DUPIXENT vs 15% and 12% with placebo in Trials 1 and 2, respectively, P<0.001), and reduction in itch as defined by ≥4-point improvement in the peak pruritus NRS (51% with DUPIXENT + TCS vs 13% with placebo + TCS in Trial 3 at Week 52, P<0.0001).1-4

EASI, Eczema Area and Severity Index; IGA, Investigator’s Global Assessment; NRS, numerical rating scale; Q2W, once every 2 weeks; TCS, topical corticosteroids.

IMPORTANT SAFETY INFORMATION

DRUG INTERACTIONS: Avoid use of live vaccines in patients treated with DUPIXENT.

USE IN SPECIFIC POPULATIONS

• Pregnancy: Available data from case reports and case series with DUPIXENT use in pregnant women have not identified a drug-associated risk of major birth defects, miscarriage or adverse maternal or fetal outcomes. Human IgG antibodies are known to cross the placental barrier; therefore, DUPIXENT may be transmitted from the mother to the developing fetus.
IMPORTANT SAFETY INFORMATION

USE IN SPECIFIC POPULATIONS (cont’d)

• Lactation: There are no data on the presence of DUPIXENT in human milk, the effects on the breastfed infant, or the effects on milk production. Maternal IgG is known to be present in human milk. The developmental and health benefits of breastfeeding should be considered along with the mother’s clinical need for DUPIXENT and any potential adverse effects on the breastfed child from DUPIXENT or from the underlying maternal condition.

Please see brief summary of full Prescribing Information on the following page.

Visit DupixentHCP.com/AtopicDermatitis to learn more

The following adverse reactions are discussed in greater detail elsewhere in the labeling:

- Patients who received DUPIXENT. If patients become infected while receiving treatment with DUPIXENT, the corticosteroid dose may be associated with systemic withdrawal symptoms and/or discontinuation of systemic, topical, or inhaled corticosteroids abruptly upon initiation of treatment with DUPIXENT.

Table 1 summarizes the adverse reactions that occurred at a rate of at least 1% in the adverse reactions associated with DUPIXENT and in the placebo group. All adverse reactions were associated with high titers of antibodies to dupilumab. One subject in the asthma development program experienced anaphylaxis (see Adverse Reactions (6.2)). If a clinically significant hypersensitivity reaction occurs, institute appropriate therapy and discontinue DUPIXENT (see Adverse Reactions (6.1, 6.2)).

5.2 Conjunctivitis and Keratitis

Conjunctivitis and keratitis occurred more frequently in atopic dermatitis subjects who received DUPIXENT. The most frequently reported eye disorder was keratitis.

5.3 Eosinophilic Conditions

Patients being treated for systemic eosinophilia sometimes presenting with systemic eosinophilia or vasculitis consistent with eosinophilic granulomatosis with polyangiitis, conditions which are often treated with systemic corticosteroid therapy. These events may be associated with the reduction of oral corticosteroid therapy. Physicians should be alert to vasculitis rash, worsening pulmonary symptoms, cardiac complications, and/or neuphropathy appearing in their patients with eosinophilic granulomatosis with polyangiitis. Cases of eosinophilic granulomatosis with polyangiitis and cases of vasculitis consistent with eosinophilic granulomatosis with polyangiitis have been reported with DUPIXENT.

5.4 Acute Asthma Symptoms or Deteriorating Disease

DUPIXENT should not be used to treat acute asthma symptoms or acute exacerbations. Do not use DUPIXENT to treat acute bronchospasm or status asthmaticus. Patients should seek medical advice if their asthma remains uncontrolled or worsens after initiation of treatment with DUPIXENT.

5.5 Reduction of Corticosteroid Dosage

Do not discontinue systemic, topical, or inhaled corticosteroids abruptly upon initiation of therapy with DUPIXENT. Reduction in corticosteroid dose may be associated with systemic withdrawal symptoms and/or acute exacerbations in the year prior to enrollment despite regular use of medium- to high-dose inhaled corticosteroids plus an additional controller(s) (AS Trials 1 and 2). A total of 118 subjects with oral corticosteroid-dependent asthma receiving high-dose inhaled corticosteroids plus up to two additional controllers were enrolled (5.1). The safety profile of DUPIXENT (AS Trials 1 and 2) was 12-17 years of age, of which 63% were female, and 62% were white. DUPIXENT 200 mg or 300 mg was administered subcutaneously twice a week, following an initial dose of 400 mg or 600 mg, respectively.

5.6 Atopic Dermatitis Patients with Comorbid Asthma

Advise atopic dermatitis patients with comorbid asthma not to adjust or stop their asthma treatments without consultation with their physicians.

5.7 Parasitic (Helminth) Infections

Patients with known helminth infections were excluded from participation in clinical studies. It is unknown if DUPIXENT will influence the immune response against helminth infections. Treat patients with pre-existing helminth infections before initiating therapy with DUPIXENT. If patients become infected while receiving treatment with DUPIXENT, and do not respond to antihelminth treatment, discontinue treatment with DUPIXENT until the infection resolves.

6 Adverse Reactions

The following adverse reactions are discussed in greater detail elsewhere in the labeling:

- Hypersensitivity [see Warnings and Precautions (5.1)]
- Conjunctivitis and Keratitis [see Warnings and Precautions (5.2)]
- Eosinophilic conditions [see Warnings and Precautions (5.3)]
- Acute Asthma Symptoms or Deteriorating Disease [see Warnings and Precautions (5.4)]
- Reduction of Corticosteroid Dosage [see Warnings and Precautions (5.5)]
- Atopic Dermatitis Patients with Comorbid Asthma [see Warnings and Precautions (5.6)]
- Parasitic (Helminth) Infections [see Warnings and Precautions (5.7)]
- Eosinophilic conditions [see Warnings and Precautions (5.3)]
- Acute Asthma Symptoms or Deteriorating Disease [see Warnings and Precautions (5.4)]
- Reduction of Corticosteroid Dosage [see Warnings and Precautions (5.5)]
- Atopic Dermatitis Patients with Comorbid Asthma [see Warnings and Precautions (5.6)]
- Parasitic (Helminth) Infections [see Warnings and Precautions (5.7)]

Table 1: Adverse Reactions Occurring in ≥1% of the DUPIXENT Monotherapy Group or the DUPIXENT + TCS Group in the Atopic Dermatitis Trials through Week 16

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>DUPIXENT Monotherapy</th>
<th>DUPIXENT + TCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATD</td>
<td>N=529</td>
<td>N=510</td>
</tr>
<tr>
<td>Conjunctivitis</td>
<td>11 (2)</td>
<td>12 (2)</td>
</tr>
<tr>
<td>Keratitis</td>
<td>5 (5)</td>
<td>2 (1)</td>
</tr>
<tr>
<td>Other Herpes simplex virus infection</td>
<td>1 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Dry eye</td>
<td>1 (1)</td>
<td>1 (1)</td>
</tr>
</tbody>
</table>

- Pooled analysis of Trials 1, 2, and 4
- Analysis of Trial 3 where subjects were on background TCS therapy
- DUPIXENT 600 mg at Week 0, followed by 300 mg every 2 weeks
- Conjunctivitis cluster includes conjunctivitis, allergic conjunctivitis, bacterial conjunctivitis, viral conjunctivitis, giant papillary conjunctivitis, eye irritation, and eye inflammation.
- Keratitis cluster includes keratitis, ulcerative keratitis, allergic keratitis, atopic keratoconjunctivitis, and epithelial herpetic keratitis.
- Other Herpes simplex virus infection cluster includes herpes simplex, genital herpes, herpes simplex otitis externa, and herpes virus infection, but excludes eczema herpeticum.

Safety through Week 52 (Trial 3):

In the DUPIXENT with concomitant TCS trial (Trial 3) through Week 52, the proportion of subjects who discontinued treatment due to adverse events was 4% in the ATD group (3% in the DUPIXENT group and 7% in the placebo group). Two subjects discontinued DUPIXENT because of adverse reactions: atopic dermatitis (1 subject) and exfoliative dermatitis (1 subject). The safety profile of DUPIXENT + TCS through Week 52 was generally consistent with the safety profile observed at Week 16.

A total of 2888 adult and adolescent subjects with moderate-to-severe asthma (ASA) were evaluated in 3 randomized, placebo-controlled, multicenter trials of 24 to 52 weeks duration (Trials 1, 2, and 3). Of these, 8787 had a history of 1 or more severe exacerbations in the year prior to enrollment despite regular use of medium- to high-dose inhaled corticosteroids plus an additional controller(s) (AS Trials 1 and 2). A total of 210 subjects with oral corticosteroid-dependent asthma receiving high-dose inhaled corticosteroids plus up to two additional controllers were enrolled (5.1). The safety profile of DUPIXENT (AS Trials 1 and 2) was 12-17 years of age, of which 63% were female, and 62% were white. DUPIXENT 200 mg or 300 mg was administered subcutaneously twice a week, following an initial dose of 400 mg or 600 mg, respectively.

In the ATD trials and 2, the proportion of subjects who discontinued treatment due to adverse events was 4% of the placebo group, 3% of the DUPIXENT 200 mg Q2W group, and 6% of the DUPIXENT 300 mg Q2W group.

Table 2 summarizes the adverse reactions that occurred at a rate of at least 1% in subjects treated with DUPIXENT and at a higher rate than in their respective comparator groups in Asthma Trials 1 and 2.

Table 2: Adverse Reactions Occurring in ≥1% of the DUPIXENT Groups in Asthma Trials 1 and 2 and Greater than Placebo (6-Month Safety Pool)

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>DUPIXENT Monotherapy</th>
<th>TCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATD</td>
<td>N=792</td>
<td>N=110</td>
</tr>
<tr>
<td>Injection site reactions</td>
<td>111 (14%)</td>
<td>144 (18%)</td>
</tr>
<tr>
<td>Oropharyngeal pain</td>
<td>13 (2%)</td>
<td>19 (2%)</td>
</tr>
<tr>
<td>Eosinophilia*</td>
<td>17 (2%)</td>
<td>16 (2%)</td>
</tr>
</tbody>
</table>

*Injection site reactions cluster includes erythema, edema, pruritus, pain, and inflammation.

Eosinophilia is blood eosinophil ≥3,000 cells/mL or ≥20% of the total leukocyte count, or >100,000 eosinophils/mL of blood.

Adverse Reactions:

- Conjunctivitis
- During the 52-week treatment period of concomitant therapy trial (Trial 3, conjunctivitis) was reported in 16% of the DUPIXENT group (20 per 100 subject-years) and in 20% of the placebo group (11 per 100 subject-years). Among asthma subjects, the frequency of conjunctivitis was similar between DUPIXENT and placebo (13% in DUPIXENT group and 15% in placebo group). Among asthma subjects the frequency of conjunctivitis was similar between DUPIXENT and placebo (13% in DUPIXENT group and 15% in placebo group).
- Eosinophilia
- The rate of eosinophilia was most common with the loading (initial) dose. The safety profile of DUPIXENT through Week 52 was generally consistent with the safety profile observed at Week 24.

Specific Adverse Reactions:

- Conjunctivitis
- During the 52-week treatment period of concomitant therapy trial (Trial 3), conjunctivitis was reported in 16% of the DUPIXENT group (20 per 100 subject-years) and in 20% of the placebo group (11 per 100 subject-years). Among asthma subjects, the frequency of conjunctivitis was similar between DUPIXENT and placebo (13% in DUPIXENT group and 15% in placebo group).
- Eosinophilia
- The rate of eosinophilia was most common with the loading (initial) dose. The safety profile of DUPIXENT through Week 52 was generally consistent with the safety profile observed at Week 24.

Eosinophilia
- DUPIXENT-treated subjects had a greater initial increase from baseline in blood eosinophil count compared to subjects treated with placebo. In subjects with atopic dermatitis, the mean and median increases in blood eosinophils from baseline to Week 4 were 100 and 0 cells/mL, respectively. In subjects with asthma, the mean and median...
8.4 Pediatric Use

Atopic Dermatitis

Safety and efficacy in pediatric patients (<18 years of age) with atopic dermatitis have not been established.

Asthma

A total of 107 adolescents aged 12 to 17 years with moderate to severe asthma were enrolled in AS Trial 2 and received either 200 mg (N=21) or 300 mg (N=18) DUPIXENT (or matching placebo either 200 mg [N=34] or 300 mg [N=34]) Q2W. Asthma exacerbations and lung function were assessed in both adolescents and adults. For both the 200 mg and 300 mg Q2W doses, improvements in FEV1 (LS mean change from baseline at Week 24 were observed (0.36 L and 0.27 L, respectively). For the 200 mg Q2W dose, subjects had a reduction in the rate of severe exacerbations that was consistent with adults. Safety and efficacy in pediatric patients (<12 years of age) with asthma have not been established. Dupilumab exposure was higher in adolescent patients than in adults at the respective dose level which was mainly accounted for by difference in body weight (see Clinical Pharmacology (12.3)).

The adverse event profile in adolescents was generally similar to the adults (see Adverse Reactions (6.1)).

8.5 Geriatric Use

Of the 1472 subjects with atopic dermatitis exposed to DUPIXENT in a dose-ranging study and placebo-controlled trials, 67 subjects were 65 years or older. Although no differences in safety or efficacy were observed between older and younger subjects, the number of subjects aged 65 and over is not sufficient to determine whether they respond differently from younger subjects.

Of the 1977 subjects with asthma exposed to DUPIXENT, a total of 240 subjects were 65 years or older. Efficacy and safety in this age group was similar to the overall study population.

OVERDOSE

There is no specific treatment for DUPIXENT overdose. In the event of overdose, monitor the patient for any signs or symptoms of adverse reactions and institute appropriate supportive treatment immediately.

17 PATIENT COUNSELING INFORMATION

Advise the patients and/or caregivers to read the FDA-approved patient labeling (Patient Information and Instructions for Use) before the patient starts using DUPIXENT and each time the prescription is renewed as there may be new information they need to know.

Administration Instructions

Provide proper training to patients and/or caregivers on proper subcutaneous injection technique, including aseptic technique, and the preparation and administration of DUPIXENT prior to use. Advise patients to follow sharps disposal recommendations.

Hypersensitivity

Advise patients to discontinue DUPIXENT and to seek immediate medical attention if they experience any symptoms of systemic hypersensitivity reactions (see Warnings and Precautions (5.1)).

Concomitant Therapy

Advise patients to notify their healthcare provider if they receive therapies that may interact with DUPIXENT.

8.6 Pregnancy

Risk Summary

Available data from case reports and case series with DUPIXENT use in pregnant women have not identified a drug-associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. Human IgG antibodies are known to cross the placental barrier; therefore, DUPIXENT may be transmitted from the mother to the developing fetus. There are adverse effects on maternal and fetal outcomes associated with asthma in pregnancy (see Clinical Considerations). In an enhanced pre- and post-natal developmental study, no adverse developmental effects were observed in offspring of female rats treated with duupilumab during organogenesis through parturition at doses up to 10-times the maximum recommended human dose (MRHD) (see Data). The estimated background risk of major birth defects and miscarriage for the indicated populations are unknown. All pregnancies have a background risk of birth defect, loss or other adverse outcomes. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2% to 4% and 15% to 20%, respectively.

Contraindications

Disease-Associated Maternal and/or Embryo-Fetal Risk

In women with poorly or moderately controlled asthma, evidence demonstrates that there is an increased risk of preclampsia and the mother and premature, low birth weight, and small for gestational age in the neonate. The level of asthma control should be closely monitored in pregnant women and treatment adjusted as necessary to maintain optimal control.

Data

Animal Data

In an enhanced pre- and post-natal development toxicity study, pregnant cynomolgus monkeys were administered weekly subcutaneous doses of homologous antibody against IL-4Rα up to 10 times the MRHD (on a mg/kg basis of 100 mg/kg/week) from the beginning of organogenesis to parturition. No treatment-related adverse effects on embryofetal toxicity, sexual, neurological, functional, or immunological development were observed in the infants from birth through 6 months of age.

8.7 Lactation

Risk Summary

There are no data on the presence of dupilumab in human milk, the effects on the breastfed infant, or the effects on milk production. Maternal IgG is known to be present in human milk. The effects of local atopic dermatitis and limited systemic exposure to dupilumab on the breastfed infant are unknown. The developmental and health benefits of breast feeding should be considered along with the mother's clinical need for DUPIXENT and any potential adverse effects on the breastfed child from DUPIXENT or from the underlying medical condition.

8.8 Eosinophilia

In a dose-ranging study of 1395 subjects aged ≥12 years with atopic dermatitis or asthma, blood eosinophil counts declined to near baseline levels during study treatment (see Warnings and Precautions (5.3)). The decrease in blood eosinophil counts was similar in DUPIXENT and placebo groups. Treatment-emergent eosinophils (≥5,000 cells/μL) was reported in <2% of DUPIXENT-treated patients and <0.5% in placebo-treated patients. Blood eosinophil counts declined to near baseline levels during study treatment.
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APPROVED FOR TWO INDICATIONS

DATE & TIME
Saturday, February 23, 2019
6:30 PM - 8:30 PM
(Food and beverages will be served)

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San Francisco Marriott Marquis
San Francisco, California

FACULTY PRESENTER
Raffi Tachdjian, MD, MPH
Associate Clinical Professor
David Geffen School of Medicine at UCLA
Los Angeles, California

Visit Booth #122 to Learn More

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