

## Education Needs and Practice Gaps – 2023

Members of the AAAAI Office of Medical Education Needs Assessment Workgroup reviewed a variety of resources to identify the highest priority knowledge and practice gaps among the Academy’s members to guide the development of educational activities that will result in improved practice and optimal patient care. The items listed below were identified by reviewing data from several sources:

- Evaluation responses from learners who participated in the 2023 AAAAI Annual Meeting
- Questions submitted by healthcare providers to the AAAAI’s “Ask the Expert” feature in 2023
- Current AAAAI online CME offerings (e.g. courses, webinars, etc.)

The list below includes the knowledge and practice gaps that were most frequently identified through analysis of these data sources. *It is not intended to be an exhaustive list*, and those planning education activities are encouraged to use other resources to supplement these suggestions.

### HIGH PRIORITY CLINICAL TOPICS (Identified in two or more data sources)

Topic	Knowledge and Practice Gaps
COVID-19	<ul style="list-style-type: none"> <li>• Long-term immunological impacts of COVID-19, particularly for patients with immunodeficiency</li> </ul>
Allergens, Allergy Testing, and Allergy Therapeutics, incl. Biologics	<ul style="list-style-type: none"> <li>• Practical considerations for the use of biologics in allergic diseases (options, patient choice, costs, logistics, follow-up)</li> </ul>
Anaphylaxis, Urticaria & Angioedema	<ul style="list-style-type: none"> <li>• Diagnosis and treatment of urticaria, particularly chronic spontaneous and chronic inducible urticaria</li> <li>• Diagnosis and treatment of angioedema, especially chronic and hereditary angioedema</li> </ul>
Asthma	<ul style="list-style-type: none"> <li>• Diagnostic and therapeutic challenges of differentiating between asthma and COPD</li> <li>• Practical considerations for use of biologics in the treatment of asthma (options, safety, patient choice, costs)</li> </ul>

Autoimmune & Autoinflammatory Disorders	<ul style="list-style-type: none"> <li>• Diagnosis and treatment of autoimmune and autoinflammatory disorders</li> </ul>
Drug/Insect/Vaccine Allergy	<ul style="list-style-type: none"> <li>• Diagnosis and testing of non-penicillin drug allergy, including skin testing and challenge protocols</li> <li>• De-labeling of penicillin and other drug allergy</li> <li>• Venom allergy testing and treatment</li> </ul>
Food Allergy	<ul style="list-style-type: none"> <li>• Oral immunotherapy (OIT) options and protocols</li> <li>• Diagnosis and treatment of EGIDs</li> <li>• Alpha-gal Syndrome</li> <li>• Challenges of diagnosing and treating food allergy in infant and pediatric patients</li> <li>• Mental health burden of food allergy on patients and their families</li> </ul>
Immune Mechanisms and Omics	<ul style="list-style-type: none"> <li>• Practical Application of Omics</li> <li>• Using a multi-omics approach to personalize and implement changes in allergy practice</li> </ul>
Immunodeficiency /Immunology	<ul style="list-style-type: none"> <li>• Approach to diagnosis of immunodeficiency, including genetic testing</li> <li>• Treatment and long-term management of immunodeficiency</li> </ul>
Mast Cells and Eosinophilic Disorders	<ul style="list-style-type: none"> <li>• Diagnosis and testing of mast cell diseases, including mast cell activation syndrome (MCAS)</li> <li>• The allergist's role in the management of mast cell diseases</li> <li>• Diagnosis and testing of eosinophilic disorders</li> </ul>
Skin Diseases	<ul style="list-style-type: none"> <li>• New treatments in atopic dermatitis, including biologics &amp; JAK inhibitors</li> </ul>

**ADDITIONAL PRIORITY CLINICAL TOPICS**  
(Identified in only one data source)

Topic	Knowledge and Practice Gaps
Allergens, Allergy Testing, and Allergy Therapeutics, incl. Biologics	<ul style="list-style-type: none"> <li>• Best practices in allergy skin testing and allergy serum testing</li> <li>• Using rush allergen desensitization effectively and safely</li> </ul>
Anaphylaxis, Urticaria, and HAE	<ul style="list-style-type: none"> <li>• Immunomodulatory treatment for chronic urticaria</li> <li>• Perioperative anaphylaxis diagnosis and testing</li> </ul>

Asthma	<ul style="list-style-type: none"> <li>• GINA 2023 Global Strategy for Asthma Management and Prevention Guidelines</li> <li>• Guidance on Anti-inflammatory Reliever (AIR)-only treatment vs Maintenance and Reliever Therapy (MART)</li> </ul>
Immune Mechanisms	<ul style="list-style-type: none"> <li>• Overview of the immune response</li> </ul>
Rhinosinusitis and Ocular Allergy	<ul style="list-style-type: none"> <li>• Allergic Rhinitis</li> <li>• Immunotherapy</li> </ul>

**HIGH PRIORITY NON-CLINICAL TOPICS**  
(Identified in two or more data sources)

<b>Topic</b>	<b>Knowledge and Practice Gaps</b>
Economic Issues	<ul style="list-style-type: none"> <li>• Identifying and addressing disparities in care</li> <li>• Optimizing billing and reimbursement</li> </ul>
Social Determinants of Health (SDOH)	<ul style="list-style-type: none"> <li>• Screening and addressing SDOH</li> <li>• Improving care in areas with limited resources</li> <li>• Providing equity in care</li> <li>• Increasing underrepresented groups in A/I</li> <li>• Impact of climate change and pollutants on allergic disease</li> </ul>

## Office of Medical Education (2023)

Gerald B. Lee, MD – Chair  
*Emory University*

Alice Hoyt, MD  
*Hoyt Institute of Food Allergy*

Rebecca Scherzer, MD FAAAAI – Vice-Chair  
*Nationwide Children's Hospital*

Shyam Joshi, MD FAAAAI\*\*  
*Oregon Health and Science University*

Leonard B. Bacharier, MD FAAAAI  
*Vanderbilt University*

Edwin H. Kim  
*University of North Carolina*

Priya Bansal, MD FAAAAI  
*Asthma and Allergy Wellness Center*

Jason Kwah, MD  
*Yale University*

David D. Chaplin, MD PhD FAAAAI\*\*  
*University of Alabama*

Wanda Phipatanakul, MD MS FAAAAI  
*Harvard University*

Asriani M. Chiu, MD FAAAAI\*\*  
*Medical College of Wisconsin*

Lily Pien, MD FAAAAI  
*Cleveland Clinic Foundation*

Rohit Divekar, MBBS PhD\*\*  
*Mayo Clinic*

Thanai Pongdee, MD FAAAAI\*\*  
*Mayo Clinic*

Mary Beth Fasano, MD MSPH FAAAAI  
*University of Iowa*

Matthew A. Rank, MD FAAAAI  
*Mayo Clinic and Foundation*

Maureen George, PhD RN AE-C  
*Columbia University*

Caroline Sokol, MD PhD FAAAAI  
*Harvard University*

Jordana Goldman, MD  
*AllerVie*

Katherine Tuttle, MD  
*University of Rochester*

Jesus R. Guajardo, MD FAAAAI  
*University of Texas Health Science Center-  
San Antonio*

\*\*Needs Assessment Workgroup member/Report Co-Author

