



# Pediatric Allergy and Immunology

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The prevalence of allergic disorders has risen over the last several decades leading to significant morbidity and cost burden. Given the increasing rate of these diseases, current knowledge of the diagnosis and management of common allergic and immunologic conditions is essential for all primary care providers. This issue of *Pediatric Annals* provides evidence-based review articles of several common allergic and immunologic presentations including food allergy, angioedema, allergic rhinitis, and primary immune defects.

The current prevalence of food allergy to at least one food in children is estimated to be up to 8% in the United States and is continuing to increase.<sup>1</sup> Caregivers of children with food allergy report a decreased quality of life compared to caregivers of children who do not and children with other chronic medical conditions. Families often avoid activities such as social events and birthday parties to minimize anxiety caused by food allergies. The mainstay of food allergy management is avoidance of the culprit food allergen and treatment of reactions from accidental exposures.

The first article, “Emerging Food Allergy Treatments,” by Dr. Rachel G. Robison highlights new therapeutic options for food allergy, including oral

immunotherapy, epicutaneous immunotherapy, sublingual immunotherapy, and immunotherapy adjuncts. These treatments are currently in development and some will likely be approved for clinical practice within the next couple of years.

The second article, “Angioedema,” by Drs. Divya Seth and Deepak Kamat reviews this common clinical entity among children and adults. This article offers a broad discussion of allergic, hereditary, and other triggers for angioedema.

The third article, “Telemedicine for General Pediatrics,” by Luisa Taylor and Dr. Jay M. Portnoy reviews the use of telemedicine as an effective way to deliver health care from a distance. The authors discuss both ambulatory telemedicine visits as well as emergency and inpatient consults. They discuss the utility of having these services available, especially in rural communities.

Then, the article, “Diagnosis and Management of Allergic Rhinitis in Children” by Dr. Timothy Brown provides a comprehensive review of the presentation and management of allergic rhinitis. Allergic rhinitis occurs in 13% of children in the United States and results in 2 million lost school days per year.<sup>2,3</sup> This article focuses on the pathogenesis, diagnosis, and

treatment of allergic rhinitis, highlighting a relatively new option for allergic rhinitis—sublingual immunotherapy for grass pollen and dust mite allergies.

The final article, “The Expanding Spectrum of Primary Immune Defects,” by Dr. Luis Murguía-Favela summarizes the primary immune defects, including newly discovered gene mutations and emerging diagnoses in this important and challenging field of pediatrics.

We hope readers will enjoy learning about the many new developments in the field of allergy and immunology and find these articles clinically useful when caring for patients.

## REFERENCES

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Disclosure: The authors have no relevant financial relationships to disclose.

doi:10.3928/19382359-20191114-02

## About the Guest Editors

**Melanie M. Makhija, MD**, is a board-certified Allergist and Immunologist. She trained at the Hospital for Sick Children in Toronto, Ontario, Canada, for both her pediatric residency and her allergy and immunology fellowship. She has been on the Faculty at Northwestern University Feinberg School of Medicine for 8 years. She is an attending physician at the Ann and Robert H. Lurie Children's Hospital of Chicago. Her clinical focus is in food allergy and eosinophilic esophagitis.

She is also the allergist on the combined gastroenterology-allergy eosinophilic esophagitis team at the hospital. She has been a primary or co-investigator on multiple clinical trials including 18 food allergy trials. She is the site primary investigator on a grant looking at novel predictors for early diagnosis and treatment of food allergy. She is also a co-investigator of the National Institutes of Health-funded Inner-City Asthma Consortium.

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**Christina E. Ciaccio, MD, MSc**, is an Associate Professor of Pediatrics and Medicine at The University of Chicago and the Chief of the Section of Allergy/Immunology and Pediatric Pulmonology. Dr. Ciaccio currently serves as the Director of the Food Allergy Program at The University of Chicago and has a research interest in understanding how nutrition (prebiotics) and microbial exposures (probiotics) influence immunoglobulin E sensitization.

She has been appointed to several important local and national committees within the allergy/immunology discipline, including the Leadership Institute of the American Academy of Allergy, Asthma, and Immunology (AAAAI); the Editorial Board of the journal *Annals of Allergy, Asthma, and Immunology*; the Clinical Advisory Board Executive Committee of Food Allergy Research and Education; and was recently elected to serve as the Secretary of the Food Allergy/EGID (eosinophilic gastrointestinal diseases) Interest Section of the AAAAI. She continues to lead immunology didactic training for clinical fellows nationally. She has authored 40 articles and authored five book chapters.

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