Raif Geha, MD, FAAAAI Lectureship (1st year)

MONDAY, MARCH 3
9:30 - 11:00 am
Changes to Asthma Management in an Ever-Changing World
Convention Center, Ground Level, Hall C

Lecturer: Juan Celedón, MD, FAAAAI

The Asthma Epigenome: Biomarkers and Vulnerability

Raif Geha, MD, FAAAAI

Dr. Raif Geha is the James Gamble Professor of Pediatrics, Harvard Medical School. He served for ten years as chief of Allergy and another thirty-five years as chief of the Division of Immunology, Allergy, Rheumatology and Dermatology at Boston Children's Hospital. Dr. Geha has received the E. Mead Johnson Award for Pediatric Research the American Association of Immunologists Prize in Human Immunology Research and the Kuwait Foundation Prize for Science. He was elected to the American Society of Clinical Investigation, presided over the Clinical Immunology Society and chaired the WHO/IUIS Committee on Immunodeficiency. Dr. Geha has trained more than 150 postdoctoral fellows, many of whom are leaders in the fields of Allergy and Immunology. He has established the International Consortium for Immune Deficiency, a network of more than 35 centers in 25 countries aimed at advancing research and clinical care of patients with immunodeficiency. He is a founding member of the NIH Atopic Dermatitis Research Network.

Dr. Geha's laboratory investigates genetic and molecular causes of immunodefciencies and has discovered a number of novel gene defects that cause PID including CD40L, SH2D1A, TACI, WIP, DOCK8, LRBA, MALT1, TFR1, DOCK2, RELA, NEIL3, IFNAR1 FCHO1, 4-1BB, C-REL, COPG1, SOSC1, ZNFX1, IKKA, ITPKB, RELB, CBL-B, FGL2, PI3KCD, and gain of function in Rac2. These discoveries have been critical for the tailored treatment of these disorders and, and their prevention through genetic counseling and pre-implantation diagnosis

The Geha lab established a mouse model of AD that model shares key clinical immunological, histological and features with AD, including the development of airway reactivity in response to inhaled antigen challenge, and of anaphylaxis in response to oral antigen challenge. This has provided the first experimental demonstration of the atopic march. The model was used to investigate the role of mechanical skin injury,

innate immune cells, cytokines, transcription factors, and chemokines in the development of AD. Current efforts are focused on understanding the mechanisms by which mechanical skin injury elicits a Th2 response to cutaneously introduced antigens and on the potentiation of food allergy in AD patients colonized with *S. aureus* infection as well as on the identification of novel regulators of allergic skin inflammation that could lead to novel therapies in AD.

Dr. Geha's publications have appeared in Cell, Immunity, Nature, Nature Genetics, Nature Immunology Molecular Cell, PNAS, Journal of Experimental Medicine, EMBO Journal, Journal of Immunology, Journal of Investigative Dermatology, Journal of Allergy and Clinical Immunology, Journal of Clinical Investigation, and Science Immunology.

Raif Geha is a leader in our field – a pioneer in clinical research, a gifted author and teacher, and an exceptional physician. Please join us in making a gift today to establish this Lectureship in his honor. This Lectureship will be delivered for five consecutive years at the Annual Meeting of the AAAAI, and goes directly to support research in our field.

Juan Celedón, MD, FAAAAI

Dr. Celedón is the Niels K. Jerne Professor of Pediatrics and Medicine at the University of Pittsburgh and Division Chief of Pulmonary Medicine at UPMC His research goals are to identify genetic and environmental determinants of airway diseases, particularly in racial/ethnic minorities. Dr. Celedón leads NIH-funded projects on the “omics” and epidemiology of asthma and has authored or co-authored over 390 publications.

Dr. Celedón’s work as a physician-scientist and mentor has been recognized by multiple organizations and institutions in the U.S. and abroad. Dr. Celedón was the first faculty member to ever receive both the Young Mentor Award (2005) and the A. Clifford Barger Excellence in Mentoring Award (2010) from Harvard Medical School. In appreciation of his scientific contributions, he was elected to the American Society for Clinical Investigation (2010) and the Association of American Physicians (2015). Further, he has received the “Recognition Award for Scientific Accomplishments” (2014), the “Lifetime Achievement Award for Innovations in Health Equity” (2015), and the “John M. Peters Award” (2017) from the American Thoracic Society (ATS). In 2020, Dr. Celedón became the first Latino and the first faculty member from the University of Pittsburgh to serve as ATS President since the society was founded in 1905.