Raif Geha, MD



Dr. Raif Geha is the James Gamble Professor or Pediatrics, Harvard Medical School. He served for 10 years as chief of Allergy and another 35 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 has been elected to the American Society of Clinical Investigation, the Russian Academy of Sciences and presided over the Clinical Immunology Society and chaired the WHO/IUIS Committee on Immunodeficiency. He is a founding member of the NIH Atopic Dermatitis Research Network.

Dr. Geha's laboratory investigates genetic and molecular causes of primary immune deficiency (PID). To this purpose, he 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. His laboratory has discovered more than 25 novel gene defects that cause PID. These discoveries have been critical for the tailored treatment of these disorders and their prevention through genetic counseling and pre-implantation diagnosis,

The Geha lab established a mouse model of AD that shares key clinical immunological, histological and features with AD. 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 and has provided the first experimental demonstration of the atopic march. Current efforts are focused on understanding the mechanisms of potentiation of food allergy in AD patients colonized with *S. aureus* infection, the identification of novel regulators of allergic skin inflammation that could lead to novel therapies in AD, the role of IL-4 receptor polymorphisms in AD and the pathogenesis of eczema and food allergy in PIDs characterized by a disrupted actin cytoskeleton

Dr. Geha's work has been continuously funded by the NIH for more than 45 years. His publications number more than 600 and 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.

Dr Geha has trained more than 200 post-doctoral fellows, the vast majority of whom are in academic medicine and are leaders in Allergy and Immunology.