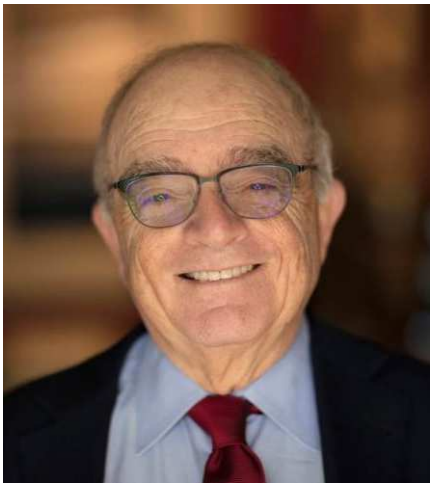
Gary S. Rachelefsky, MD, FAAAAI Lectureship: Investing Together in Our Future



Gary S. Rachelefsky, MD, FAAAAI is a graduate of Columbia College and Washington University School of Medicine in St. Louis, Missouri. He completed a medical internship at Bellevue Hospital (NYU); a pediatric residency at Johns Hopkins Hospital (Harriet Lane); a 2-year epidemiology program at the Centers for Disease Control in Atlanta Georgia; and a fellowship in Allergy and Immunology at UCLA.

Dr. Rachelefsky went on to become the Director of the Executive Care Center for Asthma, Allergy and Respiratory Diseases, Professor of Allergy and Immunology, and Associate Director of the Allergy-Immunology Training Program at the David Geffen School of Medicine at UCLA. He was president of the Respiratory and Allergic Disease Foundation and has been a principal investigator of multiple clinical trials. He is the author or co-author of more than 160 peer-reviewed publications dealing with allergy, respiratory disorders and immunology and has personally treated between 80,000 and 100,000 patients in his 40 years in medicine. He is the author of a book (published by McGraw Hill) for parents of children with asthma, "*Free Your Child from Asthma: A Four-Week Plan to Eliminate Symptoms*." He was medical director of the Starlight Children's Foundation's asthma game for children (Quest for the Code) and is a member of their board of trustees.

Dr. Rachelefsky was president of the American Academy of Allergy, Asthma and Immunology (AAAAI) in 1997, is currently on the editorial board of *The Annals of Asthma, Allergy and Immunology*, and has been on the editorial boards of the *Journal of Allergy & Clinical Immunology*, *Pediatrics*, and *Pediatric Allergy and Immunology*. He was a member and past President of the American Board of Allergy and Immunology, past chairperson of the allergy and immunology section of the American Academy of Pediatrics (AAP), and is the AAP representative to the National Asthma Education and Prevention Program (National Heart, Lung, and Blood Institute [NHLBI]).

Among his many professional honors, his most cherished include the National Asthma Award for Public Education/Service (NHLBI), the Lay Medical Education Award of the AAP, and twice being recognized for his teaching of house staff and medical students from the Department of Pediatrics, UCLA School of Medicine. Dr. Rachelefsky is now retired, living in Los Angeles with his wife Gail and continues to mentor young medical students. The AAAAI Foundation is pleased to announce the Gary S. Rachelefsky Lectureship, which will foster research in the specialty that has been a lifelong passion for Dr. Rachelefsky. Dr. Rachelefsky's Lectureship was established in 2017. The first Lecture in his name will be delivered at the 2018 AAAAI/WAO Joint Congress in Orlando.

2019 marks the 2nd year of the Gary S. Rachelefsky, MD, FAAAAI Lectureship: Investing Together in Our Future award. It will be presented in Symposium Session 3555: Interferons Contribute to Allergic Disease: Lessons Learned from the Asthma and Allergic Diseases Cooperative Research Center on Sunday, February 24, 2019: 12:30 PM - 1:45 PM, Moscone Center South, Esplanade 155

Gary S. Rachelefsky, MD, FAAAAI Lectureship: Investing Together in Our Future Lecture – Dr. Anuradha Ray, PhD

Dr. Anuradha Ray is a Professor of Medicine and Immunology and Endowed Chair of Lung Immunology in Medicine at the University of Pittsburgh School of Medicine. She received her Ph.D. from Calcutta University in India. She underwent postdoctoral training at Cornell University, Ithaca, NY and at Rockefeller University in New York. She was on the faculty at Rockefeller University and at Yale University between the years 1990 and 2001 before moving to the University of Pittsburgh.
Dr. Ray a basic/translational scientist with a long-standing research interest in immune mechanisms in the lung that induce deleterious versus protective responses to allergens and pathogens with relevance in diseases such as asthma.

Dr. Ray's early research led to the identification of NF-κB as a target for the anti-inflammatory actions of corticosteroids, which are the mainstay of asthma treatment. Subsequent research in her laboratory was devoted to understanding the key molecular events that cause naïve T cells to differentiate into Th2 cells, which promote asthma and allergic diseases. These efforts resulted in the discovery of GATA-3 as the master regulator of Th2 cells. GATA-3 is also essential for the production of type 2 cytokines by other cell types such as ILC2 cells that too have been associated with allergic diseases. Asthma is a heterogeneous disease that encompasses mild corticosteroid-responsive disease as well as severe disease that is poorly controlled by corticosteroids. Using cutting-edge tools such as mass cytometry and RNA sequencing, as well as animal models of disease, she and her colleagues are investigating the spectrum of immune dysfunction in severe asthma with the goal to identify novel targets for future therapeutic development. In related studies, the animal models are being used to investigate interactions between lung dendritic cells and T cells that promote tolerogenic versus pathogenic immune responses in the airways. Her research has been continuously funded by grants from the NIH. She has been an invited member of the Faculty of 1000 Biology in the Immunology discipline since 2004. In 2016, she was a recipient of the American Thoracic Society's Recognition Award for Scientific Accomplishments.