## The Elliott Middleton Memorial Lectureship



Elliott Middleton's interest in research began early in his career, when as a medical student at Columbia he was awarded a Medical Research Fund Student Fellowship. His research during this period led to a publication with an eminent member of the Columbia faculty, Dr Beatrice Seegal. After his internal medicine residency at the Presbyterian Hospital in New York, Middleton worked in the laboratory of the renowned immunochemist, Dr Michael Heidelberger.

Here Middleton developed the laboratory skills and knowledge that would enable him to conduct the research that was to occupy him for the remainder of his academic career. He subsequently spent 2 years

at the National Institutes of Health, followed by 2 years at the Roosevelt Hospital in New York.

Over the next decade, during which he was in part-time private practice, he was actively involved in allergy research at Columbia and Roosevelt. His investigative efforts during this period focused on the various biochemical factors that governed the in vitro release of histamine from animal and human peripheral blood leukocytes. This research resulted in the publication of 30 articles in major scientific journals. In 1969 Middleton moved to Denver to become the Director of Clinical Services and Research at the Children's Asthma Research Institute and Hospital (CARIH). During the eight years he spent in Denver he studied adrenergic-cholinergic "imbalance" in allergic reactions and asthma,  $\alpha$ -adrenergic effects on leukocyte function in asthmatic individuals, and the biochemical basis for the modulation of allergic reactions by drugs.

During this time he served as the President of the American Academy of Allergy, Asthma and Immunology. In 1976, he moved to the State University of New York at Buffalo, where he was appointed Professor of Medicine and Director of the Allergy Division, succeeding Dr Carl Arbesman. During the two decades that he worked in Buffalo, Middleton developed an interest in the effects of ubiquitous family of plant compounds knows as flavonoids. The latter are responsible for the yellow, orange, and red pigments found in many foods, flowers, tea and wine. In a series of 30 publications beginning in 1982, he elucidated the role of various plant flavonoids on mammalian cell systems.

His research revealed flavonoid effects on enzyme activities and in particular their role as modulators of various functions of immune and inflammatory cells. As a result of his work, he became an internationally recognized expert on flavonoids, which are currently receiving attention for their antioxidant, antiviral, antitoxic, antineoplastic, and other potentially important properties. An exhaustive review of the flavonoids, with more than 1000 references, was submitted for publication shortly before his death and published in the Pharmaceutical Review in December 2000.

Most practicing allergists will recognize Elliott Middleton for his editorial talents as editor of the Journal of Allergy and Clinical Immunology from 1983 to 1988 and as the senior editor of the first four editions of the two-volume textbook Allergy: Principles and Practice. In addition to his research and editorial accomplishments, Middleton was a fine clinician and outstanding teacher, as the 75+ fellows he mentored during his career will attest.

2017 marks the 16<sup>th</sup> year of the Elliott Middleton Memorial Lectureship. It will be presented in Plenary Session 4101: Using the Immune System to Fight the Immune System: Mechanism of Biologic Immunotherapies on Monday, March 6, 2017: 8:15 to 9:45 am, GWCC, Exhibit Hall B1

## The Elliott Middleton Memorial Lectureship –Sally Wenzel, MD FAAAAI



Dr. Sally Wenzel completed her MD degree at the University of Florida. Following her residency in internal medicine at Wake Forest University and her fellowship in pulmonary and critical care medicine at Virginia Commonwealth University, she spent 19 years at National Jewish and the University of Colorado before moving to the University of Pittsburgh.

She received the Elizabeth Rich Award for her role in promoting women in science, the ATS Award for Scientific Achievement and the ATS Foundation Breathing for Life Award.

She is currently Director of the University of Pittsburgh Asthma Institute at UPMC, holds the UPMC chair in Translational Airway

Biology and is Subsection Chief of Allergy.

Dr. Wenzel has served as Deputy Editor for the American Journal of Respiratory and Critical Care Medicine and is a frequent reviewer for the New England Journal of Medicine and other publications.

Dr. Wenzel has a passion for understanding and improving the treatment of asthma, in particular severe asthma. She has promoted severe asthma as a complex disease and her studies of asthma phenotypes have led the field in understanding these complexities. Dr. Wenzel has developed a strong translational program to study the pathobiology of severe asthma and its phenotypes, modeling ex vivo findings in vitro, using primary human airway cells from patients and controls.