



Allergens: Science, Health Effects and Innovations
October 3-5, 2016, Indoor Biotechnologies, Charlottesville, VA

Course Faculty



Scott P. Commins, MD, PhD

Associate Professor of Medicine
UNC Allergy & Immunology Clinic

Dr. Commins sees patients in the UNC allergy clinic and maintains an active research laboratory. His primary research and clinical interest is the recently described red meat allergy. This unique food allergy appears to be brought on by tick bites and can develop at any time throughout life, even after many years of enjoying beef, pork or lamb. Patients develop an allergic response to the sugar alpha-gal and the resulting allergic reactions are often delayed 3-6 hours after eating mammalian meat. Dr. Commins often sees patients in the allergy clinic with difficult to diagnose food allergies or allergic reactions.

In the research laboratory, the primary questions being addressed related to the role of tick bites in developing this allergy. The focus is to understand how and why the allergy response occurs so that patients with this and other food allergies can be effectively treated.



Kevin Kennedy, MPH, CEIS

Managing Director
Center for Environmental Health at Children's Mercy Hospitals and Clinics

Kevin Kennedy is an Environmental Hygienist and is the Managing Director for the Center for Environmental Health at Children's Mercy Hospitals and Clinics in Kansas City, MO. The center provides patient-based services, training, and education, and performs research in indoor environmental health. Mr. Kennedy has been involved in housing and school environmental health assessments for 10 years and environmental science and industrial hygiene chemistry consulting for over 20 years.

He is currently one of the instructors for the Children's Mercy Hospital's Healthy Home Training Center serving the state of Missouri for the National Center for Healthy Housing. Additionally, Mr. Kennedy is currently the co-director of the Workgroup Practice Parameter on Home Assessment for the Joint Task Force of the American Academy of Allergy, Asthma, and Immunology, and the American College of Allergy, Asthma, and Immunology. He is a member of the Indoor Air Quality Association's Home Health Committee, and serves on the curriculum committee for the National Healthy Homes Training Center.



Elizabeth Matsui, MD

Professor of Pediatrics, Epidemiology and Environmental Health Sciences
Johns Hopkins University School of Medicine

After completing her residency, Dr. Matsui spent several years practicing general pediatrics. During that time, she developed an interest in asthma and allergies and subsequently performed her fellowship in allergy and immunology at Johns Hopkins University School of Medicine. Dr. Matsui also completed a Master of Health Science in epidemiology at Johns Hopkins Bloomberg School of Public Health. She joined the Johns Hopkins faculty in 2003.

Dr. Matsui's areas of clinical expertise include allergic diseases, allergic rhinitis, asthma, and food and additive reactions. She is a leading national expert on environmental allergies and asthma. Dr. Matsui's research focuses on examining the impact of allergen exposure on allergic disease.

Dr. Matsui serves on the editorial board of the Journal of Allergy and Clinical Immunology and is a member of the American College of Asthma, Allergy and Immunology and the American Academy of Asthma, Allergy and Immunology. In 2012, Dr. Matsui was named the top young investigator in allergy and immunology by an international body of scientists assembled by Phadia Allergy Research Forum.



Matthew Perzanowski, PhD

Associate Professor
Environmental Health Sciences
Columbia University

Dr. Perzanowski's research is focused on understanding exposures that lead to allergic sensitization and asthma. While many environmental exposures are hypothesized to have contributed to the global asthma epidemic that started in the latter half of the 20th century, a unifying theory has not been proven.

Dr. Perzanowski began his research career at a preeminent allergen exposure laboratory and participated in studies conducted in communities as different as inner-city Atlanta and rural Kenya. He continued with his doctoral research working with the OLIN group in northern Sweden at the Arctic Circle where asthma is common but dust mites and cockroaches, exposure to which is important to asthma elsewhere, are not found.

As a co-investigator on several established prospective cohort studies, Dr. Perzanowski's current research is exploring paradigms of exposures related to asthma in an area of the world with one of the greatest asthma burdens, low and middle-income neighborhoods in New York City. He is the principal investigator on the NIH (NIEHS) and HUD funded, NYC Neighborhood Asthma and Allergy Study which is examining neighborhood differences in asthma prevalence and persistence to better understand the disparity in asthma risk between children living just city blocks apart. Two other major research aims of his laboratory work are implementing non-invasive measurements of airway inflammation in pediatric population based studies and evaluating the relevance of the 'hygiene hypothesis' to inner-city asthma.



Anne Marie Salapatek MSc, PhD

President & Chief Science Officer
Inflamax Research, Inc.

Dr. Anne Marie Salapatek has over 20 years of research experience both in industry and academia. She is the author of over 100 publications including patent inventions in topics ranging from inflammatory mechanisms to clinical trial design, conduct and Environmental Exposure Chamber technology. Dr. Salapatek was awarded a Ph.D. in Pharmacology from McMaster University, MSc in Physiology and BSc in Biochemistry from University of Toronto.

Dr. Salapatek brings to Inflamax Research a strong academic background coupled with extensive experience in clinical drug development in partnership with client Sponsors. She has advocated the use of the EEC model for allergy and dry eye research in regulatory and research forums demonstrating their benefit to improving the accuracy and precision of clinical research.



William Sheehan, MD

Assistant in Medicine
Instructor
Harvard Medical School

Dr. William Sheehan is a physician in the Allergy and Immunology Division at Boston Children's Hospital. He is also an Instructor of Pediatrics at Harvard Medical School. He completed his medical school at Northwestern University and a residency in Pediatrics at Duke University. He went to Boston Children's Hospital for a fellowship in Allergy and Immunology in 2006 and has remained as faculty since that time. Over the past decade, he has worked closely with Dr. Wanda Phipatanakul on the School Inner-City Asthma Study (SICAS).

In addition to his work on environmental exposures and pediatric asthma, he has done research on childhood food allergies. He currently receives research funding from the NIH, National Institute of Allergy and Infectious Diseases (NIAID).



Eva M King, MSc, PhD

Director of Scientific Services
Indoor Biotechnologies, Inc.

Dr. King joined Indoor Biotechnologies in 2005 and initially focused on the development of multiplex array technology for the detection of environmental allergens as well as allergen-specific IgE. Since 2015, as Director of Scientific Services, she directs the company's contract research, project management and client services activities related to allergen exposure assessment and allergy diagnostics.

She received her Master's degree in Biochemistry from the University of Bielefeld, Germany, and her Doctorate from the University of Oxford, England, where she investigated the human immune response to parasite infections. Dr. King is active in the Indoor Air Quality and Industrial Hygiene fields, and serves on the Board of Directors of the Indoor Air Quality Association (IAQA), and as chair of the IAQA Technical Program Committee.



Anna Pomés, PhD

Research Director
Indoor Biotechnologies, Inc.

Dr. Pomés' research focuses on the study of the molecular structure and function of allergens and their contribution to allergic disease. She is interested in elucidating the influence of molecular and biochemical properties of allergens in immunological mechanisms that lead to the development of allergy. Her studies have involved cloning, expression, purification and measurement of allergens, as well as the determination of the molecular structures of allergens from cockroach, mite, peanut, fungi and helminths. Recently, the structures of allergen/antibody complexes have been solved by X-ray crystallography to define conformational B cell epitopes, analyze antigenic determinants of allergens and produce hypoallergenic mutants for immunotherapy, in order to better understand the B cell repertoire in allergic disease. Dr. Pomés' is the principal investigator for the RO1 Award from the National Institute of Allergy and Infectious Diseases that funds the current studies.

Dr. Pomés obtained her PhD from the University of Barcelona-Consejo Superior de Investigaciones Científicas, Spain, did a Post-doctoral fellowship at Merck and co., Inc. (Rahway, NJ), and was faculty at the University of Virginia before becoming Research Director of Indoor Biotechnologies in 2001. She was awarded the Pharmacia Allergy Research Foundation Award on "Determinants of Allergenicity" in 2002. She is Fellow of the American Academy of Allergy, Asthma and Immunology since 2006, member of the European Academy of Allergy and Clinical Immunology and the Collegium Internationale Allergologicum, member and secretary of the WHO/IUIS Allergen Nomenclature Sub-Committee and serves as editor of Current Allergy and Asthma Reports.



Sabina Wünschmann, PhD

Head of Allergen Manufacturing, R&D
Indoor Biotechnologies, Inc.

Dr. Wünschmann received her PhD from the University of Bremen, Germany working on Hepatitis A virus and subsequently worked on Hepatitis C and HIV during her postdoctoral research in Infectious Diseases at the University of Iowa.

Dr. Wünschmann joined Indoor Biotechnologies in 2002 where her initial research involved molecular and structural properties of cockroach allergens to evaluate protein function and their role in causing allergic disease. Since 2007 her focus has been on allergen manufacturing and product-related allergen research and development. Dr. Wünschmann has extensive experience in protein expression and purification strategies, quality control and manufacturing of biologics under ISO 9001:2008 certification. Her interest in food allergens and molecular diagnostics involves manufacturing of diagnostic panels of food allergens and studies include analysis of IgE immunoreactivity, determination of biological activity and development of monoclonal Abs.



Martin Chapman, PhD

President/CEO
Indoor Biotechnologies, Inc.

Martin D. Chapman, PhD, is President and CEO of Indoor Biotechnologies, a company he founded and spun out of the University of Virginia. Indoor Biotechnologies is a biotechnology manufacturing company which produces molecular products for allergy and asthma research (www.inbio.com). The company has bio-manufacturing and R&D facilities in Charlottesville, Cardiff, UK, and Bangalore, India, and distributors in Japan, Korea and China.

InBio products include purified allergens for research and diagnostic use; test kits for assessing environmental allergen exposure; and Ventia, a consumer test for dust mites that is sold on Amazon.com. The company has an extensive range of laboratory services for allergen and food testing and provides contract research services. InBio has a patented dust collection device (DUSTREAM®) and has a single state-of-the-art test (MARIA®) for all common allergens in homes.

In 2015, InBio completed construction of a \$2.7MM bio-manufacturing and research facility in downtown Charlottesville, which also includes the CREATE art gallery/exhibition space and the Silk Mill Salon, a conference suite for 50 people. InBio supports emerging biotechnology and technology-based companies in Central Virginia with a focus on innovation, entrepreneurship and economic development.