

## Allergens: Science, Health Effects and Innovations

September 26<sup>th</sup>-27<sup>th</sup> 2017, Indoor Biotechnologies, Cardiff, UK

### Speaker profiles



#### **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 neighbourhoods in New York City. He is the principal investigator on the NIH (NIEHS) and HUD funded, NYC Neighbourhood Asthma and Allergy Study which is examining neighbourhood 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 paediatric population based studies and evaluating the relevance of the 'hygiene hypothesis' to inner-city asthma.



## **Paolo Matricardi MD**

*Charité Hospital, Berlin*

Paolo Maria Matricardi received his degree in human medicine in 1982 from the University of Rome "La Sapienza". He obtained his first specialty in Allergology and Clinical Immunology in 1986 and in Laboratory Medicine in 1990.

He directed the Immunology Laboratory of the Air Force military research center (Pratica di Mare, Rome, Italy), worked at the Institut de Biochimie, University of Lausanne, and at the Allergy Center of the Children's Hospital "Bambino Gesù" in Rome. From 2002 to 2005, he worked as Research Officer in the Chronic Respiratory Disease and Arthritis Unit of the World Health Organization (WHO) in Geneva.

In 2005, he moved to the Charité Medical University in Berlin, where he works as a Senior Scientist and Head of the Molecular Allergology and Immunomodulation Working Group, within the Pneumology and Immunology Department of the Pediatric Clinic.

He is a member of the American Academy of Allergy, Asthma and Immunology (AAAAI) and of the European Academy of Allergy and Clinical Immunology (EAACI). He chaired multiple task forces in EAACI and is elected Chairman of EAACI's Interest Group Allergy Diagnosis.

He has authored or co-authored ~ 200 research papers articles, editorials and book chapters on the subject of primary immunodeficiencies, antigen presentation, response to vaccination and respiratory allergies. He was invited speaker at over 200 national and international congresses. He is Deputy Editor of Pediatric Allergy Immunology and a member of the editorial board of other International Journals. He is the promoter and an Editor of the EAACI Molecular Allergology User's Guide.

He is an expert of the IgE response in humans and contributed since the nineties to the first developments of the so-called "Hygiene Hypothesis". He is currently studying the evolution at the molecular level of the systemic and nasal IgG and IgE responses to allergens in children. He is also developing novel diagnostic clinical decision support systems for pediatric allergy.



## **Ronald van Ree PhD**

*Academic Medical Centre, Amsterdam*

Ronald van Ree is Professor of Molecular and Translational Allergology at the Department of Experimental Immunology of the Academic Medical Centre of the University of Amsterdam, The Netherlands.

His research group focuses on elucidating the mechanisms of allergic sensitization and the role of allergen structure and exogenous environmental, microbial and dietary factors in this process.

Other areas of attention are component-resolved diagnosis and allergen standardization of diagnostic and therapeutic allergen products. He coordinates two EU projects evaluating the potential of recombinant hypo-allergens and novel adjuvants in clinical trials for the treatment of food allergy (FAST project) and allergic rhinitis (BM4SIT project).



## **Chun-Han Chan PhD**

*Food Standards Agency, London*

Chun-Han has a background in medical & molecular microbiology and started her career in natural pharmaceuticals before joining the FSA in 2003. Chun-Han has post graduate qualifications in medical microbiology (MSc) and molecular bacteriology (PhD). On joining the FSA she managed the microbiological food surveillance programme as well as providing expert advice on zoonotic diseases and the risk to the food chain.

Since 2008 she has been a member of the FSA's Food Allergy & Intolerance Branch leading on the science areas of allergen thresholds, analysis of allergens in food to underpin the policy around the adventitious presence of allergens in prepacked food.

Using scientific evidence to develop policy outcomes; Chun-Han currently leads on a diverse portfolio of work covering implementation of food allergen legislation, provision of risk assessments for food allergen incidents, development of allergen thresholds and analytical methods for allergens.



## **Frederic de Blay MD**

*Hopitaux Universitaires, Strasbourg*

Profile coming soon.



## **Oliver Pfaar MD**

*Centre for Rhinology & Allergology, Wiesbaden*

Profile coming soon.



## **Julia Zimmer, PhD**

*Lab Management and Allergen Product Quality Assessment  
Paul-Ehrlich-Institut, Langen, Germany*

Dr. Zimmer works in the Division of Allergology at the Paul-Ehrlich-Institut, the Federal Institute for Vaccines and Biomedicines in Germany. Her work as an assessor of allergen product quality is closely linked to her second line of work as a lab manager and researcher. The lab is specialized on the development and validation of *in vitro* methods for allergen product standardization. A current focus of research lies on birch pollen allergens, their prevalence in the respective products for allergen immunotherapy as well as the factors influencing birch pollen allergen content. Another main project, supported by the European Directorate for the Quality of Medicines (EDQM), is the establishment of recombinant allergen reference preparations in conjunction with immunoassays for allergen quantification. On this basis, the joint project aims to enable cross-product comparability by introducing both allergen reference standards and allergen-specific standard methods in the European Pharmacopoeia.

Dr. Zimmer is a biologist by training and obtained her PhD from the Free University of Berlin in cooperation with the Berlin-Brandenburg Center for Regenerative Therapies at the Charité Universitätsmedizin in Berlin, Germany.



## **James Hindley PhD**

*Executive Director, Indoor Biotechnologies, LTD.*

James Hindley, BSc, PhD is Executive Director of Indoor Biotechnologies Ltd a leading provider of products and services for allergy research. James obtained both his BSc in Medical Biochemistry and his PhD in Immunology from Cardiff University in 2006 and 2010, respectively. James initially worked with InBio as a student intern at their laboratory in Charlottesville, Virginia, USA during his undergraduate degree in 2004/2005. In 2012, following completion of his BSc and PhD, James set up a new UK facility for InBio in Cardiff, Wales. James now oversees a wide range of operations for the company, including R&D, contract research, analytical services and product sales to over 50 different countries. James is an active member of EAACI, BSACI and the ILSI Food Allergy Task Force. More recently James has headed the opening of InBio's new facility in India and was named one of Wales's Rising Stars of business.



## **Maria Oliver PhD**

*Senior Scientist, Indoor Biotechnologies, LTD.*

Maria Oliver, BSc, PhD joined Indoor Biotechnologies Ltd in June 2016 as Senior Scientist. Maria obtained her BSc in Biology from Cardiff University and began her career in science working for GE Healthcare, before working as a research assistant at Oxford University investigating primary immunodeficiencies. She then returned to Cardiff to undertake her PhD in viral immunology which she completed in 2012. Following a 4 year post doc within the Infection and Immunity department at Cardiff University, Maria left academic research to continue her scientific career with InBio, where her main responsibilities include overseeing bespoke contract research activities, internal R&D projects and commercial analysis within the lab.



## **Eva King 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, allergy diagnostics and product testing.

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 has served on the Board of Directors of the Indoor Air Quality Association (IAQA), and as chair of the IAQA Technical Program Committee.



## **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](http://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.