NVVI Spring Symposium 2024: "Breaking new grounds in Immunology"

Alice Denton, London, United Kingdom

Alice completed her PhD in Melbourne, Australia, under the supervision of Peter Doherty and Stephen Turner, exploring how CD8+ T cells fight influenza A virus infection. She then moved to the UK to work with Doug Fearon at the University of Cambridge, where she uncovered an important role for lymphoid fibroblasts in regulating immune homeostasis and adaptive immunity. Alice then moved to the Babraham Institute where she investigated the dysfunction of lymphoid fibroblasts ageing and the impact on the humoral response with Michelle Linterman. Alice has been based at Imperial College London since 2020, where her lab aims to understand how fibroblasts respond to vaccines and how this is linked to the humoral response, with a focus on improving vaccine efficacy in older people.

Wilfred Germeraad, Maastricht, the Netherlands

Wilfred Germeraad studied Medical Biology at the VU in Amsterdam (1980-1987), after which he performed his PhD studies (1988-1994) in Immunology at the Kyoto University in Kyoto, Japan. After a postdoc position at the Childrens Hospital Los Angeles in California, USA he moved to Rotterdam for a second postdoc position. In 1997 he joined U-BiSys, a start-up company from the Utrecht University that became Crucell. At Crucell, Wilfred was teamleader of the Dendritic Cell program. In 2003, he moved to Maastricht where he joined Prof Gerard Bos focussing on Immunotherapy for Cancer. Currently he is Associate Professor of Immunology at Maastricht University Medical Center and responsible for programs on the role of (CAR)-NK cells in the fight against cancer. Alongside Gerard, he co-established CiMaas BV in 2015, assuming the roles of Chief Scientific Officer (CSO) and Chief Operating Officer (COO). CiMaas boasts ownership of a state-of-the-art Good Manufacturing Practice (GMP) facility dedicated to the clinical manufacturing of Natural Killer (NK) cells. The primary objective of the company is to advance the field of cellular immunotherapy, specifically aiming to provide innovative treatments for cancer patients.

Martin Guilliams, Ghent, Belgium

More info can be found <u>HERE</u>.

Julia Jellusova, München, Germany

Julia Jellusova studied biology and received her PhD from the Friedrich-Alexander University in Erlangen, Germany. As a postdoc, she conducted research at the Sanford Burnham Prebys Medical Discovery Institute in La Jolla, USA, supported by a research fellowship from the German research foundation and a research grant from the Arthritis National Research Foundation. At the end of 2015, she joined the Albert Ludwigs University Freiburg as a junior group leader and since 2017 worked on her habilitation supported by a Margarete von Wrangell fellowship. In 2021, she was appointed to the professorship of Immune Signaling at the Technical University Munich. Since 2023 she is the speaker of the research unit "Crosstalk between B cell signaling and metabolism" funded by the German research foundation. She is one of the co-organizers of the seminar series "international B cell metabolism club" and writes books about the immune system for children.

Marion Koopmans, Rotterdam, the Netherlands

Prof. Marion Koopmans is director of the Department of Viroscience at Erasmus Medical Centre in The Netherlands, the WHO collaborating centre for Emerging Infectious Diseases, scientific director for Emerging Infectious Diseases of the Netherlands Centre for One Health NCOH and scientific director of the Pandemic and Disaster Preparedness Centre in Rotterdam/Delft The Netherlands. Her research focuses on emerging infections with special emphasis on unravelling pathways of disease emergence and spread at the human animal interface. Creating global networks to fight infectious diseases systematically and on a large scale is a common thread in Koopmans' work. Koopmans coordinates the EU funded consortium VEO, which develops a risk based innovative early warning surveillance in a One Health context, and is deputy coordinator of a recently awarded HERA funded network of centres of excellence for EID research preparedness. In 2021, Koopmans founded the Pandemic and Disaster Preparedness Centre PDPC, a research centre with a focus on the occurrence and prevention of pandemics and climate-related disasters, combining expertise from technical, biomedical, environmental and social sciences

Andrew McKenzie, Cambridge, United Kingdom

Andrew McKenzie investigates how the innate and adaptive arms of the immune system protect the body from infection, but can also lead to inappropriate inflammation and pathology. He has defined and characterised how cytokine networks orchestrate the cellular response to pathogens and how dysregulation of these regulatory pathways can lead to diseases such as asthma and allergy. His identification of the cytokine interleukin-13 and the subsequent unearthing of its central role in allergic asthma led to his discovery of type-2 innate lymphoid cells (ILC2). These cells secrete large quantities of cytokines and represent a new therapeutic target for intervention in inflammation and infection. Andrew was elected as a Fellow of the Academy of Medical Sciences in 2011.

Salome Pinho, Portugal

Salomé Pinho developed her PhD research at the Institute of Molecular Pathology and Immunology of Univ. Porto (IPATIMUP) and at Boston Medical School, MA, USA from 2006 to 2009. She performed her postdoctoral work at University of Porto in the glycobiology and glyco-immunology field. At present, she is Principal Investigator and Group leader at the Institute for Research and Innovation in Health (i3S) at University of Porto, Portugal and affiliated Professor at Faculty of Medicine at University of Porto. Her research activity is focused on the understanding of the role of glycosylation in the regulation of key proteins' functions involved in chronic inflammation, autoimmunity and cancer, envisioning potential clinical applications. The goal of her research group is to disentangle the spatiotemporal regulation of glycans in health and disease and to decipher its biological information to better understand its impact in defining the magnitude, the nature and the fate of the immune responses associated with inflammation, autoimmunity and cancer envisioning novel prognostic, diagnostic, and therapeutic strategies.

Caetano Reis e Sousa, London, United Kingdom

Caetano Reis e Sousa obtained a BSc from Imperial College in 1989 and a DPhil from Oxford in 1992. After a postdoc at NIH, he set up his lab in 1998 at the ICRF, later to become CRUK's London Research Institute and now subsumed into The Francis Crick Institute. Caetano's research centres on the mechanisms involved in sensing infection, cancer and tissue injury. He has helped to define the cells and pathways involved in innate immune detection of RNA viruses, fungi and dead cells. He was elected a member of EMBO and a Fellow of The Academy of Medical Sciences in 2006, a Fellow of the Royal Society in 2019 and and made an Officer of the Order of Sant'lago da Espada by his native Portugal in 2009. He is a recipient of numerous awards, including the 2017 Louis-Jeantet Prize for Medicine and the 2019 Bial Award in Biomedicine. Caetano is currently an Assistant Research Director and Principal Group Leader at the Crick where he heads the Immunobiology Laboratory. He is also Visiting Professor of Immunology at Imperial College and honorary professor at UCL and King's College London and co-founder of Adendra Therapeutics.

Read more: <u>https://en.wikipedia.org/wiki/Caetano_Reis_e_Sousa</u>

Ralph Stadhouders, Rotterdam, the Netherlands

Dr. Ralph Stadhouders is a molecular biologist and immunologist working at the Erasmus MC in Rotterdam, the Netherlands. He obtained his PhD with Prof. Frank Grosveld at the Erasmus MC, after which he moved to the Centre for Genomic Regulation in Barcelona for postdoctoral training with Dr.

Thomas Graf. In 2017 he returned to the Erasmus MC to establish his own research line in molecular immunology at the Pulmonary Medicine department. His laboratory is focused on obtaining a better understanding of how immune cell activity is controlled at a molecular level, with an emphasis placed on identifying mechanisms and cell subsets associated with severe asthma or failing anti-tumour immunity. His group also has a special interest in the non-coding part of our genome, and how it contributes to shaping the identity and responsive potential of immune cells. Dr. Stadhouders' laboratory has recently received support from the Dutch Research Council (ZonMW VIDI), the Dutch Lung Foundation (Longfonds) and the Dutch Cancer Society (KWF).

Sophie Ugolini, Marseille, France

Sophie Ugolini is a research director at the *at* the French National Institute for Health and Medical Research (INSERM) and the head of the Neural Regulation of Immunity laboratory at the Marseille-Luminy Immunology Centre (CIML), France. Her principal research goal is to understand how innate and adaptive immune responses are regulated to establish potent antimicrobial and antitumor defense without inducing excessive inflammation and auto-immunity. She has used natural killer (NK) cells as a cell model for studying the mechanisms of immune tolerance and responsiveness from the molecular to the cellular and systemic levels. Her team has analysed the mechanisms of immune defense in various infectious and cancer models, in both humans and mice, by genetic and functional approaches. More recently, she has been exploring the interactions between the nervous and immune systems. In particular, her laboratory has identified novel neuroimmune pathways playing a crucial role in the regulation of infectious diseases, inflammation and tissue repair. Among other distinctions, Sophie Ugolini received the "Duquesne award" from the Ligue nationale contre le cancer, the "Research award" from INSERM and the "Dandrimont-Bénicourt award" from the Institut de France. Her laboratory also received a Consolidator grant from the European Research Council (ERC) and an Impulscience grant from the Bettencourt Schueller Foundation. Read more: http://www.ciml.univ-mrs.fr/science/lab-sophie-ugolini/innate-lymphoid-cells-andneural-regulation-immunity

Monika Wolkers, Amsterdam, the Netherlands

Monika has always been fascinated by T cells. In her PhD with Ton Schumacher, she studied which type of antigens from infected or tumor cells are presented to T cells. During her postdoctoral training (Stephen Schoenberger and JP Medema), she focused on the molecular imprinting that is required to form long-term T cell memory. In 2010, Monika established her research group at Sanquin in Amsterdam, where she studies the molecular mechanisms that dictate CD8 T cell effector function. Specifically, her group investigates how post-transcriptional events define T cell function and how these regulatory nodes can be modified, with a specific focus on the role of RNA-binding proteins in these processes. Using molecular biology and immunological approaches, her lab demonstrated how, and which RNA binding proteins are responsible for the fine-tuning of T cell responses. Recently, her team also focusses on the fundamental rules that define the overall protein expression in T cells. These research lines combined feed into the pre-clinical work of her lab, which aims to bring TIL therapy for Non-Small Cell Lung Cancer (NSCLC) and pediatric solid tumors to the clinic. Monika holds an ERC consolidator grant and is a Senior Oncode Investigator.

Manfred Wuhrer, Leiden, the Netherlands

Manfred Wuhrer is a biochemist trained in Regensburg and Giessen, Germany. He is Prof. of Proteomics and Glycomics at the LUMC, and head of the Center for Proteomics and Metabolomics. In his research he uses mass spectrometry to study protein and lipid glycosylation in disease processes including cancer, autoimmune and infectious diseases. He has a particular interest in studying the diversity, (dys-)regulation and function of antibody glycosylation.