

BIO SPEAKERS

Leila Akkari



Leila Akkari is a group leader at the Netherlands Cancer Institute in the Tumor Biology and Immunology department and a senior member of the Oncode Institute. Her research focuses on innate immune cell plasticity applied to the biology of cancers, using elaborate murine models of primary tumors, including brain and liver cancers. Her group investigates and targets the functions of these immune cells in tumor maintenance and therapeutic resistance in order to identify therapeutic vulnerabilities to exploit. Dr Akkari is an expert on tumor-associated macrophages, as evident from grants she received (KWF (2017-YIG, 2019, 2021, 2022)); NWO-XL (2022); ERC-Synergy (2023); Vidi (2019), international brain cancer (BTCF) and myeloid cells in cancer (KWF) consortium grants and EMBO Young Investigator Program (2021) and several pioneering studies on this subject. Moreover, she is involved in science communication advocating for diversity and inclusion in the STEM community.

Anja ten Brinke



Anja ten Brinke is working as PI at Sanquin Research, the Dutch national bloodbank, within the Immunity and Inflammation priority and affiliated as PI to the Amsterdam UMC in the Netherlands. She initially studied the modulation of CD4 T cell responses by dendritic cells, while over the years the development of T cell dependent- B cell responses gained more of her attention. Her current research focusses on regulation of human B cell immunology, with a specific emphasis on T cell-dependent B cell responses to gain understanding of the pathogenesis of B cell-mediated autoimmune diseases and other unwanted antibody responses, e.g. alloimmunization against blood products. Her research integrates ex vivo analysis of antigen-specific CD4 T cell and B cells together with diverse in vitro B cell culture approaches to study human B cell differentiation.

Anja contributes with her research to several national and international (EU-funded) consortia.

Lidia Bosurgi



Lidia Bosurgi earned her master's degree in Medical Biotechnology from the University of Milano-Bicocca in 2006. Her thesis, conducted in F.H. Back's laboratory at Harvard University, focused on the effects of carbon monoxide on macrophages. In 2011, she obtained a Ph.D. in Molecular Medicine at San Raffaele University, Italy. During this time, she worked in A.A. Manfredi's lab, where her study centered on mechanisms to promote macrophage tissue remodeling functions in the damaged muscle. Concurrently, she served as a visiting Ph.D. student in U.H. Von Andrian's lab at Harvard University, investigating subcapsular sinus macrophage response during viral infection. Lidia joined Prof. C.V. Rothlin's lab at Yale University as postdoctoral fellow in 2012, focusing on how apoptotic cell sensing influences macrophage responses to type 2 cytokines. Since 2017, Lidia is a group leader at the University Medical Center Hamburg-Eppendorf and at the Bernard Nocht Institute for Tropical Medicine in Hamburg. Her lab studies how tissue-specific signals impact the functional heterogeneity of phagocytic macrophages in helminth infections and immune-mediated inflammatory diseases.

Keynote speaker: Gillian Griffiths



Professor Gillian Griffiths obtained her PhD at the MRC Laboratory of Molecular Biology with Cesar Milstein. After a post-doctoral fellowship at Stanford University, she started her own research laboratory at the Basel Institute for Immunology in Switzerland in 1990. She subsequently held posts at University College London, the Dunn School of Pathology, Oxford (1997-2007) before moving to the Cambridge Institute for Medical Research where she was Director 2102-2017. She was elected as a Fellow of the Academy of Medical Sciences (2005); EMBO (2006), and the Royal Society (2013).

She was awarded the Royal Society Buchanan medal (2019) in recognition of her ground-breaking research establishing the fundamental cell biological mechanisms that drive CTL killing, laying the foundations for the development of targeted cancer immunotherapy. Gillian becomes Chair of the Department of Cell Biology at Yale University, USA from April 1st 2025:

<https://medicine.yale.edu/news-article/gillian-griffiths-named-chair-of-the-department-of-cell-biology/>

Esther Nolte-t Hoen



Esther Nolte-t Hoen is associate professor at the Division of Infectious Diseases & Immunology of the Faculty of Veterinary Medicine Utrecht University, the Netherlands. Nolte-t Hoen has been active in research on extracellular vesicles (EVs) for around 20 years and has longstanding experience in studying the formation, composition, and function of extracellular vesicles in various (patho)physiological processes, including immune responses and virus/microbial infections.

Nolte-t Hoen received a European Research Council Starting Grant in 2013, after which she started her own independent research group.

She developed a high-resolution flow cytometry methodology to perform high-throughput analysis of individual EV and to sort-isolate EV subpopulations for downstream analysis. Being the first to have sequenced the small RNA transcriptome of extracellular vesicles, she also put strong emphasis on analyzing EV-contained RNA types as important players in the biological effects induced by EVs and as biomarkers for disease in liquid biopsies. In the last 8 years Nolte-t Hoen mainly studied EV-biology in the context of infections with RNA viruses and other microbial agents. This research aims to understand the role of EVs in host-pathogen relationships. In 2022 she acquired a VICI grant through the Dutch national funding scheme (NWO) to delineate the role of EVs in picornavirus-spreading and antiviral immune responses. She recently discovered virus- and host proteins and molecular pathways involved in the production of EVs and EV-enclosed viruses by infected cells.

Nolte-t Hoen has organized workshops and meetings, and gave scientific, educational, and 'meet the expert' lectures for the International Society for Extracellular Vesicles. She co-founded and is the current president of the Netherlands Society for Extracellular Vesicles, organizes EMBL (Heidelberg) hands-on training courses on EV research, and is deputy editor for the main journal in the EV field (Journal of Extracellular Vesicles).

Suzan Rooijackers



Suzan Rooijackers is Professor of Bacterial Infections & Immunity at the Department of Medical Microbiology at the University Medical Center Utrecht. Her group focuses on uncovering fundamental principles of the human immune response to bacterial infections, with the aim to develop strategies to enhance host immunity using therapeutic antibodies or vaccines. Prof. Rooijackers has made groundbreaking contributions to our understanding of human immunity against bacterial infections. Rooijackers played a leading role in uncovering how bacterial pathogens escape the human complement system, a key protein network in antibacterial immunity. The evasion molecules identified by her team are now utilized by

companies to develop more effective vaccines and are often featured in Immunology textbooks to educate undergraduates on how pathogens evade immune responses. In addition, her pioneering work revealed the first 3D structure of a key enzyme of the complement cascade. This provided a major step forward in understanding complement biology and opened development of anti-inflammatory drugs targeting C3 convertases. Rooijackers' fundamental work on complement and bacteria has attracted attention from several companies with an interest in developing antibody-based therapies. Given that antibodies can accelerate bacterial killing through activation of complement, there is industrial interest in exploiting the Rooijackers lab's unique assays and know-how to discover potent 'complementenhancing' antibodies, and their associated mechanisms. In a collaboration with a specialized antibody company (Genmab), her lab obtained new insights into the reactivity of antibodies in a functional immune response. This work resulted in a joint patent and has laid an important basis for a new successful research line in her lab that focuses on exploring therapeutic development of antibodies against drug-resistant bacteria.

Rinke Stienstra



My research is aimed at understanding the contribution of the immune system to both the development and complications of obesity and diabetes. A common thread throughout my academic career has been studying the interaction between energy metabolism and the immune system, a field referred to nowadays as immunometabolism. By combining mechanistic *in vitro* and animals studies with human intervention studies, our line of research is focused on deciphering the changes in immune cell metabolism and function with a specific emphasis on the innate arm including monocytes and macrophages. The ultimate goal is to find targets to restore immune cell function and thereby prevent or revert complications associated with obesity and diabetes.

Jan Van den Bossche



Jan Van den Bossche is Associate Professor at the Department of Molecular Cell Biology and Immunology at Amsterdam UMC. He leads the Translational Macrophage Immunometabolism group IMMUNOMETLAB. His young and enthusiastic team specializes in the immune/metabolic profiling and targeting of macrophages and other immune cells. The overall aim is to explain how metabolic reprogramming regulates macrophage subsets in different settings, focusing on cancer and cardiovascular disease. By unravelling key questions in macrophage immunometabolism, the goal is to demonstrate whether and how targeting immunometabolism can be used for future therapy. Current research topics investigate how immunometabolites, metabolic immune-cancer interactions, and environmental factors and lifestyle impact on immune cell metabolism, function, and disease. Over the past decade, Jan's team established an immunometabolic profiling

platform allowing the phenotypic, functional and metabolic characterization of macrophage and other immune subsets in a fast and cost-effective way.

Carola Vinuesa



Carola Vinuesa obtained a medical degree at the University Autonoma of Madrid (1993), undertook clinical training in the UK, and was awarded a PhD by the University of Birmingham (2000). As a Wellcome Trust International Research Fellow, she did postdoctoral work at the Australian National University (ANU) where she became a group leader (2006), Professor of Immunology (2010), and Head of Department (2011). In 2014 she founded and co-directed the Centre for Personalised Immunology, an NHMRC Centre of Research Excellence, as well as a sister Centre in Shanghai Renji Hospital. In late 2021 she became a Royal Society Wolfson Fellow and Assistant Research Director at The Francis Crick Institute (London, UK). She is an elected Fellow of the Royal Society of London (FRS), the Australian Academy of Science (FAA), the Australian Academy of Health and Medical Science (FAHMS) and the UK Academy of Medical Sciences (FMedSci). Carola has discovered novel T cell subsets that control B cell responses – follicular helper T cells (T_{fh}) and follicular regulatory T cells (T_{fr} cells) – as well as the mechanisms by which they regulate antibody responses and limit autoimmunity. Her recent discoveries are connecting genetic variation in humans to autoimmune diseases like lupus and illuminating disease pathogenesis. She has been the recipient of several prestigious awards, including the Australian Academy of Science Gottschalk medal, the Australian Science Minister's prize for Life scientist of the year, the 2023 Lupus Insight Prize (LRA) and Johann Anton Merck Award 2023.

Yvonne Vercoulen



Yvonne Vercoulen is a principal investigator and associate professor at the Center for Molecular Medicine of the UMC Utrecht, and a member of the Utrecht Young Academy. Throughout her career she has developed a fascination for immune regulation and aims to understand how errors result in tissue inflammation and cancer. She trained as a PhD student in T cell immune regulation at Utrecht University, and as a Marie-Curie international postdoctoral fellow in T cell receptor signal transduction at UC San Francisco.

Dr. Vercoulen's team works at the interface of immunology and cancer to identify cellular and molecular underpinnings of disease using spatial omics technology. The lab asks fundamental questions to understand how immune cells contribute to cancer development, prognosis and therapy response. The team has developed multiplex spatial analyses technology integrating microscopy with imaging mass cytometry and applies both protein and spatial RNA analyses to investigate the interplay between different cell types in the tissue. Studying tissue and intercellular communication in the tumor microenvironment is essential to understand the mechanisms of disease and therapy response. Dr. Vercoulen's team collaborates closely with clinicians and researchers from multiple disciplines and strives to drive the field of spatial tissue biology forward and bring this to a level of clinical application.

Sandra van Vliet



As a glyco-immunology specialist at Amsterdam UMC, Dr. van Vliet studies how immune cells employ glycosylation patterns as a blue-print to fine-tune immune responses. She has characterized multiple lectin receptors and was the first to describe the elaborate carbohydrate recognition profile of the C-type lectin MGL, demonstrating its unique specificity for tumor-associated glycans and its predictive value for patient survival and metastatic potential of tumors. With grants from the Dutch Cancer Society, Cancer Center Amsterdam and European Marie Curie MSCA ITN network she has established her own independent research group that aims to unravel how aberrant tumor glycans induce immune evasion as well as resistance to immunotherapy. Dr. van Vliet is a recipient of the female career award NWO-ASPASIA, which she used to establish the “Amsterdam UMC Women in Science Fund” that aims to accelerate the careers of young female scientists by providing grants for international work visits.

Felix Wensveen



Felix Wensveen obtained his PhD in 2010 at the University of Amsterdam in the field of fundamental CD8 T cell biology. For his postdoctoral education, he moved to the University of Rijeka, where he started his own group in 2015. In Rijeka, he shifted his focus initially to NK cell biology and later to systemic immunometabolism. This field, also known as sickness metabolism, investigates the way in which the immune system alters systemic metabolism following infection and in context of metabolic disease. Currently, his groups focuses on sickness metabolism of the liver and the endocrine systems.

Menno van Zelm



Menno van Zelm obtained his PhD studies from the Erasmus University (2002-2007). He held postdoc positions at the University of California San Diego (USA) and the Erasmus MC (the Netherlands), prior to becoming Lab Head at the Erasmus MC (2010). Since 2015, he heads the Allergy and Clinical Immunology laboratory from Monash University and the Alfred Hospital, where he founded the JMF Research and Diagnostic Center for Immunodeficiency Diseases in Melbourne, and was Deputy Head of Department (2017-2023). He was recruited to Erasmus MC in 2023 to head the Humoral Immune Memory laboratory. He is currently responsible for the careers of 14 people with research lines into Allergy, Primary Immunodeficiency and Vaccination Responses.

Dr. van Zelm has received continuous research grant support in the Netherlands and Australia. In 2010, he received the Heineken Young Scientists Award from the Royal Netherlands Academy of Sciences (KNAW). Menno van Zelm has published >180 papers in international peer-reviewed journals, and is named inventor on multiple patent applications.