

Speakers Thursday, June 29th

Plenary Session 1 - Environmental Influences on Lung Health

Prof dr Gerard van der Steenhoven, KNMI

Prof. Dr. Gerard van der Steenhoven is a physicist. He served as director general of the national weather service in the Netherlands (KNMI) from 2014 until 2023. He holds a special professorship at the University of Twente in the domain of weather and climate. Furthermore he is active as an advisor in this domain for the Ministry of the Interior. Van der Steenhoven is also actively involved with the Climate Initiative the Netherlands (KIN), initiated by NWO and KNAW. Van der Steenhoven gives frequent public lectures on climate change and is member of various evaluation committees and advisory boards.

Prof Roel Vermeulen, Division of Environmental Epidemiology, Institute for Risk Assessment Sciences (IRAS), Utrecht University, Utrecht, The Netherlands



Prof. Roel Vermeulen is a Professor of Environmental Epidemiology and Exposome Science at the Institute for Risk Assessment Sciences (IRAS), Utrecht University and at the Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht.

Prof Vermeulen's scientific research focuses on environmental risk factors for cancer, cardiometabolic and neurological diseases through inter and transdisciplinary research. One of the current research areas is the exploration of new methods for quantifying the external and internal exposome.

Prof Barbro Melgert, University of Groningen



Prof Dr Barbro Melgert is a respiratory immunologist at the University of Groningen. Her group investigates how the immune system in the lung reacts to exposures like allergens, cigarette smoke and microplastics and how innate immune cells can be harnessed to treat chronic respiratory diseases like asthma, COPD and lung fibrosis.

Scientific Session 1: Back to the Future: How research has moved clinical care forward

Dr Noor Rikkers-Mutsaerts, Leiden University Medical Centre (LUMC) / Willem Alexander Children's Hospital (WAKZ)



Noor Rikkers-Mutsaerts is a Pediatric Pulmonologist, connected to the Leiden Medical University Centre. Since 2014 she is also an advocate for a Smokefree Generation. She was the initiator of the Taskforce Smokefree Start (www.rookvrijestart.nl, obstetric and youth healthcare) and part of "Artsen slaan Alarm", a partnership of doctors who address urgent matters via striking actions. Recently they took action on TikTok, to prevent influencers from visibly vaping in their posts (www.artsenslaanalarm.nl), in order not to tempt young children to start vaping.

Scientific Session 2: Stem cells: Basic to Clinic



Dr Rob Hynds, UCL

Rob leads the Epithelial Cell Biology in ENT Research (EpiCENTR) Group at the University College London Institute of Child Health in collaboration with Mr. Colin Butler, an ENT surgeon. The group works on airway epithelial stem cell biology, ageing, and the development of cell and gene therapies in the context of rare paediatric diseases.

Prof Marc Vooijs, Maastricht University

Marc Vooijs is a professor and chair of the radiotherapy department at Maastricht University and research director at Maastro Clinic.



His group is interested in identifying key factors in the tumor microenvironment that provide actionable targets to improve survival without affecting healthy tissue function. His work is supported by ERC, NWO, and KWF, among others. He is a board member of the Dutch Society of Radiobiology (NVRB) and a former member of the board of directors of the European Society of Therapeutic Radiation Oncology (ESTRO)

https://www.linkedin.com/in/marc-vooijs-b0b4686/

Dr Padmini Khedoe, Leiden University Medical Center



I am a postdoctoral scientist in the PulmoScience lab at the Department of Pulmonology in the LUMC. I performed my PhD project on the link between COPD and cardiovascular disease and the potential of reparative/regenerative therapies in these diseases. After obtaining my PhD in 2017, I focused my research on developing human preclinical models (e.g. co-cultures, organoids) of lung repair that can be used to advance pulmonary regenerative medicine towards the clinic in emphysema and fibrotic lung disease. Currently, I am workin on a translational project studying the regenerative potential of mesenchymal stromal cell (MSC) therapy in COPD patients with emphysema. In this project, we apply single-cell mass cytometry (scMC) and

imaging mass cytometry (IMC) to profile immune cells upon MSC treatment in lung tissue and blood. Within this project, we study the interaction between immune cells and lung structural cells (e.g. epithelial, endothelial cells), and examine alterations in these cellular interactions in respiratory disease such as COPD and a subgroup of COPD patients with α -1-antitrypsin deficiency, using spectral flow cytometry.

Preliminary Programme* Friday, June 30th

Scientific session 3 LAN Session - Implementation - COPD Hospital Admissions



Lidewij Sekhuis is a senior project manager at the Lung Alliance Netherlands (LAN) and specializes in interdisciplinary care pathways. Under her leadership, the LAN has developed and tested a care pathway that aims to reduce the number of hospitalization days for COPD lung attacks. Since then, the care pathway is widely known, supported by professionals and has been adopted in a National Quality Standard. She is also

coordinator of www.inhalatorgebruik.nl and manages the care pathway for inhalation medication. Background: MSc in Pharmaceutical Sciences and Health Sciences.



Prof dr. Huib Kerstjens, UMCG, Groningen



Huib Kerstjens is a professor of pulmonology in the UMC Groningen and currently president of the NRS. His clinical and research interest is in improving care for patients with COPD or asthma, especially in preventing and managing lung attacks. He has recently headed the multi-disciplinary National Care Pathway for COPD hospitalizations. He has published extensively on exacerbations (lung attacks), and among others on the role of eosinophils therein. He is looking for new ways to accelerate improvements in patient care.

Speaker bio will follow

Scientific session 4 Longfonds project reports

Dr Jurjan Aman, Amsterdam UMC, Amsterdam



Throughout my career I have been intrigued by endothelial injury, not only by the mechanisms that lead to vessel injury during inflammation, but also by its consequences for lung function and by the fact that there is currently no drug to reverse vascular injury. For this reason, my activities as pulmonologist and as fundamental researcher focus on understanding the role of endothelial injury in lung disease. Combining fundamental research with my current clinical work as a pulmonologist in pulmonary vascular disease allows me to study pulmonary vascular disease at a molecular level, and to translate basic insights into novel therapies in the clinics.

Dr Marieke Duiverman, UMCG, Groningen



Dr. Marieke Duiverman is pulmonologist at the Home Mechanical Ventilation (HMV) Center of the University Medical Center Groningen. Her main research interest is long-term ventilatory assistance in severe COPD. She is currently principal investigator of studies on mechanisms of NIV in stable COPD and of a RCT investigating the efficacy of nasal high flow in frequently exacerbating COPD patients. Dr Duiverman has special research interest in respiratory monitoring. She was recently granted by NWO to start the NOCTIVENT trial to push telemonitored follow-up of HMV.

Dr Gerdien Tramper, Franciscus Gasthuis & Vlietland, Rotterdam



Dr. Gerdien Tramper is a pediatrician and senior researcher working in the Franciscus Gasthuis & Vlietland in Rotterdam. Her current research projects focus on microbiology and immunology in patients with (risk for) pulmonary diseases; antimicrobial stewardship; and treatment of neonatal infections. She is involved in co-organizing of the national course 'Antibiotics in children', is chairing the EAACI working group 'Infections' and task force 'Rational use of antibiotics in allergic diseases' and is Dean for Research in Franciscus.

Scientific session 5 Just breathe - the science of inhalation and exhalation

Dr Job van Boven, University Medical Center Groningen



Dr Job FM van Boven is a consultant respiratory pharmacist, associate professor of cost-effective drug use and founder of the multidisciplinary medication adherence expertise center (MAECON) at the UMCG. He chairs the 40-country European Commission funded COST Action on digital technologies for adherence (ENABLE) as well as the ERS Clinical Research Collaboration on digital respiratory health (CONNECT). He is (principal/co) investigator of several randomized clinical trials involving digital inhalers and spacers in asthma and COPD.

Dr Paul Brinkman, Erasmus Medical Center, Rotterdam



Dr. Paul Brinkman is a biomedical engineer with over 13 years of experience in the field of pulmonary research. His work focuses on the development of new medical technology, with specific focus on exhaled markers. He's Project Coordinator of ONELAB (Orchestrating next-generation mobile modular laboratories for pandemic monitoring preparedness), a project within the Horizon Europe Framework Programme (HORIZON-CL3-2021-DRS-01) that includes international 22 partners.

Dr Annelies Zwitserloot, University Medical Center Groningen Speaker bio will follow

Scientific session 6 Novel Methodologies from the clinic to the lab

Dr Anne van der Does, Leiden University Medical Center, Leiden



Anne van der Does, Ph.D. is Assistant Professor at the PulmoScience Lab at the Leiden University Medical Center, the Netherlands. Her work is focused on (chronic) lung diseases, with particular focus on host defense and repair, using advanced cell cultures. Related to this focus, she was awarded a Marie Curie fellowship twice, of which the second included a one-year visit at Emulate Inc. -a pioneer company in Organs-on-Chips technology- to use their Organ-Chip platform.

Dr Katherina Stankova, Delft University



Dr. Staňková is an associate professor at TU Delft and Delft Technology Fellow. She focuses on both theory of differential and evolutionary games and its application in managing evolving systems. In recent years, she has been focusing mostly on gametheory based treatments of metastatic cancer and designing evolutionary therapies, i.e. therapies that anticipate and steer treatment-induced resistance in cancer cells. These treatments show a great promise in clinical trials. For this work, she received the 2020 NWO Stairway to Impact award. She leads a number of national and international projects, including the recently started NWO VIDI project "ANTICANCER: Game

Theory Empowered by Data Science and Control Theory to Improve Treatment of Metastatic Cancer", where she collaborates with EMC and MUMC+ to model NSCLC and improve its treatment and which will be a subject of her talk.

Dr Nuria Gavara, University of Barcelona



Dr Núria Gavara was trained as a physicist before obtaining a PhD on Cell Biophysics both at the University of Barcelona (Spain). She then carried out postdoctoral research at the National Institutes of Health (NIH, USA) and the University of Goettingen (Germany). In 2013 she was appointed Lecturer in Biomedical Engineering within the School of Engineering and Material Sciences at Queen Mary, University of London. Since 2020, her lab is based at the Medical School of the University of Barcelona, where her research focuses on the lung, in particular the mechaobiology of cells and extracellular matrix. Her lab uses a broad cellular biophysics toolbox, including Atomic Force Microscopy, Traction Force Microscopy, high-throughput imaging, advanced image quantification pipelines and machine learning methods.



Plenary Session - Out of the box: Society and technology influencing Respiratory Disease

Dr Leticia Kawano-Dourad, Hcor Research Institute, Hospital do Coracao, Sao Paulo, Brazil



Leticia Kawano-Dourado is a respiratory, critical care physician and researcher specialized in Interstitial Lung Diseases. She is the research team lead at HCOR Research Institute in Sao Paulo Brazil; Researcher at the Pulmonary Division of the University of Sao Paulo, Brazil, and Researcher and Social Media director at MAGIC Foundation, Oslo, Norway. Leticia is a United Nations-verified scientific communicator on COVID-19 (team halo project).

Adriana lamnitchi is Professor, Chair of Computational Social Sciences at Maastricht University.



Her current research focuses on social media forensics, network science, and distributed systems. She holds a PhD in Computer Science from The University of Chicago and is an ACM Distinguished Member, IEEE Senior Member, and recipient of the US National Science Foundation CAREER award.