



## NRS Advanced Technologies in Lung Research

Friday April 12, 2024, University of Utrecht – David de Wied Building

*Topics of interest 2024: High Dimensional Microscopy, (Spatial) Metabolomics, Human induced pluripotent stem cells, Epigenetics*

### NRS Advanced Technologies in Lung Research –Symposium

This yearly symposium will be an educational journey through exciting current developments in lung research focusing on novel powerful technology. The program includes lectures by internationally renowned experts and research presentations by advanced PhD students and post-docs. Furthermore, there will be parallel workshops addressing how novel technological approaches can boost your scientific creativity and help you to answer specific research questions.

#### **From 9:30 Arrivals and Registration with tea and coffee**

10:00-10:10	Opening introduction	
10:10-10:50	Mapping the pulmonary immune landscape in health and disease	Prof. Clare Lloyd, Imperial College, London
10:50-11:30	Metabolomics and mass spectrometry imaging - a combined approach to investigate lipid mediators in the airways	Prof. Craig Wheelock, Karolinska Institute (KI), Stockholm
	Short Break	
11:40-12:20	Utilizing iPSC derived airway epithelium for modelling respiratory diseases	Dr. Ruth Olmer, German Center for Lung Research (DZL), Hannover
12:20-13:00	Epigenetic control of immune responses	Dr. Ralph Stadhouders, Erasmus MC, Rotterdam
13:00-14:00	Meet the speaker Lunch	
14:00-15:00	<b>Workshop (parallel sessions)</b>	
	Session 1: High Dimensional Microscopy	Prof. Clare Lloyd & Dr. Wilco Nijenhuis
	Session 2: Metabolomics	Prof. Craig Wheelock & Shahriyar Shahbazi Khamas
	Session 3: Human induced pluripotent stem cells	Dr. Ruth Olmer & Dr. Alejandro Rodriguez Ruiz
	Session 4: Epigenetics	Dr. Ralph Stadhouders & Dr. Maaïke de Vries
15:00-15:30	Coffee break	
15:30-16:50	<b>Junior session: View into the Future</b>	
15:30-15:50	Towards modelling emphysema using hiPSC-derived alveolar epithelial cells	Dr. Alejandro Rodriguez Ruiz, Leiden UMC, Leiden
15:50-16:10	Breath beyond boundaries: leveraging exhaled metabolites in asthma and therapeutic drug monitoring	Shahriyar Shahbazi Khamas, Amsterdam UMC, Amsterdam
16:10-16:30	Epigenetic clock – Fact or fiction? Exploring its potential in COPD	Dr. Maaïke de Vries, University Medical Center Groningen, Groningen
16:30-16:50	From nose to nanoscopy: 3D imaging of human airway epithelia	Dr. Wilco Nijenhuis, University Utrecht, Utrecht
16:50-17:00	Closing highlights/take home messages	

