**Title symposium:** Advanced Technologies in Lung Research

**Date**: Friday March 31, 2023

**Location**: University of Utrecht – David de Wied Building

*Topics of interest 2023*: Lung-on-Chip, scRNA-seq, CyToF imaging, genome editing.

**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.

**10:30-13:00 Morning session** (Reception from 09:30 with coffee)

**10:30 - 10:40** Opening en introductie van symposium

**10:40 - 11:15** Spreker 1 Lung-on-Chip *Thomas Geiser*,

**11:15 - 11:50** Spreker 2 scRNAseq: *Amanda Oliver*

**11:50 - 12:25** Spreker 3 CyTof: *Padmini Khedoe & Vincent van Unen*

**12:25 – 13:00** Spreker 4 Gene editing: Kyungtae Lim

**13:00-14:00** **Interactive Lunch**

**14:00-15:00** **Workshop (parallel sessions)**

Session 1: CyToF

Session 2: Genome Editing

Session 3: scRNA seq

Session 4: Lung-on-Chip

**15:00 – 15:30 Coffee break**

**15:30-16:50 Junior session: View into the Future**

**15:30 - 15:50** Breathomics 🡪 Dominic Fenn (Amsterdam UMC): 16s rRNA gene sequencing and exhaled breath metabolomics in vitro and in vivo across various patient settings

**15:50 - 16:10** Mass spec imaging 🡪 Rick Ursem (LUMC) molecular changes in malignant peripheral nerve sheath tumor (MPNST)

**16:10 - 16:30** Mandy van Gulijk, ErasmusMC

**16:30 - 16:50** Gimano amatngalim UMCU; cell culture and imaging

**16:50-17:00** Closing highlights/take home messages