

Symposium of the NRS Platform animal models in pulmonary research

When: October 17th, 2014.

Location: David de Wied gebouw, M2.01, Universiteitsweg 99, 3584 CG Utrecht, de Uithof.

9.00-9.15 hr. **Welcome and introduction.**

Gert Folkerts (*Pharmacology, Utrecht University*), Rudi Hendriks (*Pulmonology, Erasmus MC, Rotterdam*) and Gerry Wagenaar (*Pediatrics, LUMC, Leiden*).

9.15-11.00 hr. **Perinatal lung injury.**

- * Using mouse models to understand how the oxygen environment at birth influences children's health.
Michael O'Reilly, Pediatrics, University of Rochester, Rochester, USA.
- * The oxygen environment at birth is a redox regulator of lung stem cell expansion.
Min Yee, Pediatrics, University of Rochester, Rochester, USA.
- * Lung development and lung pathologies in perinatology: lessons from translational ovine models.
Monique Willems, Pediatrics, MUMC, Maastricht.

11.00-11.20 hr. **Coffee.**

11.20-12.20 hr. **Pulmonary arterial hypertension and emphysema.**

- * New insights in PGP synthesis and breakdown: Implications for the development of lung emphysema.
Mojtaba Abdul Roda, Pharmacology, UIPS, Utrecht University, Utrecht.
- * Novel animal models for pulmonary arterial hypertension.
Chris Happé, Pulmonology, Free University MC, Amsterdam.

12.20-12.50 hr. **Lunch.**

12.50-15.05 hr. **Asthma.**

- * The role of dendritic and epithelial cells in asthma.
Hamida Hammad, VIB Inflammation Research Center, University of Ghent and Respiratory Medicine, University Hospital Ghent, Ghent, Belgium.
- * Vitamin D3 is effective as an adjuvant for subcutaneous immunotherapy in a grass pollen-driven mouse model of asthma.
Laura Hesse, Pathology and Medical Biology, UMCG, Groningen.
- * Sequential effect of subcutaneous immunotherapy for birch pollen allergy on Th2 cell suppression and attenuation of airway hyperreactivity in a murine asthma model.
Leonie van Rijt, Experimental Immunology, AMC, Amsterdam.
- * Eosinophilic or neutrophilic asthma: a decisive role of the NF-kappaB regulator A20 in dendritic cells in a house dust mite driven mouse model of asthma.
Heleen Vroman, Pulmonary Medicine, Erasmus MC, Rotterdam.

15.05-15.25 hr. **Tea and coffee break.**

15.25-16.25 hr. **Bacterial and ventilator-induced lung injury.**

- * Pro-resolving activity by the HDAC-inhibitor phenylbutyrate reduces murine *Pseudomonas aeruginosa*-induced lung inflammation.

Anne van der Does, Physiology & Pharmacology, Karolinska Institutet, Stockholm, Sweden.

- * Age-dependent changes in the pulmonary renin angiotensin system in rats with ventilator- and/or LPS-induced lung injury.

Laura Schouten, Intensive Care Medicine and Paediatric Intensive Care, AMC, Amsterdam.

16.25-17.25 hr. **Airway hyperreactivity and remodelling.**

- * Epac1 and Epac2 are differentially involved in inflammatory and remodelling processes induced by cigarette smoke.

Anouk Oldenburger, Molecular Pharmacology, University of Groningen, Groningen.

- * Mouse models to study the role of Protocadherine-1 and E-cadherine in allergic airway inflammation and hyperreactivity

Martijn Nawijn, Pathology and Medical Biology, UMCG, Groningen.

17.30-18.30 hr. **Network meeting with drinks and Italian Buffet.**