Symposium of the NRS Platform animal models in pulmonary research

When: October 14th, 2016

Location: Marinus Ruppert building, room 042, Leuvenlaan 21, 3584 CE Utrecht, de Uithof

9.30-10.00 hr Welcome and introduction

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

10.00-10.45 hr Drug development in asthma and COPD

* Development and use of novel mouse models to develop drugs against asthma and COPD.

Klaus Erb, Boehringer Ingelheim, Germany.

10.45-12.45 hr Lung inflammation, pulmonary hypertension and airway narrowing

- * Mechanisms underlying pollutant-induced inflammatory lung responses.
 - Katrien de Grove, Respiratory Medicine, Ghent University Hospital, Belgium.
- * Treatment with a lysate of Helicobacter pylori reduces allergic airway inflammation in mice Yolanda van Wijck, *Pulmonology, Leiden University Medical Center, Leiden*.
- * Parenchymal disruption by *ex vivo* elastase treatment enhances airway narrowing in mice precision cut lung slices.
 - Eline van Dijk, *Pharmacology, Groningen University, Groningen*.
- * Mouse models for inflammation driven pulmonary hypertension.
 - Thomas Koudstaal, Pulmonary Medicine, Erasmus MC, Rotterdam.

12.45-13.15 hr Lunch

13.15-14.00 hr Lung inflammation II

* The use of murine models to probe the opposing roles of leukotriene A4 hydrolase in regulating pulmonary inflammation.

Robert Snelgrove, National Heart and Lung Institute, Imperial College London, UK.

14.00-15.30 hr Perinatal intervention and viral infection

- * Immune programming through maternal dietary intervention.
 - Astrid Hogenkamp, Pharmacology, Utrecht University, Utrecht.
- * Altered repair potential and gene expression profile of CD146[†] endogenous lung mesenchymal stromal cells in experimental bronchopulmonary dysplasia.
 - Jennifer Collins, Pediatric Surgery, ErasmusMC, Rotterdam.
- * In vivo modeling of Respiratory Syncytial Virus infection.
 - Kuldeep Kumawat, Pediatrics, Utrecht University Medical Center, Utrecht.

15.30-16.00 hr Tea and coffee break

16.00-17.00 hr Imaging and lung cancer

- * Nanoscale lung illumination: Local cyclic nucleotide microdomains of structural lung cells Haoxiao Zuo, *Pharmacology, Groningen University, Groningen*.
- Normal tissue effects and tumor control in lung cancer models
 - Marc Vooijs, Radiotherapy, Maastricht University Medical Center, Maastricht

17.00-18.30 hr Network meeting with drinks and Italian Buffet