

ERS Research Seminar

Early Origins of Lung Disease: an interdisciplinary approach

11 – 12 November 2019

Lisbon, Portugal

Monday, 11 November 2019

- 08.30 – 08.45 Registration
- 08.45 – 09.00 Introduction and welcome
Dr. Niki Ubags (Switzerland) and Dr. Jennifer Collins (Netherlands)

Session I – Pre- and perinatal lung development

Chairs: Dr. Charlotte Dean (UK) and Dr. Rory Morty (Germany)

- 09.00 – 09.45 *Fetal and neonatal lung development: the impact of multiple pre- and postnatal exposures*
Prof. Suhas Kallapur (USA)
- 09.45 – 10.00 *OP1: Prenatal disturbances in endogenous epithelial stem/progenitor pools – first hits to adverse pulmonary outcomes* - Ms. H  lene Widowski (Netherlands)
- 10.00 – 10.20 Coffee break
- 10.20 – 10.50 *A vascular perspective on fetal lung development in health and disease*
Dr. Robbert Rottier (Netherlands)
- 10.50 – 11.05 *OP2: Some new thoughts on the 3-dimensional form and function of the distal air exchange surfaces within the lung* – David Warburton (USA)
- 11.05 – 11.30 General discussion
- 11.30 – 12.15 **Poster session**
Chairs: Dr. Niki Ubags (Switzerland) and Dr. Jennifer Collins (Netherlands)
- 12.15 – 13.30 Lunch

Session II – Priming the developing lung for disease: Cellular mechanisms

Chairs: Dr. Mandy Laube (Germany) and Prof. Dr. Suhas Kallapur (USA)

- 13.30 – 14.00 *Resident alveolar macrophages and their role in lung alveolarization and BPD*
Dr. Rory Morty (Germany)
- 14.00 – 14.15 *OP3: Live imaging of alveologenesis in precision-cut lung slices reveals dynamic epithelial cell behaviour* – Charlotte Dean (UK)
- 14.15 – 14.45 *Role of lung mesenchymal stromal cells in the developing lung and BPD*
Dr. Jennifer Collins (Netherlands)
- 14.45 – 15.15 General discussion
- 15.15 – 15.30 Coffee break

Breakout Sessions

- 15.30 – 15.40 Introduction to breakout sessions
- 15.40 – 17.10 Break out session 1: Pre- and postnatal exposures: priming the developing lung for disease
Moderators/chairs: Dr Niki Reynaert and Prof Dr Sophie Lanone
Panel:
 - Prof Dr Suhas Kallapur
 - Dr Robert Rottier
 - Dr Rory Morty
 - Dr Mandy Laube
- 17.10 – 18.40 Break out session 2: Early life host-microbe interaction: importance in the development of respiratory diseases
Moderators/chairs: Prof Hermelijn Smits and Dr Miguel Alejandro Alcazar
Panel:
 - Prof Dr Sylvia Knapp
 - Prof Dr Clare Lloyd
 - Prof Dr Deborah Strickland
 - Dr Céline Pattaroni
 - Dr Wouter de Steenhuijsen Piters
- 18.40 – 19.00 General discussion breakout sessions

Tuesday, 12 November 2019

Session III: Immune maturation and the development of respiratory disease

Chairs: Jasmijn Schrumpf (Netherlands) and Dr. Gerdien Tramper (Netherlands)

- 08.00 – 08.30 Development of the pulmonary immune system in the neonatal period
Dr. Sylvia Knapp (Austria)
- 08.30 – 08.45 OP4: Single-cell platforms for the analysis of local airway responses to allergen
– Hermelijne Smits (Netherlands)
- 08.45 – 09.15 Development of allergic immunity in the lung during early life
Prof. Dr. Clare Lloyd (UK)
- 09.15 – 09.45 Immune maturation and priming in the 'Atopic March'
Dr. Niki Ubags (Switzerland)
- 09.45 – 10.10 General discussion
- 10.10 – 10.30 Coffee break

Session IV: Early life exposures and susceptibility to disease

Chairs: Dr. Rachel Foong (Australia) and Dr. Christoph Beisswenger (Germany)

- 10.30 – 11.00 Transplacental immune modulation in the prevention of asthma development
Prof. Dr. Deborah Strickland (Australia)
- 11.00 – 11.15 OP5: FoxO1 activation protects against IL-6-mediated perinatal metabolic programming of bronchial and vascular remodeling - Miguel Alejandro Alcazar (Germany)

- 11.15 – 11.45 Host-microbe interactions in the neonatal lung
Dr. Céline Pattaroni (Australia)
- 11.45 – 12.15 Early life respiratory infections: diagnosis, prognosis and treatment
Dr. Wouter de Steenhuijssen Piters (Netherlands)
- 12.15 – 12.45 General discussion
- 12.45 – 13.30 Concluding remarks
Dr. Niki Ubags (Switzerland) and Dr. Jennifer Collins (Netherlands)
- 13.30 Lunch on departure