Injury and Repair Mechanisms in Chronic Airways Disease

Schedule of Talks

Day 1

09:00 - 09:50 Registration

09:50 – 10:00 Welcome and introductions

10:00 – 10:45 Special Introductory Lecture

Jeffrey Whitsett (Cincinnati Children’s Hospital Medical Center, US)
Transcriptional networks in the pathogenesis of chronic pulmonary diseases

Session 1 Genes and the Environment in Disease Pathogenesis

Chairs: Jeffrey Whitsett and Andrew Bush

10:45 – 11:15 Bart Lambrecht (University Hospital Gent, Belgium)
Epithelial-dendritic cell communication in asthma

11:15 – 11:45 Morning break

11:45 – 12:15 Miriam Moffatt (Imperial College, London, UK)
Epithelial susceptibility genes in asthma and COPD

12:15 – 12:45 Gerard Koppelman (University of Groningen, The Netherlands)
Gene-environmental interactions in asthma

12:45 – 13:00 Despo Ierodiakonou (University of Groningen, The Netherlands)
Transforming growth factor beta-1 gene and lung function decline in asthma patients

13.00 – 13.15 Sijranke Post (University of Groningen, The Netherlands)
Different biochemical properties activities of house dust mite induce divergent epithelial
and inflammatory responses

13:15 – 13.30 Kieran Matharu (Abcam)
Abcam

13:30 – 14:30 Lunch

Session 2 Translating Environmental Exposures into Acute and Chronic Mucosal Disease

Chairs: Andrew Halayko and Donna Davies

14:30 – 15:00 Pieter Hiemstra (Leiden University Medical Center, The Netherlands)
Disordered epithelial innate immunity in chronic airway disease

15:00 – 15:30 Tom MacDonald (Barts and the London School of Medicine and Dentistry, UK)
Underlying mucosal mechanisms of inflammatory bowel disease

15:30 – 15:45 Man-Chi Wong (Leiden University Medical Center, The Netherlands)
Elastase-induced emphysema does not affect atherosclerosis development in APOE*3-Leiden mice

15:45 – 16.00 Martijn Nawijn (University of Groningen, The Netherlands)
Airway epithelial Protocadherin-1 expression is regulated by house-dust mite and
cigarette smoke exposure in mice

16:00 – 16:30 Afternoon break
Injury and Repair Mechanisms in Chronic Airways Disease

16:30 – 17:00 Sebastian Johnston (National Heart and Lung Institute, UK)
The role of virus infection in the pathogenesis of asthma and COPD

17:00 – 17:30 Andrew Bush (Imperial College London, UK)
Airway inflammation and remodeling in the origins and progression of asthma in children

17:30 – 19:30 Poster session and drinks reception
17:30 – 18:30 Odd numbered posters to present
18:30 – 19:30 Even numbered posters to present

Day 2
09:00 Special Lecture
John Iredale (University of Edinburgh, UK)
The molecular basis for tissue remodeling in chronic liver disease

Session 3 How does Airway Remodeling Occur
Chairs: Bart Lambrecht and Clare Lloyd
09:45 – 10:15 Barry Stripp (Duke University Medical Center, US)
Airway regenerative capacity following injury in health and disease
10:15 – 10:45 Darryl Knight (University of British Columbia, Canada)
Disordered epithelial function in the origins of asthma
10:45 – 11:00 Aron Jaffe (Novartis Institutes for BioMedical Research, US)
Establishment of a novel 3D culture model of airway epithelial morphogenesis

11:00 – 11:30 Morning break
11:30 – 11:45 Rosemary Norton (University of East Anglia, UK)
Finding a 2D in vitro model to study lung inflammation
11:45 – 12:15 Donna Davies (University of Southampton, UK)
Disordered epithelial mesenchymal communication in asthma
12:15 – 12:45 Andrew Halayko (University of Manitoba, Canada)
The role of mesenchymal cells in chronic asthma
12:45 – 13:00 Samuel Wadsworth (Providence Heart & Lung Institute, Canada)
PneumaCult™-ALI: an improved media formulation for the differentiation of primary human bronchial epithelial cells in air-liquid interface culture
13:00 – 13:15 Carol Jones (Novartis Institutes of Biomedical Research, UK)
Origins of mucus producing goblet cells in human airway diseases

13:15 – 14:15 Lunch
Session 4  New Insights into Airway Remodeling  
*Chairs: Darryl Knight and John Iredale*

14:15–14:45  Song Guo Zheng (University of Southern California, US)  
*Therapeutic effects of TGF-β-induced regulatory T cells on established autoimmune and inflammatory diseases*

14:45–15:15  Clare Lloyd (National Heart and Lung Institute, UK)  
*Modeling repair and resolution in vivo*

15:15–15:30  Pawan Sharma (University of Manitoba, Canada)  
*Inhibition of TGFβ1 induced fibrosis through a novel cross-talk between PKA and MAP kinase pathway*

15:30–15:45  Ceri Harrop (The University of Manchester, UK)  
*Cross-talk between lung fibroblasts and bronchial epithelial cells downregulates MUC5AC and MUC5B production in vitro*

15:45–16:15  Afternoon break

16:15–16:45  Harald Renz (Philipps University of Marburg, Germany)  
*New insights into tissue remodeling in the lung*

16:45–17:15  Stephen T Holgate (University of Southampton, UK)  
*Where do we go from here: future research directions?*

17:15–17:20  Closing remarks