

ERS Research Seminar

New developments in in vitro models of the pulmonary epithelium

07 – 09 April 2016 – Berlin, Germany

(Scientific Programme as of November 26, 2015)

Thursday, 7 April 2016

16.15 – 16.30 Welcome and Introduction

Session I: The airway epithelium in development and disease

Chair: TBC

16.30 – 17.10 Lung development: Branching morphogenesis under the microscope – Savério Bellusci, Germany

17.10 – 17.50 Epithelial abnormalities in lung disease – what can we model – Donna Davies, UK

17.50 – 18.30 Advances in ALI cultures and organoids – Jason Rock, USA

18.30 – 19.00 General discussion

Friday, 08 April 2016

Session II: in vitro models of the lung: advances in culture techniques

Chair: Adam Glangreco

08.30 – 09.10 Live cell imaging in complex airway models – Mattias Svensson, Sweden

09.10 – 09.25 Short presentation selected from abstracts

09.25 – 10.05 Modelling particulate uptake in primary cells – Andrew Thorley, UK

10.05 – 10.35 General discussion

10.35 – 10.55 *Coffee break*

Session III: Translation approaches using in vitro models

Chair: Terry Tetley

10.55 – 11.35 Gene editing to repair gene mutation: the story of CFTR – Jeffrey Beekman, Netherlands

- 11.35 – 11.50 Short presentation selected from abstracts
- 11.50 – 12.30 Viral infections in pediatric airway cells – Ultan Power, UK
- 12.30 – 13.00 General discussion
- 13.00 – 14.00 *Lunch break*
- 14.00 – 15.15 **POSTER SESSION**

Session IV: Break out sessions

- 15.15 – 17.45 Three Break Out Sessions to be chosen by participants on the meeting
- 16.30 – 16.50 *Coffee break*
- 17.45 – 18.30 General discussion

Saturday, 9 April 2016

Session V: Beyond simple culture

Chairs: Colin Bingle, Reinoud Gosens

- 09.00 – 09.40 Micro fluid approaches to in vitro models: Lung disease on a chip – TBC
- 09.40 – 09.55 Short presentation selected from abstracts
- 09.55 – 10.35 Tissue engineering and lung cells from iPSCs – TBC
- 10.35 – 10.50 *Coffee break*
- 10.50 – 11.05 Short presentation selected from abstracts
- 11.05 – 11.45 Precision cut lung slices and ex vivo approaches – Melanie Königshoff, Germany
- 11.45 – 12.15 General discussion, summary and future outlook
- 12.30 *Lunch and departure*