

Developing the Lung

How the extracellular matrix drives alveolar development & regeneration



The fifth scientific symposium of the
University of Giessen and Marburg Lung Center School

Schlosshotel Waldeck, Hessen, Germany
17th – 18th September, 2012



LOEWE

Exzellente Forschung für
Hessens Zukunft



Deutsches Zentrum für
Lungenforschung

Monday, 17th September 2012

09:30 **Bus arrival from Giessen**

09:30 – 10:00 **Badge pickup (coffee available)**

10:00 – 10:30 **Welcome**

Rory E. Morty and Thomas J. Mariani

10:30 – 12:00 **BPD and elastin I**

Chairs: Jennifer Quantius and Elpidoforos Sakkas

10:30 – 11:15 ALAN H. JOBE (Cincinnati Children's Hospital Medical Center)

What is BPD?

11:15 – 12:00 ROBERT P. MECHAM (Washington University at St. Louis)

Elastin synthesis and elastin fibre assembly

12:00 – 13:30 **Lunch**

13:30 – 15:00 **BPD and elastin II**

Chairs: Alexandra Pichl and Peter Rauschkolb

13:30 – 14:15 RICHARD A. PIERCE (Washington University at St. Louis)

Lung elastic fibres in alveolar development, disease, and regeneration

14:15 – 15:00 ANNE HILGENDORFF (Ludwig Maximilians University)

Targeting the extracellular matrix in a BPD model – is it worth pursuing?

15:00 – 15:30 **Coffee break**

15:30 – 18:00 **Networks in lung development I**

Chairs: Alicia Madurga Hernández and Tatyana Likhoshvay

15:30 – 16:30 DAVID WARBURTON (University of Southern California, Los Angeles)

Pre- and postnatal lung development: what a tangled web we weave

16:30 – 17:15 DANIEL B. RIFKIN (New York University Langone Medical Center)

Role of latent TGF- β binding protein in lung development

17:15 – 18:00 SOPHIE THOMPSON (University of Liverpool)

Heparan sulfate in lung morphogenesis: the elephant in the room

18:30 – 20:00 **Dinner**

20:00 – 20:45 **Guided tour of Waldeck Castle**

21:00 **Open bar**

Tuesday, 18th September 2012

09:00 – 11:15 Networks in lung development II

Chairs: Anja Buchbinder and Benno Grzesik

09:00 – 10:00 PARVIZ MINOO (University of Southern California, Los Angeles)

GOD: Generation of diversity in the lung endoderm through cross-talking signalling

10:00 – 10:45 KEITH TANSWELL (The Hospital for Sick Children, Toronto)

Regulation of postnatal alveologenesis in the rat by lipid hydroperoxides and by the IGF-I/IGF-R1 pathway

10:45 – 11:15 THOMAS J. MARIANI (University of Rochester)

IGF-1 and the pulmonary elastogenic cell

11:15 – 11:45 Coffee break

11:45 – 13:00 Lung regeneration

Chairs: Nieves Gabrielli and Friederike Klein

11:45 – 12:30 STEVEN J. MENTZER (Brigham and Women's Hospital, Boston)

Post-pneumonectomy lung growth in humans and mice

12:30 – 13:00 ROBERT VOSWINCKEL (Max Planck Institute for Heart & Lung Research, Bad Nauheim)

The mesenchyme and late lung development and regeneration

13:00 – 14:30 Group Photograph, followed by lunch

14:30 – 16:00 Stretching the fibroblast

Chairs: Friederike Weisel and Anita Golec

14:30 – 15:15 DANIEL J. TSCHUMPERLIN (Harvard School of Public Health, Boston)

Matrix stiffness and fibroblast function

15:15 – 16:00 MARTIN KOLB (McMaster University, Hamilton)

Abnormal stretching of the lung matrix – cause or consequence of pulmonary fibrosis?

16:00 – 16:30 Coffee break

16:30 – 17:15 Fibroblasts, matrix remodelling, and cancer

Chairs: Christine Veith and Marco Schlappkohl

16:30 – 17:15 STEPHEN MCGOWAN (University of Iowa, Iowa City)

PDGFR α -mediated signalling in lung fibroblasts

17:15 – 18:00 BARRY STARCHER (University of Texas Health Science Center at Tyler)

Lung matrix remodelling and cancer

18:00 – 18:15 **Concluding remarks** (Rory E. Morty and Thomas J. Mariani)

18:30 **Bus departure from Waldeck to Giessen**

19:00 **Dinner for speakers and guests staying overnight**

Notes