### **Previous Lectures 2022**

20. April, 15:00 – 16:30

Single cell RNA-seq in ILD - from recent discoveries to new therapeutic approaches

15:00 Speaker Introduction
Nataliia Artyisch (PhD candidate, DZL Academy Fellow at BREATH)

**15:05 Clinical aspects of interstitial lung disease** Jonas Schupp (Dr. med., DZL PI, BREATH)

**15:25 Towards a single cell roadmap to pulmonary fibrosis therapeutics**Naftali Kaminski (Professor of Medicine, MD, Yale School of Medicine, USA)

15:45 Q&A

Chair: Nataliia Artyisch (PhD candidate, DZL Academy Fellow at BREATH)

**16:00** Endothelial single cell biology in health and lung fibrosis Jonas Schupp (Dr. med., DZL PI, BREATH)

16:20 Q&A

Chair: Da-Hee Park (Dr. med., DZL Academy Fellow at BREATH)

### 27. July, 15:00

Lung injury and repair after viral infections: Implications for future therapy

1. Macrophage (re-)programming in viral pneumonia: Role in lung injury and stem-cell-mediated repair

Prof. Dr. Susanne Herold (Professor for Pulmonary Infections at UGMLC)

2. Lung endothelial barrier failure in ARDS, pneumonia and COVID-19 – pathomechanisms and potential therapeutic targets

Prof. Dr. Wolfgang Kübler (Director of the Institute of Physiology, Charité - Berlin)

## 19. September, 15:00

Lung Cancer: a paradigm for applied technological advances to serve precision medicine

1. Translational Research: 40 years' worth of experiences moving science from the bench to 1st in human clinical trials of immunotherapy and gene therapy

Dr. Bernard Fox (Chair of the Molecular and Tumor Immunology Laboratory at Providence Cancer Institute, Oregon, USA)

2. Challenges in daily clinical practice - which multimodal therapy concept is appropriate?

Dr. med. Laura Klotz (Clinician Scientist, Thorax Clinic, Heidelberg)

3. High-throughput characterization of the TP53 mutome using saturating CRISPR mutagenesis as tool for precision medicine?

Juliane Funk (PhD student, University of Marburg)

### 28. November, 3-5 PM

## New targets in lung toxicology and disease

3:00-3:20 pm Welcome & Introductory Talk "Emerging Concepts in Lung Toxicology"

Claudia Staab-Weijnitz (LHI, CPC-M)

3:20-3:40 pm "Can one always trust the analytical chemist? - An accidental exposure with the chemical warfare agent sulfur mustard in Germany"

Dirk Steinritz (InstPharmToxBw, Munich)

3:40-4:00 pm "TRP channels in lung physiology and toxicology" Alexander Dietrich (WSI, Munich)

4:00-4:20 pm "In situ cross-linking mass spectrometry to identify P2X7 receptor interaction partners in the lung"

Annette Nicke (WSI, Munich)

4:20-4:40 pm "The endolysosomal cation channel TRPML3: role in emphysema/COPD?"

Christian Grimm (WSI, Munich)

4:40- 5:00 pm "Role of miR-21 in pulmonary fibrosis" Deepak Ramanujam, TUM Munich

09. December, 2-6 PM
Current topics in translational research on bronchopulmonary dysplasia

**Session Chairs:** Ms. Miša Gunjak (Morty Laboratory, DZL Campus TLRC) and Dr. Claudio Nardiello (Weißmann Laboratory, DZL Campus UGMLC)

#### 2:00-2:05 pm Introduction

Prof. Dr. Rory E. Morty (Department of Translational Pulmonology, University Hospital Heidelberg, Germany)

# 2:05-3:00 pm How important is sex as a biological variable in the neonatal lung?

Assoc. Prof. Krithika Lingappan (Division of Neonatology, Children's Hospital of Philadelphia, Philadelphia, U.S.A.)

#### 3:00-4:00 pm Round-table discussion on alveologenesis

Assist. Prof. Jennifer Sucre (Division of Neonatology, Vanderbilt University School of Medicine, Nashville, U.S.A.)

#### 4:00-4:20 pm Bio-break (and football score update!)

# 4:20-5:00 pm New directions in translation studies on bronchopulmonary dysplasia: work from the Young Laboratory in Miami

Assoc. Prof. Karen C. Young (Division of Neonatology, University of Miami, Miami, U.S.A.)

# 5:00- 5:55 pm How the maternal environment impacts epigenetic changes in offspring: implication for the lungs

Prof. Lynette K. Rogers (Center for Perinatal Research, Nationwide Children's Hospital, Columbus, U.S.A.)

### 5:55- 6:00 pm Wrap-Up

Prof. Dr. Rory E. Morty (Department of Translational Pulmonology, University Hospital Heidelberg, Germany)