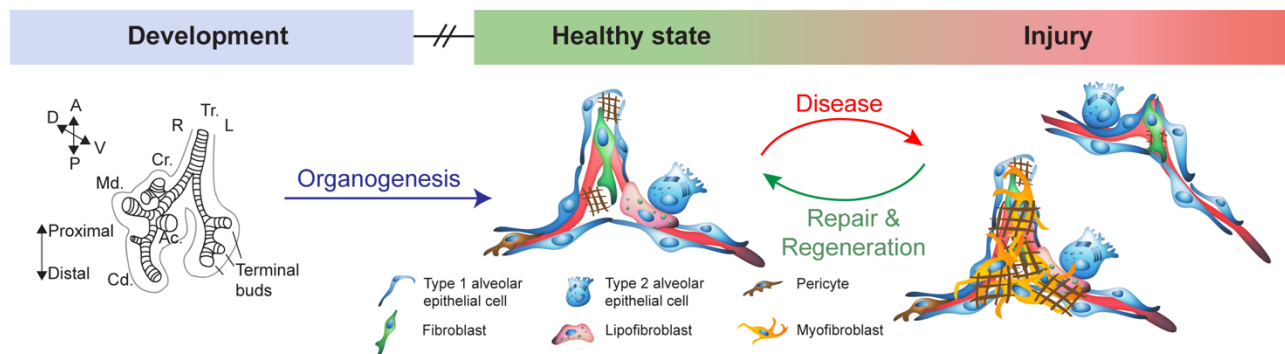


Announcing the 2nd Academy Symposium of the
German Center for Lung Research (DZL)
21st - 23rd November, 2022

DZL Academy Symposium 2022

Lung Development, Repair and Regeneration

Robert Hynds (London, UK)
Kerstin Meyer (Cambridge, UK)
Hartmut Michel (Frankfurt am Main, Germany)
Purushothama Rao Tata (Durham, USA)
Darcy Wagner (Lund, Sweden)
William Zacharias (Cincinnati, USA)



Venue: Schloss Rauischholzhausen
Schlosspark 1, 35085 Ebsdorfergrund,
Hessen, Germany

Scientific Organizers and Planning Committee

Rory E. Morty • Elie El Agha •
Sezin Czarnecki

Capacity is Limited – Registration is Required

Information: <https://dzl.de/en/programs-dzl-academy/symposia-receptions/>

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Comprehensive
Pneumology Center



Translational Lung
Research Center
Heidelberg



MONDAY, 21.11.2022

16:00 - 16:45

Arrival at Rauschholzhausen Castle and Registration

16:45 - 17:00

Welcome: Elie El Agha and Rory E. Morty

17:00 - 18:00

WILLIAM ZACHARIAS

Cincinnati Children's Hospital Medical Center, Cincinnati, OH, U.S.A.

"Building and rebuilding alveoli in organoids, mice and nonhuman primates"

18:00 - 19:00

DZL Academy Fellow Presentations – Block A

THE ALVEOLAR NICHE IN HOMEOSTASIS, INJURY AND REGENERATION

19:00 - 20:00

DZL Academy Fellow Presentations – Block B

LUNG DEVELOPMENT AND BRONCHOPULMONARY DYSPLASIA

20:00 – end

Dinner and open bar

TUESDAY, 22.11.2022

07:30 - 08:30

Breakfast

08:30 - 09:30

PURUSHOTHAMA RAO TATA

Duke University, Durham, NC, U.S.A.

“Lung regeneration at single-cell resolution”

09:30 - 10:15

DZL Academy Fellow Presentations – Block C

MODELING OF LUNG DEVELOPMENT AND DISEASE - I

10:15 - 11:00

Coffee and snacks

11:00 - 11:45

DZL Academy Fellow Presentations – Block D

MODELING OF LUNG DEVELOPMENT AND DISEASE – II

11:45 - 12:30

Pre-lunch networking “breather”

12:30 - 13:30

Lunch

13:30 - 14:45

“Meet-the-expert” sessions followed by group photograph

14:45 – 15:45

KERSTIN MEYER

Wellcome Sanger Institute, Cambridge, U.K.

“Spatial atlasing of the human adult and developing lung”

15:45 - 17:00

Poster session, coffee and snacks

17:00 - 18:00

ROBERT HYNDIS

University College London, London, U.K.

“Towards cell and gene therapy for airway epidermolysis bullosa”

18:00 – 19:00

DZL Academy Fellow Presentations – Block E

AIRWAY INJURY, REPAIR AND TUMORIGENESIS

19:00 – Open end

Dinner and open bar

WEDNESDAY, 23.11.2022

07:30 - 08:30

Breakfast and room check-out

08:30 - 09:30

DZL Academy Fellow Presentations – Block F
LUNG FIBROSIS AND ITS RESOLUTION

09:30 - 09:45

“Breather”

09:45 - 10:45

The Nobel Lecture

HARTMUT MICHEL

Max Planck Institute of Biophysics, Frankfurt am Main, Germany
“Photosynthesis and cellular respiration”

10:45 - 11:15

Coffee and snacks

11:15 - 12:15

DARCY WAGNER

Lund University, Lund, Sweden

“Building and utilizing ex vivo models of lung disease and regeneration”

12:15 - 12:30

Formal closing of the Symposium: Elie El Agha and Rory E. Morty

12:30 - 13:30

Lunch

13:30

Bus departure from Rauischholzhausen to Giessen
Meeting point: Parking lot of the castle (13:20)

A) THE ALVEOLAR NICHE IN HOMEOSTASIS, INJURY AND REGENERATION

Monday, November 21st, at 18:00

Chair: Sara Taghizadeh

18:00 - 18:15: [Juliana Falivene](#) (PI: Wolfgang Kübler, *DZL-Associated Site* Charité Berlin)

“Role of SNAT2 in regulation of alveolar homeostasis during acute lung injury/ARDS”

18:15 - 18:30: [Stefan Hadžic](#) (PI: Norbert Weissmann, *DZL UGMLC Campus* Giessen)

“FGF10 treatment reverses experimental emphysema and pulmonary hypertension in mice”

18:30 - 18:45: [Supak Panpeng](#) (PI: Christian Mühlfeld, *DZL BREATH Campus* Hannover)

“Characterization of the cellular contact between alveolar epithelial type 2 cells and fibroblasts”

18:45 - 19:00: [Carola Voss](#) (PI's: Anne Hilgendorff and Tobias Stöger, *DZL CPC Campus* Munich)

“The alveolar microenvironment – A liaison of immunity in disease mechanisms and response to environmental stress”

B) LUNG DEVELOPMENT AND BRONCHOPULMONARY DYSPLASIA

Monday, November 21st, at 19:00

Chair: Miša Gunjak

19:00 - 19:15: [Ivana Mižiková](#) (PI: Miguel Alejandro Alcázar, *DZL UGMLC Campus* Giessen)

“The developing lung at single-cell resolution”

19:15 - 19:30: [Claudio Nardiello](#) (PI: Natascha Sommer, *DZL UGMLC Campus* Giessen)

“The long-term effects of neonatal hyperoxia and the need to find therapeutic interventions”

19:30 - 19:45: [Paolo Panza](#) (PI: Didier Stainier, *DZL UGMLC Campus* Giessen)

“Lung capillary secreted factor SPARCL1 promotes AT2 cell differentiation”

19:45 - 20:00: [Sara Taghizadeh](#) (PI: Ana Pardo-Saganta, *DZL UGMLC Campus* Giessen)

“FGF10 triggers de novo alveologenesis in a bronchopulmonary dysplasia model: Impact on resident mesenchymal niche cells”

C) MODELING LUNG DEVELOPMENT AND DISEASE - I

Tuesday, November 22nd, at 09:30

Chair: Anna-Lena Ament

09:30 - 09:45: [Ashesh Chakraborty](#) (PI: Claudia Staab-Weijnitz, *DZL CPC Campus* Munich)

“Establishment of a human in vitro model for bronchial epithelial injury and regeneration”

09:45 - 10:00: [Alberto Hidalgo](#) (PI: Matthias Ochs, *DZL-Associated Site* Charité Berlin)

“Interfacial delivery: Surfing the lungs to deliver drugs”

10:00 - 10:15: [Peter Pennitz](#) (PI: Martin Witzernath, *DZL-Associated Site* Charité Berlin)

“Integrational approaches for cross-species analysis of lung pathologies at single-cell resolution”

D) MODELING LUNG DEVELOPMENT AND DISEASE - II

Tuesday, November 22nd, at 11:00

Chair: Mahtab Shahriari-Felordi

11:00 - 11:15: [Esmeralda Vásquez Pacheco](#) (PI: Saverio Bellusci, *DZL UGMLC Campus Giessen*)

“An in vitro model for studying fibroblast heterogeneity”

11:15 - 11:30: [Ana Ivonne Vazquez-Armendariz](#) (PI: Susanne Herold, *DZL UGMLC Campus Giessen*)

“Complex lung organoid systems to model development and disease in vitro”

11:30 - 11:45: [Laura von Schledorn](#) (PI: Ruth Olmer, *DZL BREATH Campus Hannover*)

“Development of an in vitro disease model for primary ciliary dyskinesia (PCD) utilizing patient-specific human induced pluripotent stem cells”

E) AIRWAY INJURY, REPAIR AND TUMORIGENESIS

Tuesday, November 22nd, at 18:00

Chair: Stefan Hadžic

18:00 - 18:15: [Sara Chocarro](#) (PI: Rocio Sotillo, *DZL TLRC Campus Heidelberg*)

“Club cells employ regeneration mechanisms during lung tumorigenesis”

18:15 - 18:30: [Alberto Diaz](#) (PI: Rocio Sotillo, *DZL TLRC Campus Heidelberg*)

“Determinants of EML4-ALK driven lung cancer growth and therapeutic responses”

18:30 - 18:45: [Keynoosh Khalooghi](#) (PI: Thomas Braun, *DZL UGMLC Campus Giessen*)

“Transition-state, branch-point-associated cells give rise to the majority of ciliated cells in the mouse lung”

18:45 - 19:00: [Huan Ma](#) (PI: Susanne Krauss-Etschmann, *DZL ARCN Campus Borstel*)

“Repetitive rhinovirus infection primes for amplified IL-13-induced airway epithelial responses”

F) LUNG FIBROSIS AND ITS RESOLUTION

Wednesday, November 23rd, at 08:30

Chair: Claudio Nardiello

08:30 - 08:45: [Sonia Giambelluca](#) (PI: Matthias Ochs, *DZL-Associated Site Charité Berlin*)

“Cholesterol crystal-mediated inflammation in alveolar macrophages: A new potential therapy target for lung fibrosis”

08:45 - 09:00: [Muzamil Majid Khan](#) (PI: Rainer Pepperkok, *DZL TLRC Campus Heidelberg*)

“Targeting collagen trafficking to mitigate lung fibrosis”

09:00 - 09:15: [Maria Camila Melo Narváez](#) (PI: Mareike Lehmann, *DZL CPC-M Campus Munich*)

“Cellular aging of the alveolar epithelium contributes to non-resolving fibrosis of the lung”

09:15 – 09:30: [Daniel Wendisch](#) (PI: Leif E. Sander, *DZL-Associated Site Charité Berlin*)

“SARS-CoV-2 triggers fibrotic macrophage signatures and fibroproliferative disease”

SPEAKER INTRODUCTIONS AND SPEAKER SESSION CHAIRS

ROBERT HYNDS by Kai Guo

KERSTIN MEYER by Daniel Meissner

HARTMUT MICHEL by Draginja Kovacevic

PURUSHOTHAMA RAO TATA by Negah Ahmadvand

DARCY WAGNER by Muzamil Majid Khan

WILLIAM ZACHARIAS by Dominik Leitz

POSTER PRESENTATIONS

Poster #	Presenter (Tuesday, 22 nd November 2022: 15:45-17:00)
1	Anna-Lena Ament (PI: Susanne Herold, <i>DZL UGMLC Campus Giessen</i>) "Human induced pluripotent stem cell (hiPSC)-derived lung organoids for disease modeling"
2	Chase Anderson (PI: Rory E. Morty, <i>DZL TLRC Campus Heidelberg</i>) "Considering the eosinophil as a mediator of disordered lung development in bronchopulmonary dysplasia"
3	Laurien Czichon (PI: Ruth Olmer, <i>DZL BREATH Campus Hannover</i>) "Establishment of a complex organotypic in vitro model of the upper respiratory tract to study bacterial infections in cystic fibrosis"
4	Miša Gunjak (PI: Rory E. Morty, <i>DZL TLRC Campus Heidelberg</i>) "Susceptibility to viral infection driving lung injury and disruption of lung development in neonates with bronchopulmonary dysplasia"
5	Jianlong Jia (PI: Ali Önder Yildirim, <i>DZL CPC Campus Munich</i>) "Identification of the cell(s) of origin of squamous cell lung carcinoma (LUSC)"
6	Draginja Kovacevic (PI: Susanne Krauss-Etschmann, <i>DZL ARCN Campus Borstel</i>) "Microbial colonization status and development of innate immunity: Consequences for asthma risk"
7	Dominik Leitz (PI: Marcus Mall, <i>DZL-Associated Site Charité Berlin</i>) "In vivo monitoring of progressive pulmonary fibrosis in adult mice by microcomputed tomography"
8	Astrid Loubal (PI: Malgorzata Wygrecka, <i>DZL UGMLC Campus Giessen</i>) "LRP1-AS as potential new treatment for pulmonary fibrosis"
9	Daniel Meißner (PI: Susanne Krauss-Etschmann, <i>DZL ARCN Campus Borstel</i>) "Airway-specific analysis of ORMDL in smoke-exposed <i>Drosophila melanogaster</i> larvae"
10	David Puertollano (PI: Ruth Olmer, <i>DZL BREATH Campus Hannover</i>) "High-throughput screening for compounds allowing transcriptional readthrough of premature termination codons based on genetically engineered primary ciliary dyskinesia patient-specific hiPSCs"
11	Juliana Schramm (PI: Susanne Krauss-Etschmann, <i>DZL ARCN Campus Borstel</i>) "The role of tobacco smoke-induced changes of the microbiome in shaping risk for IBD"
12	Mahtab Shahriari-Felordi (PI: Elie El Agha, <i>DZL UGMLC Campus Giessen</i>) "Origin of repair-supportive mesenchymal cells (RSMCs) in the regenerating conducting airway"

- 13 **Carina Steinchen** (PI: Mareike Lehmann, *DZL CPC Campus* Munich)
“Immunomodulation of age-dependent alveolar stem-cell function”
- 14 **Zhe Zhou-Suckow** (PI: Rory E. Morty, *DZL TLRC Campus* Heidelberg)
“An optimized protocol for vascular casting of infant and adult mouse lungs for micro-CT imaging in preclinical studies”

Fellows: Please hang posters during lunch (12:30-13:30).