



MBML
MOLECULAR BIOLOGY
& MEDICINE OF THE LUNG



Welcome to the 20th Anniversary Alumni Retreat
of the
International Graduate Programme
Molecular Biology and Medicine of the Lung



Raicholzhausen, Germany
June 28-30, 2023



UGMLC
UNIVERSITIES OF
GIESSEN & MARBURG
LUNG CENTER



DZL
Deutsches Zentrum für
Lungenforschung



**CARDIO
PULMONARY
INSTITUTE**

WEDNESDAY, 28.06.2023

Up to 09:30

Arrival at Rauschholzhausen Castle, Registration

09:30 - 09:45

Welcome and Introduction: Elie El Agha and Werner Seeger

09:45 - 10:15

The Opening Lecture – how it all began

RORY E. MORTY

Heidelberg University Hospital, Heidelberg, Germany

“A trip down memory lane”

10:15 - 10:45

MELANIE KÖNIGSHOFF

University of Pittsburgh, Pittsburgh, PA, U.S.A.

“The long and winding road to lung regeneration”

10:45 - 12:15

Student Presentations – Block A

LUNG DEVELOPMENT AND BRONCHOPULMONARY DYSPLASIA

12:15 - 13:45

Room check-in, followed by lunch

13:45 - 14:15

SUSANNE HEROLD

Justus-Liebig University Giessen, Giessen, Germany

“Host-directed therapies in ARDS: A journey of ups and downs”

14:15 - 15:45

Student Presentations – Block B

LUNG INFLAMMATION AND ACUTE LUNG INJURY

15:45 - 16:15

Group photograph (all *Annual Retreat* participants) followed by *Anniversary Ceremony* with coffee and cake, leading to the ...

16:15 - 17:30

Poster session

17:30 - 18:00

ISTVÁN VADÁSZ

Justus-Liebig University Giessen, Giessen, Germany

“The alveolar-capillary and other barriers from bench to bedside and back”

18:00 – 00:00

Dinner, open bar and entertainment

THURSDAY, 29.06.2023

07:30 - 09:00

Breakfast

09:00 - 09:30

ALI ÖNDER YILDIRIM

Helmholtz Munich, Munich, Germany

“The immune origins of COPD”

09:30 - 10:45

Student Presentations - Block C

CHRONIC OBSTRUCTIVE PULMONARY DISEASE, AIRWAY DISEASE AND AGING

10:45 - 11:15

Coffee and snacks

11:15 - 11:45

MALGORZATA WYGRECKA

Justus-Liebig University Giessen, Giessen, Germany

“To begin is easy, to persist is art”

11:45 - 12:15

RAJKUMAR SAVAI

Justus-Liebig University Giessen, Giessen, Germany

““Microenvironment” influence on my career and the lung cancer research”

12:15 - 13:45

Lunch

13:45 - 14:00

.... followed by coffee pick-up, leading into the

14:00 – 16:00

“Meet-the-Professor” sessions

16:00 - 17:00

Student Presentations - Block D

LUNG CANCER

17:00 - 17:30

NATASCHA SOMMER

Justus-Liebig University Giessen, Giessen, Germany

“Mitochondrial oxygen sensing - From artefacts to insights”

17:30 - 18:00

OLIVER EICKELBERG

University of Pittsburgh, Pittsburgh, PA, U.S.A.

“MBML: The **M**ost **B**eloved **M**ilestones of our **L**ives”

18:00 – open end

Dinner, open bar and entertainment

FRIDAY, 30.06.2023

07:30 - 09:00

Breakfast and room check-out

09:00 - 09:30

GRAZYNA KWAPISZEWSKA

Ludwig Boltzmann Institute for Lung Vascular Research, Graz, Austria

“Hold the line”

09:30 - 10:30

Student Presentations – Block E

THE LUNG VASCULATURE IN PULMONARY HYPERTENSION

10:30 - 11:00

Coffee and snacks

11:00 - 11:30

SONI SAVAI PULLAMSETTI

Justus-Liebig University Giessen, Giessen, Germany

“Epigenetics and nurture: Matters in both life and career”

11:30 - 12:30

Student Presentations – Block F

THE RIGHT HEART IN PULMONARY HYPERTENSION

12:30 - 13:00

Presentation of MBML coursework certificates

Formal closing of the Retreat: Elie El Agha and Werner Seeger

13:00 - 15:00

Lunch

15:00

Bus Departure from Rauischholzhausen to Giessen

Meeting Point: Parking Lot of the Castle (14:50)

A) LUNG DEVELOPMENT AND BRONCHOPULMONARY DYSPLASIA

Wednesday, June 28th, at 10:45

Chairs: Stephanie Stephan and Mahsa Zabihi

10:45 - 11:00: [Mohammad Amin Mahjoub](#) (PI: Miguel A. Alejandre Alcázar)

“Investigating the role of Notch signaling pathway in experimental BPD”

11:00 - 11:15: [Eleni Bouloukou](#) (PI: Christos Samakovlis)

“Conversion of basal cells to the neuroendocrine trajectory”

11:15 - 11:30: [Reshma Jamal](#) (PI: Rory E. Morty)

“Exploring murine lung alveolarization using an ex vivo isolated, perfused and ventilated lung model in neonates”

11:30 - 11:45: [Ali Khadim](#) (PI: Elie El Agha)

“Mesenchymal cells in lung development and repair”

11:45 - 12:00: [Afshin Noori](#) (PI: Saverio Bellusci)

“The role of *Fgf10*-positive cells in repair/regeneration after injury using different mouse models”

12:00 - 12:15: [Esmeralda Vásquez Pacheco](#) (PI: Saverio Bellusci)

“A unifying model to characterize lipofibroblast and myofibroblast differentiation”

B) LUNG INFLAMMATION AND ACUTE LUNG INJURY

Wednesday, June 28th, at 14:15

Chairs: Bhavika B. Katariya and Alejandro Egea Zorrilla

14:15 - 14:30: [Lasti Erfinanda](#) (PI: Wolfgang Kübler, *DZL-Associated Site* Charité Berlin)

“CFTR and lung endothelial barrier regulation in respiratory infections”

14:30 - 14:45: [Mohammad Estiri](#) (PI: Susanne Herold & Ulrich Matt)

“Impact of diffusible signals at human cell-microbe interfaces: Influence of EVs in organoids and in vivo models”

14:45 - 15:00: [Lianyong Han](#) (PI: Tobias Stöger, *DZL CPC-M Campus* Munich)

“Lung single-cell transcriptomics to guide the development of AOP anchored cell-based assays in response to nanoparticle exposure”

15:00 - 15:15: [George Kiliaris](#) (PI: Elie El Agha)

“Mobilization of mesenchymal niches in influenza virus-induced lung injury”

15:15 - 15:30: [Mohammad Rashedul Alam](#) (PI: Eveline Baumgart-Vogt & Stefan Arnhold)

“Role of peroxisomes in type II alveolar epithelial cells and surfactant metabolism in the lung”

15:30 - 15:45: [Khaled Abdulrahim Talal Mahmoud](#) (PI: Eveline Baumgart-Vogt)

“Influence of peroxisomes in macrophages on inflammatory and profibrotic processes in the lung”

C) CHRONIC OBSTRUCTIVE PULMONARY DISEASE, AIRWAY DISEASE AND AGING

Thursday, June 29th, at 09:30

Chairs: Anis Čilić and Dongzhu Li

09:30 - 09:45: [Antonia Bohnhorst](#) (PI: Markus Weckmann, *DZL ARCN Campus* Borstel)

“Innate training of the *IL-6* gene in asthma exacerbation”

09:45 - 10:00: [Rafael Castillo Negrete](#) (PI: Peter Jedlicka)

“The role of TGFβ1 in 3S-HS biosynthesis in Alzheimer’s disease related tauopathy”

10:00 - 10:15: [Christina Gress](#) (PI: Jens Hohlfeld, *DZL BREATH Campus* Hannover)

“Prostaglandin D₂ metabolites activate asthmatic patient-derived type 2 innate lymphoid cells via the DP2 receptor”

10:15 - 10:30: [Vidya Lakshmi](#) (PI: Norbert Weißmann & Natascha Sommer)

“Mitochondrial T-cell reprogramming in virus-induced COPD exacerbation and emphysema progression”

10:30 - 10:45: [Edma Loku](#) (PI: Norbert Weißmann & Stefan Hadžic)

“FGF10 treatment activates repair mechanisms of lung alveolar and vascular structures in mice after established emphysema and PH”

D) LUNG CANCER

Thursday, June 29th, at 16:00

Chairs: Ali Khadim and Afshin Noori

16:00 - 16:15: [Öznur Aktay Cetin](#) (PI: Rajkumar Savai)

“Specific signals from Influenza infection induce tumor cell killing by orchestrating macrophage phenotype”

16:15 - 16:30: [Philipp Friedrich Arndt](#) (PI: Rajkumar Savai)

“Metabolic reprogramming of tumor-associated macrophages and its impact on lung cancer progression”

16:30 - 16:45: [Joshua Ayoson](#) (PI: Rajkumar Savai)

“CD8+ T cell subpopulation (Tc17) induces a metabolic enriched tumor microenvironment enabling lung cancer progression”

16:45 - 17:00: [Spyridoula Barmpoutsis](#) (PI: Rajkumar Savai)

““Do not eat me” LILRB4 signaling as a novel macrophage immunotherapy in lung cancer”

E) THE LUNG VASCULATURE IN PULMONARY HYPERTENSION

Friday, June 30th, at 09:30

Chairs: Vanessa Kleinhenn and Leila Sotoodeh Atefi

09:30 - 09:45: [Golnaz Hesami](#) (PI: Soni Savai Pullamsetti)

“IRG1/Itaconate axis plays a role in cardiopulmonary disease through inter-organ communication”

09:45 - 10:00: [Zahraa Msheik](#) (PI: Soni Savai Pullamsetti)

“lncRNA19 - A major regulator of cellular responses to hypoxia in the lung”

10:00 - 10:15: [Samuel Olapoju](#) (PI: Soni Savai Pullamsetti)

“Role of MST1/2 kinases and its therapeutic modulation in pulmonary arterial hypertension”

10:15 - 10:30: [Vinita Sharma](#) (PI: Norbert Weißmann)

“Exploring the pre-developmental phase of pulmonary hypertension in COPD: Insights into initial pulmonary vascular remodeling”

F) THE RIGHT HEART IN PULMONARY HYPERTENSION

Friday, June 30th, at 11:30

Chairs: Muchen Li and Ornella Yamdjeu Tchokonde

11:30 - 11:45: [Sailun Wang](#) (PI: Ralph T. Schermuly & Baktybek Kojonazarov)

“Metabolic signaling pathway in the adaptive/ maladaptive right ventricle remodeling”

11:45 - 12:00: [Merle Antonia Wiegand](#) (PI: Henning Gall & Manuel Richter)

“The right atrium: Underestimated in clinical relevance? - Right atrium function assessment in pulmonary hypertension”

12:00 - 12:15: [Athiththan Yogeswaran](#) (PI: Henning Gall & Ardeschir Ghofrani)

“Risk stratification in pulmonary hypertension”

12:15 - 12:30: [Daniel Zedler](#) (PI: Manuel Richter & Khodr Tello)

“Right atrial function in pulmonary arterial hypertension”

Speaker Introductions and Speaker Session Chairs

OLIVER EICKELBERG by Athiththan Yogeswaran

SUSANNE HEROLD by Öznur Aktay Cetin

MELANIE KÖNIGSHOFF by Zahraa Msheik

GRAZYNA KWAPISZEWSKA by Merle Antonia Wiegand

RORY E. MORTY by Daniel Zedler

RAJKUMAR SAVAI by Anis Čilić

SONI SAVAI PULLAMSETTI by Alejandro Egea Zorrilla

NATASCHA SOMMER by Bhavika B. Katariya

ISTVÁN VADÁSZ by Stephanie Stephan

MALGORZATA WYGRECKA by Leila Sotoodeh Atefi

ALI ÖNDER YILDIRIM by Mahtab Shahriari Felordi

Poster Presentations

Students: Please hang posters during lunch (12:15 - 13:45) prior to the poster session.

Poster board number	Presenter (Wednesday, 28 th June 2023: 16:15 - 17:30)
1	Chase Anderson (PI: Rory E. Morty, <i>DZL TLRC Campus</i> Heidelberg)
2	Martha Candoni (PI: Norbert Weissmann & Natascha Sommer)
3	Anis Čilić (PI: Norbert Weissmann)
4	Alejandro Egea Zorrilla (PI: Ana Pardo Saganta)
5	Bhavika B. Katariya (PI: Poornima Mahavadi)
6	Vanessa Kleinhenn (PI: Norbert Weissmann)
7	Dongzhu Li (PI: Ana Pardo Saganta)
8	Muchen Li (PI: Norbert Weissmann & Natascha Sommer)
9	Mahtab Shahriari Felordi (PI: Elie El Agha)
10	Leila Sotoodeh Atefi (PI: Saverio Bellusci)
11	Stephanie Stephan (PI: Miguel A. Alejandro Alcázar)
12	Mahsa Zabihi (PI: Elie El Agha)

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