

**Welcome to the 12<sup>th</sup> Annual Retreat**  
of the  
**International Graduate Programme**  
**Molecular Biology and Medicine of the Lung**



**Rauischholzhausen, Germany**  
**August 4–6, 2014**



**MONDAY, 04.08.2014**

**Up to 09:30**

Arrival at Rauschholzhausen Castle, Registration

**09:30 - 09:45**

Welcome and Introduction: Rory E. Morty and Werner Seeger

**09:45 - 10:45**

*The Opening Lecture*

by **Sir MAGDI YACOUB** (Imperial College, London, United Kingdom)  
“Pulmonary Hypertension: a Global Perspective”

**10:45 - 11:45**

**Student Presentations**

**PULMONARY HYPERTENSION**

**11:45 -13:30**

**Lunch**

**13:30 - 14:30**

**Student Presentations**

**LUNG DEVELOPMENT I: ALVEOLARIZATION & BRONCHOPULMONARY DYSPLASIA**

**14:30 - 15:30**

*The Basic Science Nobel Lecture*

by **Professor ROBERT HUBER** (Max Planck Institute for Biochemistry, Martinsried, Germany)  
“Proteases and their Control in Health and Disease and my Experience with Translation into Practice and Business”

**15:30 - 17:00**

Poster session, with coffee and snacks

**17:00 - 18:00**

**Student Presentations**

**LUNG DEVELOPMENT: BRANCHING & CELL PLASTICITY**

**18:00 - 19:00**

*The Evening Lecture*

by **His Eminence Cardinal WILLEM JACOBUS EIJK**, Archbishop of Utrecht  
(Archdiocese of Utrecht, Utrecht, The Netherlands)  
“Euthanasia: Medical Responsibilities Concerning the End of Life”

**19:00 - end**

Dinner and open bar

**TUESDAY, 05.08.2014**

**07:30 - 09:15**

Breakfast

**09:15 - 10:00**

**Professor SADIS MATALON** (University of Alabama at Birmingham, Birmingham, U.S.A.)  
“Endogenous Danger Signals in Halogen-Induced Hyper-reactivity”

**10:00 - 10:45**

**Student Presentations**

**ACUTE LUNG INJURY: INFLUENZA AND FLUID TRANSPORT**

**10:45 - 11:15**

Coffee and snacks

**11:15 - 12:00**

**Professor JAMES A. FRANK** (University of California at San Francisco, San Francisco, U.S.A.)  
“Lung-specific Claudin-18 is Required for Alveolar Homeostasis”

**12:00 - 12:45**

**Student Presentations**

**BARRIER FUNCTION AND INFLAMMATION**

**12:45 - 14:00**

Lunch

**14:00 - 15:00**

*The Clinical Science Nobel Lecture*

by **Professor HARALD ZUR HAUSEN** (German Cancer Research Centre, Heidelberg, Germany)  
“Zoonotic Infections in Human Cancer and Chronic Diseases”

**15:00 - 15:15**

Group photograph

**15:15 - 16:45**

“Meet-the-Professor” sessions, with coffee and snacks

**16:45 - 18:00**

**Student Presentations**

**CHRONIC PARENCHYMAL AND AIRWAY DISEASE I**

**18:00 - 19:30**

“The Discovery of Middle East Respiratory Syndrome (MERS) and the MERS Coronavirus”  
delivered jointly by

**Professor ALY ZAKY** (Ain Shams University, Cairo, Egypt), and  
**Professor BART HAAGMANS** (Erasmus University Medical Centre, Rotterdam, The Netherlands)

**19:30 - end**

Dinner and Drinks

**WEDNESDAY, 06.08.2014**

**07:30 - 09:00**

Breakfast

**09:00 - 09:45**

**Professor MARIA BELVISI** (Imperial College, London, United Kingdom)  
“Transient Receptor Channels in Respiratory Disease”

**09:45 - 11:00**

**Student Presentations**

**CHRONIC PARENCHYMAL AND AIRWAY DISEASE II**

**11:00 - 11:30**

Coffee and snacks

**11:30 - 12:30**

**Student Presentations**

**PULMONARY HYPERTENSION II, STEM CELLS, AND TRANSCRIPTIONAL REGULATION**

**12:30 - 13:00**

Presentation of MBML coursework certificates  
Formal closing of the Retreat: Rory E. Morty and Werner Seeger

**13:00 - 14:30**

**Lunch**

**14:45**

Bus Departure from Rauschholzhausen to Giessen  
Meeting Point: Parking Lot of the Castle 14:30

## **A) PULMONARY HYPERTENSION**

**Monday, August 4<sup>th</sup>, at 10:45**

**Chairs: Mario Böhm and Mariola Bednorz**

10:45 - 11:00: [Elisabetta Gamen](#) (PI: Soni Pullamsetti)

“Characterizing the role of class IIa HDACs in pulmonary hypertension”

11:00 - 11:15: [Dijana Iloska](#) (PI: Soni Pullamsetti)

“Characterization of distal vascular remodelling in CTEPH”

11:15 - 11:30: [Balram Neupane](#) (PI: Ralph T. Schermuly)

“Contribution of obesity to the pathology of pulmonary hypertension: yes or no?”

11:30 - 11:45: [Jan Schneider](#) (PI: Ralph T. Schermuly)

“Membrane-bound carbonic anhydrases 9 and 12 in pulmonary hypertension and lung fibrosis: the discovery of novel pathological players?”

## **B) LUNG DEVELOPMENT I: ALVEOLARIZATION AND BRONCHOPULMONARY DYSPLASIA**

**Monday, August 4<sup>th</sup>, at 13:30**

**Chairs: Salma Dilai and Alena Moiseenko**

13:30 - 13:45: [Ivana Mižíková](#) (PI: Rory E. Morty)

“Roles for lysyl oxidase family in normal and aberrant lung development”

13:45 - 14:00: [Tatyana Likhoshvay](#) (PI: Rory E. Morty)

“Role of inflammatory cells in normal lung development and bronchopulmonary dysplasia”

14:00 - 14:15: [Alicia Madurga Hernández](#) (PI: Rory E. Morty)

“The role of hydrogen sulfide in normal and aberrant late lung development”

14:15 - 14:30: [Jordi Ruiz Camp](#) (PI: Rory E. Morty)

“The role of microRNA-34a in late lung development and disease”

### **C) LUNG DEVELOPMENT II: BRANCHING AND CELL PLASTICITY**

**Monday, August 4<sup>th</sup>, at 17:00**

**Chairs: Ivana Mižiková and Tatyana Likhoshvay**

17:00 - 17:15: [Alena Moiseenko](#) (PI: Saverio Bellusci)

“Origin and fate of the smooth muscle cells during development and disease”

17:15 - 17:30: [Daphne Mous](#) (PI: Dick Tibboel, Erasmus University, Rotterdam)

“Pulmonary vascular development in congenital diaphragmatic hernia”

17:30 - 17:45: [Salma Dilai](#) (PI: Saverio Bellusci)

“Role of Fibroblast Growth Factor10 (FGF10) and its receptor (FGFR2b) on epithelial stem cells during early lung development”

17:45 - 18:00: [Amit Shrestha](#) (PI: Saverio Bellusci)

“Role of miR142-3p in lung mesenchymal cell fate and decision”

### **D) ACUTE LUNG INJURY: INFLUENZA AND FLUID TRANSPORT**

**Tuesday, August 5<sup>th</sup>, at 10:00**

**Chairs: Paulina Gwoździńska and Ana Ivonne Vázquez Armendariz**

10:00 - 10:15: [Balachandar Selvakumar](#) (PI: Susanne Herold and Jürgen Lohmeyer)

“M2-polarised exudate macrophages attenuate influenza virus-induced acute lung Injury”

10:15 - 10:30: [Lina Jankauskaite](#) (PIs: Susanne Herold and Jürgen Lohmeyer)

“Therapeutic potential of murine bone marrow derived mesenchymal stem cells in influenza virus-induced pneumonia”

10:30 - 10:45: [Luciana Mazzocchi](#) (PI: István Vadász)

“TGF- $\beta$ /GSK-3 $\beta$ -dependent down-regulation of megalin impairs alveolar protein clearance in alveolar epithelial cells”

## E) BARRIER FUNCTION AND INFLAMMATION

Tuesday, August 5<sup>th</sup>, at 12:00

Chairs: Martin Reichert and Irina Shalashova

12:00 - 12:15: [Christina Herkt](#) (PI: Bernd Schmeck)

“*Legionella pneumophila* alters the miRNA profile of human macrophages”

12:15 - 12:30: [Anne Lena Merkel](#) (PI: Bernd Schmeck)

“Exosomes in response to *Legionella pneumophila* infection of human macrophages”

12:30 - 12:45: [Andrew P. Ferretti](#) (PI: Robert Barrington, University of South Alabama, U.S.A.)

“Insights to human pulmonary alveolar proteinosis through a novel rodent model”

## F) CHRONIC PARENCHYMAL AND AIRWAY DISEASE I

Tuesday, August 5<sup>th</sup>, at 16:45

Chairs: Gayathri Viswanathan and Adriana Contreras

16:45 - 17:00: [Žaneta Sibinska](#) (PI: Ralph T. Schermuly)

“Inhibition of HSP90 ameliorates pulmonary fibrosis by preventing TGF- $\beta$ -induced fibroblast activation and epithelial- mesenchymal transition”

17:00 - 17:15: [Espen Groth](#) (PI: Henrik Watz and Klaus Rabe, *DZL Cluster North campus*)

“Is there hope for sputum analysis in contemporary research?”

17:15 - 17:30: [Oleksiy Klymenko](#) (PI: Andreas Günther)

“Biological role of the pro-apoptotic transcription factor C/EBP homologous protein (CHOP) in idiopathic pulmonary fibrosis”

17:30 - 17:45: [Shalini Venkatesan](#) (PI: Andreas Günther)

“Mitochondrial dysfunction in amiodarone induced pulmonary fibrosis”

17:45 - 18:00: [Christoph Arens](#) (PI: Markus Weigand)

“Cardiac effects of echinocandin preparations”

## **G) CHRONIC PARENCHYMAL AND AIRWAY DISEASE II**

**Wednesday, August 6<sup>th</sup>, at 09:45**

**Chairs: Elsa Tadele and Christina Herkt**

09:45 - 10:00: [Mariola Bednorz](#) (PI: Norbert Weissmann)

“ROS signalling in the pathogenesis of cigarette smoke-induced pulmonary hypertension and emphysema”

10:00 - 10:15: [Chidiebere U. Awah](#) (PI: Frauke Stanke, *DZL Hannover Campus*)

“Transcription factor occupancy and histone modifications on regulatory SNP determines CF outcome”

10:15 - 10:30: [Petra Nathan](#) (PI: Susanne Krauss-Etschmann, *DZL Munich Campus*)

“Effect of in utero cigarette smoke exposure on the offspring: characterization of phenotype and lung gene expressions”

10:30 - 10:45: [Natalia El-Merhie](#) (PI: Eveline Baumgart-Vogt)

“The role of peroxisomes in chronic obstructive pulmonary disease”

10:45 - 11:00: [Stephan Spahn](#) (PI: Marcus Mall, *DZL Heidelberg Campus*)

“Effect of osmotic stress on chloride channel SLC26A9 function”

## **E) PULMONARY HYPERTENSION II, STEM CELLS, AND TRANSCRIPTONAL REGULATION**

**Wednesday, August 6<sup>th</sup>, at 11:30**

**Chairs: Kathrin Siebers and Elisabetta Gamen**

11:30 - 11:45: [Monika Malczyk](#) (PI: Norbert Weissmann)

“Role of classical transient receptor potential (TRPC) 1 in murine pulmonary arterial smooth muscle cell function in pulmonary hypertension”

11:45 - 12:00: [Gayathri Viswanathan](#) (PI: Ralph T. Schermuly)

“Role of G-protein coupled receptors in pulmonary arterial hypertension”

12:00 - 12:15: [Anita Golec](#) (PI: Robert Voswinckel)

“Developmental studies for therapeutic approaches using endothelial cells derived from mouse embryonic stem cells”

12:15 - 12:30: [Adriana Contreras](#) (PI: Guillermo Barreto)

“microRNA mediated transcriptional regulation”



## Speaker Introductions

**Sir Magdi Yacoub** by Jan Schneider

**Professor Robert Huber** by Shalini Venkatesan

**Cardinal Wim Eijk** by Anna Lena Merkel

**Professor Sadis Matalon** by Luciana Mazzocchi

**Professor James Frank** by Tatyana Likhoshvay

**Professor Harald zur Hausen** by Ivana Mižíková

**Professors Aly Zaky & Bart Haagmans** by Alicia Madurga Hernández & Balachandar Selvakumar

**Professor Maria Belvisi** by Monika Malczyk

## Poster Presentations:

| Poster board number | Presenter (Monday)            |
|---------------------|-------------------------------|
| 1                   | Addi Romero                   |
| 2                   | Aglaia Ntokou                 |
| 3                   | Aleksandar Petrović           |
| 4                   | Ana Ivonne Vázquez Armendariz |
| 5                   | Changwu Lu                    |
| 6                   | Claudio Nardiello             |
| 7                   | Diogo Silva                   |
| 8                   | Elsa Tadele                   |
| 9                   | Irina Shalashova              |
| 10                  | Mario Böhm                    |
| 11                  | Martin Reichert               |
| 12                  | Maryam Keshavarz              |
| 13                  | Mira Goekyildirim             |
| 14                  | Paulina Gwoździńska           |
| 15                  | Poonam Tambe                  |
| 16                  | Ujjwal Deo                    |

## Meet-the-Professor session allocations:

### **Magdi Yacoub**

Ivana Mižíková  
Alena Moiseenko  
Dijana Iloska  
**Elisabetta Gamen\***  
Martin Reichert  
Diogo Silva  
Daphne Mous

### **Robert Huber**

Adriana Contreras  
Mario Böhm  
Anita Golec  
Shalini Venkatesan  
**Christina Herkt\***  
Amit Shrestha  
Irina Shalashova

### **Sadis Matalon**

Paulina Gwoździńska  
Aglaiia Ntokou  
Changwu Lu  
**Jordi Ruiz Camp\***  
Kathrin Siebers  
Addi Romero  
Petra Nathan

### **James A. Frank**

Lina Jankauskaite  
Balachandar Selvakumar  
Balram Neupane  
Elsa Tadele  
**Natalia El-Merhie\***  
Ujjwal Deo  
Stephan Spahn

### **Harald zur Hausen**

Anna Lena Merkel  
Christoph Arens  
Ana Armendariz  
Aleksandar Petrović  
Poonam Tambe  
**Jan Schneider\***  
Mariola Bednorz  
Andrew P. Ferretti  
Espen Groth

### **Aly Zaky and Bart Haagmans**

Alicia Madurga Hernández  
Alberto Rodriguez-Castillo  
Mira Goekyildirim  
Salma Dilai  
**Tatyana Likhoshvay\***  
Claudio Nardiello  
Chidiebere U. Awah

### **Maria Belvisi**

Gayathri Viswanathan  
Oleksiy Klymenko  
**Monika Malczyk\***  
Luciana Mazzocchi  
Maryam Keshavarz  
Žaneta Sibinska  
Agnieszka Pozarska

\* These persons are responsible for the organization of their groups for the “Meet-the Professor” session!  
(Immediately after the group photograph, please convene the group members, locate the professor for your group, identify and migrate the group to a place for the session, and keep an eye on the time)