

Welcome to the 4th Annual Retreat

of the

International Graduate Program

“Molecular Biology and Medicine of the Lung”

(MBML)



**Rauischholzhausen,
July 31 - August 2, 2006**

MONDAY, 31.07.2006

Up to 09:00

Arrival at the Castle of Rauschholzhausen, Registration

09:30 – 10:30:

Welcome and Introduction: Werner Seeger, Oliver Eickelberg

Opening Lecture: MBML Retreat 2006

JACOB I. SZNAJDER (Northwestern University, Chicago, IL)

“Adaptation of the alveolar epithelium to hypoxia”

10:30 - 12:00

Student Presentations:

LUNG (PATHO)PHYSIOLOGY

12:00 -13:30

Lunch

13:30 - 15:00: Invited Speakers

ZEA BOROK (University of Southern California/Keck School of Medicine, Los Angeles, USA)

“Alveolar epithelial cell plasticity”

RICHARD BLAND (Stanford University School of Medicine, Stanford, USA)

“Neonatal Chronic Lung Disease: Insights from Animal Models”

15:00 - 16:00

Coffee Break

16:00 - 17:45

Student Presentations:

LUNG INFECTION, INFLAMMATION, AND INJURY

18:00 - 19:30

Buffet Dinner

19:30 – 20:15: After Dinner Lecture

KURT STENMARK (University of Colorado Health Sciences, Denver, USA)

“TBA”

After 20.15

Drinks, Chat

TUESDAY, 01.08.2006

07:00 - 08:00

Breakfast

08:00 - 10:00

**Student Presentations:
FIBROTIC LUNG DISEASES**

10:00 - 10:30

Coffee Break

10:30 - 12:00: Invited Speakers

BETHANY MOORE (University of Michigan, Ann Arbor, MI, USA)

“The recruitment and activation of fibrocytes in the pathogenesis of pulmonary fibrosis”

SERPIL ERZURUM (Cleveland Clinic Foundation, Cleveland, USA)

“Endothelial Progenitor cells in Idiopathic Pulmonary Arterial Hypertension”

12:00 - 13:30

Lunch

13:30 - 15:00

**Student Presentations:
DEVELOPMENT AND PROGENITOR CELLS**

15:00 - 17:00

Coffee Break

Meet-the-Professor-Sessions (MBML students, see announcements)

17:00 - 18:30

**Student Presentations:
PULMONARY VASCULAR DISEASE**

18.30 - 19:15: Evening Lecture

MARLENE RABINOVICH (Stanford University School of Medicine, Stanford, CA, USA)

“BMP Co-Dependent Pathways and Insulin Resistance
in the Pathogenesis of Pulmonary Hypertension”

19:15 - till you drop!

Barbecue Dinner and Social Program

WEDNESDAY, 02.08.2006

07:30 - 09:00

Breakfast

09:00 - 10:45

**Student Presentations:
CELLULAR SIGNALING**

10:45 - 11:30

Coffee Break

11:30 - 13:00

Invited Speakers:

YOAV HENIS (Tel Aviv University, Tel Aviv, Israel)
“Dynamics of Ras and Src membrane interactions in live cells”

JEANINE d'ARMIENTO (Columbia University, New York City, NY)
“TBA”

13:00 - 14:30

Lunch

around 14:30

Bus departure from Rauschholzhausen to Giessen
Meeting Point: Parking Lot of the Castle 14:15

A) LUNG (PATHO)PHYSIOLOGY, MONDAY, 10:30 - 12:00

Chairs: Ana Ruth Pinto & Piotr Sklepkiewicz

10:30 - 10:45: [Susan Wehner**](#) (PI: Norbert Weissmann)

“Characterization of ROS/NO production in hypoxia-stimulated and inflamed isolated lungs”

10:45 - 11:00: [Xia Tian**](#) (PI: Ralph T. Schermuly)

”Phosphodiesterases in pulmonary arterial hypertension”

11:00 - 11:15: [Julia Sevilla-Perez](#) (PI: Oliver Eickelberg)

”TGF- β signaling in alveolar epithelial cells *in vivo*”

11:15 - 11:30: [Akylbek Sydykov**](#) (PI: Ardeschir Ghofrani)

”Characterization of ROS production in ischemia/reperfusion-induced lung injury”

11:30 - 11:45: [Dorothea Peters](#) (PI: Rory E. Morty)

”Acute effects of TGF- β on ENaC in acute lung injury”

11:45 - 12:00: [Natascha Sommer**](#) (PI: Norbert Weissmann)

“The role of mitochondria in oxygen sensing in the lung”

B) LUNG INFECTION, INFLAMMATION AND INJURY, MONDAY, 16:00 - 17:45

Chairs: Manish Mittal & Ewa Surdziel

16:00 - 16:15: [Tatyana Koledachkina](#) (PI: Andreas Günther)

“Pathomechanisms and therapeutic implications of impaired host defense in pulmonary fibrosis”

16:15 - 16:30: [Ruth Pinto](#) (PI: Stephan Pleschka)

“MAPK-inhibition during Influenza A virus replication and host inflammation in the mouse lung”

16:30 - 16:45: [Lidija Cakarova](#) (PI: Jürgen Lohmeyer)

“Macrophage-epithelial crosstalk during alveolar differentiation and repair in pulmonary inflammation”

16:45 - 17:00: [Markus Queisser](#) (PI: Klaus T. Preissner)

“Advanced glycation end products & RAGE: Thread in diabetes and lung injury”

17:00 - 17:15: [Maciej Cabanski](#) (PI: Jürgen Lohmeyer)

“PAMP-induced genetic programs in mononuclear phagocytes”

17:15 - 17:30: [Huawen Ding](#) (PI: Andreas Günther)

“Cell-specific gene transfer to the respiratory epithelium”

17:30 - 17:45: [Bakytbek Egemnazarov**](#) (PI: Ardeschir Ghofrani)

“Role of different NOS isoforms in I/R injury: Kinetic of ROS production in I/R injury”

C) FIBROTIC LUNG DISEASES, TUESDAY, 08:00 - 10:00

Chairs: Maciej Cabanski & Eva Dony

08:00 - 08:15: [Poornima Mahavadi](#) (PI: Andreas Günther)

“Altered lysosomal trafficking in a mouse model of pulmonary fibrosis”

08:15 - 08:30: [Kamila Kitowska](#) (PI: Oliver Eickelberg)

”Arginine metabolism and arginase expression in lung fibrosis”

08:30 - 08:45: [Sergey Udalov**](#) (PI: Ralph T. Schermuly)

“Phosphodiesterase 4 inhibitors in bleomycin-induced lung fibrosis”

08:45 - 09:00: [Aparna Jayachandran](#) (PI: Oliver Eickelberg)

”Mechanisms of epithelial-to-mesenchymal transition (EMT) in lung fibrosis”

09:00 - 09:15: [Takwi Nkyimbeng](#) (PI: Andreas Günther)

“Extracellular matrix remodelling by matrix metalloproteases (MMP) in the lung”

09:15 - 09:30: [Ewa Surdziel](#) (PI: Melanie Königshoff)

“Wnt signaling in lung fibrosis”

09:30 - 09:45: [Sevdalina Nikolova**](#) (PI: Ralph T. Schermuly)

“Role of cGMP Phosphodiesterases in Idiopathic Pulmonary Fibrosis”

09:45 - 10:00: [Izabella Chrobak](#) (PI: Oliver Eickelberg)

“Differential expression of the TGF- β type I receptor ALK1 in lung fibrosis”

D) DEVELOPMENT AND PROGENITOR CELLS, TUESDAY, 13:30 - 15:00

Chairs: Dorothea Peters & Viktor Malec

13:30 - 13:45: [Vandana Nikam](#) (PI: Robert Voswinckel)

“Circulating fibrocytes in pulmonary hypertension”

13:45 - 14:00: [Sabine Lange](#) (PI: Heinrich Sauer)

“Vasculogenesis and smooth muscle differentiation of mouse embryonic stem cells”

14:00 - 14:15: [Karsten grosse Kreymborg](#) (PI: Ardeschir Ghofrani)

“Establishment and characterization of a new model of right ventricular hypertrophy in mice induced by pulmonary arterial banding”

14:15 - 14:30: [Karolina Chwalek](#) (PI: Grazyna Kwapiszwska)

“The role of neurotrophins in vascular remodelling”

14:30 - 14:45: [Kathrin Woyda**](#) (PI: Ralph T. Schermuly)

“The role of phosphodiesterases in bronchopulmonary dysplasia”

14:45 - 15:00: [Jens-Christian Wolff](#) (PI: Ludger Fink)

“Molecular mediators of alveolarization”

E) PULMONARY VASCULAR DISEASE, TUESDAY, 17:00 - 18:30

Chairs: Aparna Jayachandran & Karsten grosse Kreymborg

17:00 - 17:15: [Dariusz Zakrzewicz](#) (PI: Oliver Eickelberg)

“Protein arginine methylation in idiopathic pulmonary arterial hypertension”

17:15 - 17:30: [Eva Dony](#) (PI: Ralph T. Schermuly)

“Establishment of a murine model of pulmonary emphysema”

17:30 - 17:45: [Piotr Sklepkiwicz**](#) (PI: Ralph T. Schermuly)

“Role of GSK-3 β / β -catenin signalling in idiopathic pulmonary arterial hypertension”

17:45 - 18:00: [Jiang Zhou](#) (PI: Robert Voswinckel)

“RGS5-domain protein: a new key regulator in the pathogenesis of idiopathic pulmonary arterial hypertension (iPAH)”

18:00 - 18:15: [Fotini Kouri](#) (PI: Oliver Eickelberg)

“Expression and functional analysis of the TGF- β /BMP system in pulmonary arterial hypertension”

18:15 - 18:30: [Isabel Laumanns](#) (PI: Robert Voswinckel)

“Wnt signaling in pulmonary hypertension”

F) CELLULAR SIGNALING, WEDNESDAY, 09:00 - 10:45

Chairs: Markus Queisser & Lidija Cakarova

09:00 - 09:15: [Shu Li](#) (PI: Jörg Hänze)

“Role of Nox1-derived ROS in hypoxia signalling”

09:15 - 09:30: [Jadranka Milosevic](#) (PI: Oliver Eickelberg)

“Translocation proteomics: A novel technology for the analysis of signal transduction processes”

09:30 - 09:45: [Ewa Kolosionek**](#) (PI: Ralph T. Schermuly)

“Regulation of phosphodiesterases by profibrotic mediators”

09:45 - 10:00: [Oana Raluca Domnisoru](#) (PI: Jörg Hänze)

“Relation of hypoxia and cellular stress responses for therapy resistance of cancer cells”

10:00 - 10:15: [Ewa Rupniewska](#) (PI: Oliver Eickelberg)

“Role of snail proteins in alveolar epithelial cell plasticity”

10.15 - 10:30: [Victor Malec](#) (PI: Jörg Hänze)

“Folding and interaction of NOX and p22phox NADPH oxidase subunits”

10:30 - 10:45: [Manish Mittal](#) (PI: Norbert Weissmann)

“Role of NADPH oxidases and potassium channels in oxygen sensing”

** Current Altana sponsored students

INTRODUCTION SCHEDULE

31.07.2006	09:45; Sznajder	(Natascha Sommer)
31.07.2006	13:30; Borok	(Aparna Jayachandran)
31.07.2006	14:15; Bland	(Kathrin Woyda)
31.07.2006	19:30; Stenmark	(Oana R. Domnisoru)
01.08.2006	10:30; Moore	(Lidija Cakarova)
01.08.2006	11:15; Erzurum	(Kamila E. Kitowska)
01.08.2006	18:30; Rabinovich	(Fotini M. Kouri)
02.08.2006	11:30; Henis	(Markus Queisser)
02.08.2006	12:15; d'Armiento	(Takwi Nkyimbeng)

INVITED SPEAKERS:

Richard D. Bland, MD

Professor of Pediatrics
Stanford University School of Medicine
CCSR Building, Room 1225
269 Campus Drive
Stanford, CA 94305-5162
Email: rbland@stanford.edu

Zea Borok, MD

Professor of Medicine
University of Southern California
2011 Zonal Avenue, HMR 911
Los Angeles, CA 90033
Email: zborok@usc.edu

Jeanine D'Armiento, MD, PhD

Assistant Professor of Medicine
Columbia University
630 West 168th Street, P&S 9-449
New York, NY 10032
Email: jmd12@columbia.edu

Serpil C. Erzurum, MD

Chair, Department of Pathobiology
Lerner Research Institute (NC22)
The Cleveland Clinic Foundation
9500 Euclid Avenue
Cleveland, Ohio 44195
Email: erzurus@ccf.org

Yoav I. Henis, PhD

Professor of Biochemistry
The Zalman Weinberg Chair of Cell Biology
Dept. of Neurobiochemistry
Faculty of Life Sciences
Tel Aviv University
Tel Aviv 69978, Israel
Email: henis@post.tau.ac.il

Bethany B. Moore, PhD

Assistant Professor of Medicine
Department of Internal Medicine, Pulmonary, and Critical Care Medicine
4062 BSRB 109 Zina Pitcher Pl
University of Michigan
Ann Arbor, MI 48109-2200
Email: BMoore@umich.edu

Marlene Rabinovitch, MD

Dwight and Vera Dunlevie Professor of Pediatrics
Professor (by courtesy) Developmental Biology
Research Director of the Wall Center for Pulmonary Vascular Diseases
Stanford University School of Medicine
CCSR-Room 2245B
269 Campus Drive,
Stanford University
Stanford, California, 94305-5162
Email: marlener@stanford.edu

Kurt R. Stenmark, MD

Professor of Pediatrics
Section Head, Critical Care Medicine
Director, Developmental Lung Biology Laboratory
University of Colorado at Denver and HSC
4200 E. 9th Avenue, Box B131
Denver, CO 80262
Email: Kurt.Stenmark@UCHSC.edu

Jacob I. Sznajder, MD

Professor of Medicine and Cell and Molecular Biology
Chief, Pulmonary and Critical Care Medicine
Feinberg School of Medicine, Northwestern University
240 E. Huron, McGaw Pavilion M-326
Chicago, IL 60611
Email: j-sznajder@northwestern.edu

ENJOY IT!