

THURSDAY - JUNE 5, 2014

9:00 – 9:10 **Opening Remarks**
Xianhua Piao
Boston Children's Hospital, Harvard Medical School

Session A - Domain-specific Function and *in vivo* signaling of Adhesion GPCRs

Chair: Randy Hall

9:10 – 9:35 **Mechanisms in Adhesion GPCR -activation and –Signal Transduction**
Ines Liebscher, University of Leipzig

9:35 – 10:00 **Organ-specific Function of Adhesion G Protein-coupled Receptor GPR126 is Domain-dependent**
Felix Engel, Friedrich-Alexander University

10:00 – 10:25 **The Adhesion G Protein-coupled Receptor GPR112 is Selectively and Highly Expressed in Enteroendocrine Cells and is Required for Enteroendocrine Cell Development**
Miriam Peeters, Post-doctoral Fellow of Dr. Thue W. Schwartz University of Copenhagen

10:25 – 10:45 *Coffee Break*

Session B – Adhesion GPCR in Development

Chair: Felix Engle

10:45 – 11:10 **GPR116-Mediated Regulation of Pulmonary Surfactant Homeostasis**
James Bridges, University of Cincinnati

11:10 – 11:35 **Emphysema-like Symptoms in Lungs of Ig-Hepta/GPR116-Deficient Mice**
Donna Mareta Ariestanti, Tokyo Institute of Technology

11:35 – 12:00 **G Protein Coupled Receptor 56 is a Target Gene of the PGC-1 α Isoform and Regulates Overload-induced Muscle Hypertrophy**
James White, Post-doctoral Fellow of Dr. Bruce M Spiegelman
Dana Farber Cancer Institute, Harvard Medical School

12:00 – 14:00 *Lunch Break*

Session C - Adhesion GPCR in Cancer

Chair: Torsten Schöneberg

14:00 – 14:25 **Adhesion-GPCRs are Implicated in Cancer Progression and Metastasis**
Bigyan Bista, Graduate Student
Massachusetts Institute of Technology

14:25 – 14:50 **GPR56 Inhibits Melanoma Growth by Internalizing and Degrading Its Ligand TG2**
Lei Xu, University of Rochester Medical School

14:50 – 15:15 **GPR116 Promotes Breast Cancer Metastasis via the G α -p63RhoGEF-Rho GTPase Pathway**
Mingyao Liu, Shanghai Key Lab of Regulatory Biology

15:15 – 15:35 *Coffee Break*

Session D – Adhesion GPCRs in Human Diseases

Chair: Xianhua Piao

15:35 – 16:00 **Noncoding DNA in GPR56 Regulates Local Neuroprogenitor Proliferation and Human Gyral Patterning**
Byoung-il Bae, Postdoctoral Fellow of Dr. Christopher A. Walsh
Boston Children's Hospital, Harvard Medical School

16:00 – 16:25 **VLGR1 in Health and Disease**
Uwe Wolfrum, University of Mainz

Session E – The Evolution of Adhesion GPCRs Followed by Business Meeting

Chair: Jörg Hamann

16:25 – 16:50 **Adhesion GPCR Nomenclature and Evolutionary Aspects**
Helgi Schiöth, University of Uppsala

16:50 – 17:50 *Discussions on the Nomenclature, Next Workshop, and Adhesion GPCR Consortium*

FRIDAY - JUNE 6, 2014

Session F – Adhesion GPCR in Myelination

Chair: Tobias Langenhan

9:00 – 9:20 **GPR56 and CNS Myelination**
Stefanie Giera, Post-doctoral Fellow of Dr. Xianhua Piao
Boston Children's Hospital, Harvard Medical School

9:20 – 9:40 **The Function of Gpr126 in Myelin Maintenance and Remyelination**
Amit Mogha, Post-doctoral Fellow of Dr. Kelly Monk
Washington University in St. Louis, School of Medicine

- 9:40 – 10:00 **Gpr126 Signaling in Schwann Cell Myelination**
William S Talbot, Stanford University
- 10:00 – 10:20 **Laminin 211 is Schwann Cell-specific Ligand of the Adhesion GPCR GPR126 during Development**
*Rong Lu, Post-doctoral Fellow of Dr. Xianhua Piao
Boston Children's Hospital, Harvard Medical School*
- 10:20 – 10:40 **The Adhesion GPCR Gpr126 has Distinct, Domain-dependent Functions in Schwann Cells Governed by Interaction with Lamini-211**
*Kelly Monk
Washington University in St. Louis, School of Medicine*
- 10:40 – 11:00 *Coffee Break*

Session G – Adhesion GPCRs in Neural Development

Chair: Kelly Monk

- 11:00 – 11:25 **Latrophilin/dCIRL is Required for Locomotion in Drosophila**
*Nicole Hartman, Graduate Student of Dr. Tobias Langenhan
University of Würzburg*
- 11:25 – 11:50 **Role of Celsr3 and Fzd3 in Axon Guidance**
Andre M. Goffinet, University of Louvain
- 11:50 – 14:00 *Lunch Break*

Session H – Adhesion GPCR in Synaptogenesis

Chair: Andre M. Goffinet

- 14:00 – 14:25 **The C. Elegans Celsr Ortholog FMI-1 Regulates Axon Outgrowth and Synaptogenesis via Distinct Mechanisms**
Brian Ackley, University of Kansas
- 14:25 – 14:50 **BAI1 Restricts Dendrite Arborization during Development in Hippocampal Neurons**
*Joseph G. Duman Post-doctoral fellow of Kimberley F. Tolias
Baylor College of Medicine*
- 14:50 – 15:15 **The Adhesion-GPCR BAI3 as a Coordinator of Dendritogenesis and Synaptogenesis**
*Severine Sigollot, Post-doctoral Researcher
College de France*
- 15:15 – 16:00 *Coffee Break and Group Photo*

Session I – Poster session 16:00 – 18:00

SATURDAY - JUNE 7, 2014

Session J – New Role for “Old” Adhesion GPCRs

Chair: Hsi-Hsien Lin

- 9:00 – 9:25 **GPR64 New Role for an Old Adhesion 7TM Receptor in the Sensory System**
Thue W. Schwartz, University of Copenhagen
- 9:25 – 9:50 **CD97 Regulates Intestinal Chloride Secretion**
Gabriela Aust, University of Leipzig
- 9:50 – 10:15 **EMR2 and its Role in Human Ocular Tolerance**
*Helen Song, Schepens
Eye Research Institute - Mass Eye and Ear*
- 10:15 – 10:35 *Coffee Break*

Session K - Structural Biology of Adhesion GPCRs

Chair: Thue W. Schwartz

- 10:35 – 11:00 **Towards a Structural and Functional Understanding of Adhesion GPCRs: the GAIN Domain and Beyond.**
Demet Araç, University of Chicago
- 11:00 – 11:25 **Understanding 7TM-Cadherin Function in 3D**
*Caroline Formstone
King's College of London*
- 11:25 – 11:50 **Crystal Structures of the C1q-like Protein Family Reveal Conserved Ca²⁺ Binding Motifs Crucial for BAI3 GPCR Interaction and Synapse Homeostasis.**
*Susanne Ressler, Post-doctoral Research Fellow of Axel T. Brunger
Stanford University*
- 11:50 – 14:00 *Lunch Break*

Session L- Signaling Properties of Adhesion GPCRs

Chair: Lei Xu

- 14:00 – 14:25 **Latrophilin Signals through G Protein Activation and Distinct Intracellular Cues to Mediate Embryonic Development**
Simone Prömel, University of Leipzig
- 14:25 – 14:50 **Signaling Properties and Synaptic Function of the Adhesion GPCR BAI1**

- Randy Hall, Emory University School of Medicine*
14:50 – 15:15 **Deciphering the Mechanisms of GPR56 and GPR110 Activation of Heterotrimeric G Proteins**
Gregory Tall, University of Rochester Medical Center
- 15:15 – 15:35** *Coffee Break*

Session M - Adhesion GPCRs in NK cell function

Chair: Gabriela Aust

- 15:35 – 16:00** **Regulation of GPR56 Expression in Human NK cells**
Jorg Hamann, University of Amsterdam
- 16:00 – 16:25** **GPR56 Receptor Plays an Inhibitory Role in NK Cell Cytotoxicity**
Hsi-Hsien Lin, Chang Gung University
- 16:25 – 17:00** **Presentation of the Travel Award and Closing Remarks**
Jorg Hamann, Tobias Langenhan, and Xianhua Piao