6th International Adhesion-GPCR Workshop

6-8 Sep 2012
Institute of Physiology
University of Würzburg, Germany

Thursday - 6 Sep 2012

9:00 - 9:10 Opening remarks
Tobias Langenhan, Würzburg

Session A - Structural hallmarks of Adhesion-GPCR
Chair: Hsi-Hsien Lin

9:10 - 9:35 The GPS motif: 15 years of studies
Alexander Petrenko, Russian Academy of Sciences

9:35 - 10:00 A Novel Evolutionarily Conserved Domain of Cell-Adhesion GPCRs Mediates Autoproteolysis
Demet Araç-Ozkan, Stanford University

10:00 - 10:25 Structural insights into the Adhesion-GPCR CD97
Martin Stacey, University of Leeds

10:25 - 10:45 Coffee break

Session B - Neurobiological roles of Adhesion-GPCR
Chair: Caroline Formstone

10:45 - 11:10 Latrophilin governs synaptic development
Tobias Langenhan, University of Würzburg

11:10 - 11:35 High-affinity functional trans-synaptic receptor pairs between presynaptic latrophilin and post-synaptic Lasso (teneurin-2)
Yuri Ushkaryov, University of Kent

11:35 - 12:00 GPR56-dependent development of the frontal cerebral cortex
Xianhua Piao, Harvard Medical School

12:00 - 14:00 Lunch break

Session C - Neurobiological roles of Adhesion-GPCR (cont'd)
Chair: Gabriela Aust

14:00 - 14:25 GPR56, together with α3β1 integrin, regulates cortical lamination
Kathleen Singer, Harvard Medical School

14:25 - 14:50 Role of Celsr1-3 cadherins in planar cell polarity and brain development
André Goffinet, University of Louvain

14:50 - 15:15 The very large G protein coupled receptor Vlgr1b/GPR98 as a key component of the Usher syndrome protein networks in the inner ear and the retina
Uwe Wolfrum, University of Mainz

15:15 - 15:40 Molecular and genetic analysis of Gpr126 in peripheral nerve development
Kelly Monk, Washington University School of Medicine, St. Louis

15:40 - 16:00 Coffee break

16:00 - 17:00 Poster session

18:30 Wine tasting in the historic wine cellar of the "Residenz" (registration required)

Friday - 7 Sep 2012

Session D - Adhesion-GPCR in development
Chair: Yuri Ushkaryov

9:00 - 9:25 Basal enrichment of Celsr1 protein within epithelia: novel function or apico-basal dependent planar cell polarity (PCP) signalling?
Caroline Formstone, King's College London

9:25 - 9:50 Knockdown of the orphan G protein-coupled receptor 126 influences ventricular morphogenesis and heart function in zebrafish and mice
Felix Engel, MPI Bad Nauheim

9:50 - 10:15 Mice constitutively overexpressing CD97 in enterocytes develop a megaintestine without alterations in histology and cell fate decision
Gabriela Aust, University of Leipzig

10:15 - 10:45 Coffee break

Session E - Adhesion-GPCR in tumor biology
Chair: Alexander Petrenko

10:45 - 11:10 Roles of GPR56 and TG2 during melanoma progression
Lei Xu, University of Rochester Medical Center

11:10 - 11:35 The expression of the EGF-TM7 receptor CD97 is higher in CD34-negative and NPM1/FLT3-ITD mutated AML
Manja Wobus, University of Dresden

11:35 - 12:00 Activation of EMR2 receptor via ligation-induced translocation and interaction of receptor subunits in lipid rafts activates macrophages
Hsi-Hsien Lin, Chang Gung University

12:00 - 14:00 Lunch break

Session F - Signal transduction of Adhesion-GPCR
Chair: Kelly Monk

14:00 - 14:25 Shear stress-dependent downregulation of the Adhesion-GPCR CD97 on circulating leukocytes upon contact with its ligand CD55
Jörg Hamann, University of Amsterdam

14:25 - 14:50 Insights into the molecular function of latrophilins - logic of adhesion-GPCR signalling
Simone Prömel, University of Leipzig

14:50 - 15:15 G protein-mediated signal transduction of Adhesion-GPCR
Ines Liebscher, University of Leipzig

15:15 - 15:40 Real-time monitoring of GPCR signaling in living cells: from intracellular signaling microdomains to single molecules
Davide Calebiro, University of Würzburg

15:40 - 16:30 Coffee break

16:30 - 17:30 General Meeting of the Adhesion-GPCR Consortium

19:00 Evening programme

Saturday - 8 Sep 2012

Session G - Miscellaneous facets of the Adhesion-GPCR class
Chair: Xianhua Piao

9:00 - 9:25 The origin of the Adhesion-GPCR family
Helgi Schiöth, University of Uppsala

9:25 - 9:50 The ADHD-susceptibility gene *Iphn3.1* modulates dopaminergic neuron formation and locomotor activity during zebrafish development
Klaus-Peter Lesch, University of Würzburg

9:50 - 10:15 Adhesion 7TM receptors – major players in the endocrine and enteroendocrine system
Thue Schwartz, University of Copenhagen

10:15 - 10:45 Coffee break

Open discussion
Chairs: Tobias Langenhan & Jörg Hamann

10:45 - 11:45 Future initiatives of the Adhesion-GPCR community

11:45 - 12:00 Concluding remarks

Information

Organizer
Tobias Langenhan (http://www.langenhan-lab.org)

Venue
Lecture Hall of the Institute of Physiology, Röntgenring 9, 97070 Würzburg

More information
http://www.adhesiongpcr.org

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