

Program 12th aGPCR Workshop

16-18 September 2026, Düsseldorf

Wednesday 16.09.2026

14:00 - 15:30	Registration
15:30 - 15:45	Welcome
15:45 - 16:45	Keynote Lecture The long road to understanding: Early adventures in adhesion GPCR research Jörg Hamann, Amsterdam UMC (Netherlands)
16:45 - 17:00	Short Break
Decoding aGPCRs: Activation, Structure & Signaling	
17:00 - 17:20	The far extracellular CUB domain of the adhesion GPCR ADGRG6/GPR126 is a key regulator of receptor signaling Sumit Bandekar, University of Chicago (United States)
17:20 - 17:30	Actin-dependent PKC delta modulation on C-tail phosphorylation of ADGRL3 Yin Kwan (Alex) Chung, University of Copenhagen (Denmark)
17:30 - 17:50	The cryo-EM structure of ADGRL4 provides functional insights into its mechanism of activation David Favara, MRC Laboratory of Molecular Biology, Cambridge (United Kingdom)
17:50 - 18:10	Cryo-EM structures of adhesion GPCR arrestin complexes: Three-tiered regulation of β -arrestin signalling encodes functional diversity across adhesion GPCRs Jin-Peng Sun, Shandong University, Jinan (China)
18:10 - 18:20	Structural and Functional Investigation of ADGRV1, a key adhesion GPCR for hearing Clarice Marty, Institut Pasteur, Paris (France)
18:20 - 18:40	Comparison of Adhesion GPCR Activation Modes Biochemically, ex vivo and in vivo using ADGRG3/GPR97 and ADGRG1/GPR56 as model receptors Gregory Tall, University of Michigan Medical School (United States)
18:40 - 18:50	GAIN domain cleavage as a protein trafficking checkpoint for adhesion GPCRs Lina Zielke, Leipzig University (Germany)
18:50 - 19:00	A new modality for adhesion GPCR signaling? TMPRSS6-dependent processing of ADGRE5/CD97 promotes receptor activation and signaling Ana Lilia Moreno Salinas, University of Sherbrooke, Québec (Canada)
19:00 - 20:30	Poster Session (with drinks and finger food)

Thursday 17.09.2026

8:30 - 9:15	AGC General Assembly
9:15 - 9:45	Coffee Break
Forces at Work: Mechanosensing & Mechanical Adaptation	
9:45 - 10:05	Signaling function and Mechanosensation of the Adhesion GPCR ADGRL3 Signe Mathiasen, University of Copenhagen (Denmark)
10:05 - 10:15	Direct tensile force activates Adgrl3 in a tethered agonist-dependent manner Jesper Holmkvist, University of Copenhagen (Denmark)
10:15 - 10:25	ADGRD2 (GPR144) is required for maintenance of a straight body axis and activation of floor plate cells by the cerebrospinal fluid Claire Lebarbenchon, University of Basel (Switzerland)
10:25 - 10:45	Latrophilin-2 regulates blood flow-mediated vascular homeostasis via non-canonical G protein-independent signaling Keiichiro Tanaka, Yale University (United States)
10:45 - 11:45	Experience with antibodies against aGPCRs Rob Meijers, IPI Antibodies (United States)
11:45 - 12:00	Group photo
12:00 - 13:15	Lunch Break / Poster Session
Building Connections: Adhesion, Cell-Cell Communication, and synapse signaling	
13:15 - 13:35	Myelin-Associated Glycoprotein Is a cis-Regulatory Partner of ADGRL/latrophilin Antony A. Boucard, Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico City (Mexico)
13:35 - 13:55	Untangling excitatory versus inhibitory synapse specification by Latrophilin Adhesion GPCRs Daniel Matúš, Stanford University (United States)
13:55 - 14:15	Female-specific nociception controlled by the adhesion GPCR Remoulade Beatriz Blanco-Redondo, Leipzig University (Germany)
14:15 - 14:35	Dissecting molecular symmetry breaking in trans-intercellular complexes of Fmi/Celsr ADGRC class receptors David Strutt, University of Sheffield (United Kingdom)
14:35 - 14:55	ADGRCs in glutamatergic synapse formation and maturation Yimin Zou, The University of California, San Diego (United States)
15:00 - 16:25	AGC Board Meeting / Poster Session
16:30	Departure for City Tour
18:30	Conference Dinner

Friday 18.09.2026

Shaping Tissues: Development, Polarity & Morphogenesis

8:30 - 8:50	Investigating the role of the adhesion GPCR ADGRL/Cirl in neuronal tension homeostasis Nicole Scholz, Leipzig University (Germany)
8:50 - 9:00	ADGRL/Cirl-mediated communication within the cortex glia-neuroblast niche Lara-Sophie Brodmerkel, Leipzig University (Germany)
9:00 - 9:20	Adgrg6/Gpr126 is required for compact wall integrity and establishing trabecular identity during cardiac trabeculation Felix Engel, Friedrich Alexander University Erlangen-Nürnberg (Germany)
9:20 - 9:30	Understanding the roles of adgrg6 N-glycosylation in zebrafish tissue development Anandhu Jayachandran, Ashoka University (India)
9:30 - 9:50	A novel dominant zebrafish adgrg6 (gpr126) mutant with distinct ear defects and precocious mbpa expression Nahal Shahidan, University of Sheffield (United Kingdom)
9:50 - 10:10	WNT7A/B assemble a GPR124-RECK-LRP5/6 co-receptor complex to activate β -catenin signaling in brain endothelial cells Mario Vallon, University of Würzburg (Germany)
10:10 - 10:40	Coffee Break

Maintaining Balance: Organ Homeostasis & Adaptation

10:40 - 11:00	Identification of SFTA2 as an ADGRF5 binding protein and regulator of pulmonary surfactant homeostasis James Bridges, National Jewish Health, Denver (United States)
11:00 - 11:10	Endothelial Mechanosensation as a Driver of Adipose Tissue Aging and Thermogenic Failure Anastasia Georgiadi, Helmholtz Centre Munich (Germany)
11:10 - 11:30	The mechanosensitive adhesion G protein-coupled receptor 133 (GPR133/ADGRD1) enhances bone formation Ines Liebscher, Leipzig University (Germany)
11:30 - 11:40	ADGRF5 prevents dilated cardiomyopathy via Gq protein/ERK1/2/STAT3-dependent repression of eccentric cardiomyocyte growth Douglas Tilley, Temple University, Philadelphia (United States)
11:40 - 11:50	The DNA repair factor ku80 binds and activates the adhesion receptor ELTD1/ADGRL4 Björn Olde, Lund University (Sweden)
11:50 - 12:10	Dual role of brain endothelial Gpr126 in blood-brain barrier development and ischemic stroke Monica Giannotta, University of Pavia (Italy)
12:10 - 12:20	Gpr56 Expression Preserves GFR in the Adenine-induced Renal Injury Mouse Ryan Martinez, University of New Mexico (United States)
12:20 - 13:20	Lunch Break

Responding to Challenge: Immunity, Injury & Disease

13:20 - 13:40	Regulation of aGPCRs after traumatic injury Gabriela Aust, Leipzig University (Germany)
13:40 - 14:00	ADGRV1 regulates glutamate homeostasis in hippocampal astrocytes supporting neurons Uwe Wolfrum, Johannes Gutenberg University Mainz (Germany)
14:00 - 14:10	GPR56/ADGRG1 regulates survival of terminally differentiated CD8+ T cells Cheng-Chih Hsiao, Netherlands Institute for Neuroscience (Netherlands)
14:10 - 14:30	ADGRG1/GPR56 Couples $G\alpha_{12/13}$ -RhoA Signaling to Promote Protective Microglial States in Neurodegeneration Xianhua Piao, University of California San Francisco (United States)
14:30 - 14:40	Latrophilin2 - CFTR Interplay in Cystic Fibrosis Pathogenesis Rana El Masri, University of Geneva (Switzerland)
14:40 - 15:10	Coffee Break

From Mechanism to Medicine: Tools, Targets & Therapeutics

15:10 - 15:20	Lipid-controlled cell-free production enables digital quantification of GPCR-ligand interactions Savinay Kukkundoor Jain, Fraunhofer IZI-BB, Potsdam (Germany)
15:20 - 15:30	A novel molecular high throughput drug screening tool for human adhesion GPCRs Prabakaran Annadurai, Leipzig University (Germany)
15:30 - 15:50	Antibody-drug conjugates targeting CD97 in glioblastoma Dimitris Placantonakis, New York University Grossman School of Medicine (United States)
15:50 - 16:10	Strategies for modulating the function of axonopathy-associated variants in the adhesion GPCR BAI2 (ADGRB2) Alex Roy, Emory University (United States)
16:10 - 16:45	Poster Awards and Closing Remarks