

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 (NL)
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 (USA)
17:20 - 17:30	Actin-dependent PKC delta modulation on C-tail phosphorylation of ADGRL3 Yin Kwan (Alex) Chung, University of Copenhagen (DK)
17:30 - 17:50	The cryo-EM structure of ADGRL4 provides functional insights into its mechanism of activation David Favara, University of Cambridge (UK)
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 (CH)
18:10 - 18:20	Structural and Functional Investigation of ADGRV1, a key adhesion GPCR for hearing Clarice Marty, Institute Pasteur Paris (F)
18:20 - 18:40	Comparison of Adhesion GPCR Activation Modes Biochemically, <i>ex vivo</i> and <i>in vivo</i> using ADGRG3/GPR97 and ADGRG1/GPR56 as model receptors Gregory Tall, University of Michigan Medical School (USA)
18:40 - 18:50	GAIN domain cleavage as a protein trafficking checkpoint for adhesion GPCRs Lina Zielke, Leipzig University (D)
18:50 - 19:00	A new modality for adhesion GPCR signaling? TMRSS6-dependent processing of ADGRE5/CD97 promotes receptor activation and signaling Ana Lilia Moreno Salinas, University of Sherbrooke, Québec (CA)
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 (DK)
10:05 - 10:15	Direct tensile force activates Adgr13 in a tethered agonist-dependent manner Jesper Holmkvist, University of Copenhagen (DK)
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 (CH)
10:25 - 10:45	Latrophilin-2 regulates blood flow-mediated vascular homeostasis via non-canonical G protein-independent signaling Keiichiro Tanaka, Yale University (USA)
10:45 - 11:45	Experience with antibodies against aGPCRs Rob Meijers, IPI Antibodies
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 Boucard, Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico City (MX)
13:35 - 13:55	Untangling excitatory versus inhibitory synapse specification by Latrophilin Adhesion GPCRs Daniel Matúš, Stanford University (USA)
13:55 - 14:15	Female-specific nociception controlled by the adhesion GPCR Remoulade Beatriz Blanco-Redondo, Leipzig University (DE)
14:15 - 14:35	Dissecting molecular symmetry breaking in trans-intercellular complexes of Fmi/Celsr ADGRC class receptors David Strutt, University of Sheffield (UK)
14:35 - 14:55	ADGRCs in glutamatergic synapse formation and maturation Yimin Zou, The University of California, San Diego (USA)
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/Cir1 in neuronal tension homeostasis
Nicole Scholz, Leipzig University (DE)
- 8:50 - 9:00 ADGRL/Cir1-mediated communication within the cortex glia–neuroblast niche
Lara-Sophie Brodmerkel, Leipzig University (DE)
- 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 (DE)
- 9:20 - 9:30 Understanding the roles of adgrg6 N-glycosylation in zebrafish tissue development
Anandhu Jayachandran, Ashoka University (IN)
- 9:30 - 9:50 A novel dominant zebrafish adgrg6 (gpr126) mutant with distinct ear defects and precocious mbpa expression
Nahal Shahidan, University of Sheffield (UK)
- 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 (DE)

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 (USA)
- 11:00 - 11:10 Endothelial Mechanosensation as a Driver of Adipose Tissue Aging and Thermogenic Failure
Anastasia Georgiadi, Helmholtz Centre Munich (DE)
- 11:10 - 11:30 The mechanosensitive adhesion G protein-coupled receptor 133 (GPR133/ADGRD1) enhances bone formation
Ines Liebscher, Leipzig University (DE)
- 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 (USA)
- 11:40 - 11:50 The DNA repair factor ku80 binds and activates the adhesion receptor ELTD1/ADGRL4
Björn Olde, Lund University (SE)
- 11:50 - 12:10 Dual role of brain endothelial Gpr126 in blood-brain barrier development and ischemic stroke
Monica Giannotta, University of Pavia (IT)
- 12:10 - 12:20 *Gpr56* Expression Preserves GFR in the Adenine-induced Renal Injury Mouse
Ryan Martinez, University of New Mexico (USA)

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 (DE)
- 13:40 - 14:00 ADGRV1 regulates glutamate homeostasis in hippocampal astrocytes supporting neurons
Uwe Wolfrum, Johannes Gutenberg University Mainz (DE)
- 14:00 - 14:10 GPR56/ADGRG1 regulates survival of terminally differentiated CD8⁺ T cells
Cheng-Chih Hsiao, Netherlands Institute for Neuroscience (NL)
- 14:10 - 14:30 ADGRG1/GPR56 Couples G α 12/13-RhoA Signaling to Promote Protective Microglial States in Neurodegeneration
Xianhua Piao, University of California San Francisco (USA)
- 14:30 - 14:40 Latrophilin 2 - CFTR Interplay in Cystic Fibrosis Pathogenesis
Rana El Masri, University of Geneva (CH)

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 Leipzig (DE)
- 15:20 - 15:30 A novel molecular high throughput drug screening tool for human adhesion GPCRs
Prabakaran Annadurai, Leipzig University (DE)
- 15:30 - 15:50 Antibody-drug conjugates targeting CD97 in glioblastoma
Dimitris Placantonakis, New York University (USA)
- 15:50 - 16:10 Strategies for modulating the function of axonopathy-associated variants in the adhesion GPCR BAI2 (ADGRB2)
Alex Roy, Emory University (USA)

16:10 - 16:45 Poster Awards and Closing Remarks