Workshop: Challenges in GPCR Drug Discovery, Tuesday 26th of May 2026

Address to venue: AstraZeneca Gothenburg, Pepparedsleden 1, 431 53, Mölndal. Participants are welcomed to report at the reception at the main entrance (KC) A valid ID is required for visiting the AstraZeneca Gothenburg site. Guests/participants will be guided to the workshop venue from the KC entrance, therefore please arrive on time to the KC reception.

G protein-coupled receptors (GPCRs) are the largest protein family encoded by the human genome and one of the key targets for therapeutic approaches across many disease areas. However, only around 25% of the druggable GPCRs have been tapped into. This presents a significant opportunity to develop novel medicines with high therapeutic impact for the GPCR class in numerous indications.

The Challenges in GPCR drug discovery workshop is co-organized by Gothenburg University, Uppsala University, and AstraZeneca to explore the latest advancements in GPCR drug discovery research. Our aim is to bring together renowned international experts from industry, biotech, academia and service providers to facilitate communication between scientific groups and research areas within GPCR drug discovery community. The workshop focusses on lead-generation aspects such as, computational approaches, structural biology and pharmacology in early drug discovery of GPCRs. We believe this will lead to uncovering common challenges and finding new innovative approaches to drug discovery for GPCRs, and further strengthen the GPCR community in the Nordics.

The workshop has a maximum of 90 attendants generating an informal atmosphere encouraging discussions, networking and information exchange. The maximum is also determined by the venue, and as we have a waiting list, participants that need to cancel are encouraged to let us know to allow others to participate.

Program

8.00-8.30 Arrival and registrations at KC reception AstraZeneca. A valid ID is required for visiting the AstraZeneca Gothenburg site. Guests/participants will be guided to the workshop venue from the KC entrance, therefore please arrive on time to the KC reception.

8.30-8.45 Welcome and practical information (Arjan Snijder)

8.45-9.30 Keynote lecture M Madam Babu (St. Judes Childeren's Hospital)

9.30-9.55 Dr. Elisabeth Rexen Ulven (Copenhagen University) **Multiple binding sites of free fatty acid receptors**

9.55-10.35 Coffee in poster area/networking

Chair: Linda Johansson

10.35-11.00 Andreas Kiessling, PhD (Project Manager, Cube-Biotech) **Recent advances in NativeMP stabilized GPCRs for small molecule discover**y

11.00-11.25 Alexander Hauser (Copenhagen University) EMBO Young Investigator Lecture **GPCRs in the Era of Biobanks and Peptide Drugs**

11.25-11.50 Peter Gmeiner (Friedrich-Alexander-Universität Erlangen-Nürnberg) **How to create functional selectivity of GPCR ligands**

11.50-12.15 Florian van der Ent (AstraZeneca) **Explaining small molecule GLP-1R agonist signaling profiles with atomistic simulations**

12.15-13.15 Lunch (Restaurang Gallerian AZ, reserved section to be confirmed)

Chair: Jens Carlsson

13:15-13.40 Martin Gustavsson (Copenhagen University) **RaPID Discovery of Cyclic Peptides Targeting Chemokine Receptor**

13.40-14.05 Janosch Ehrenmann (LeadXpro) **Advancing Structure-Based Drug Discovery on GPCRs**

14.05-14.30 Tore Bengtsson (Atrogi)

14.30-14.55 Gunnar Schulte (Karolinska Intitute) **Targeting Frizzleds with small-molecule compounds - light at the end of the tunnel!**

14.55-15.20 tea posters and networking

15.20-15.40 Paul Wan (VivaBioscience) **DNA-encoded Chemical Library Screening against Cell-Surface GPCRs: unlocking an intractable target class**

15:40-16.00 Marcela Pekna (Gothenburg University) **Complement C3aR drives the progression of amyotrophic lateral sclerosis in mice**

16.00-16.20 Damian Bartuzi (Uppsala University) **Lipid –Exposed Extrahelical Binding sites for Positive Allosteric Modulators of the Dopamine D2 Receptor**

16.20-16.40 Stefania Koutsilieri (Karolinska Institute) **Decoding endogenous glucagon receptor signaling in primary human hepatocytes**

16:40-17.00 Jan Hendrik Voss (Skape Bio) **De novo design of miniprotein agonists and antagoionsts targeting GPCRs**

17.00-17.15 Wrap-up

The event is sponsored by CubeBiotech

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Alexander Hauser (Copenhagen University) EMBO Young Investigator Lecture

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