Conference program
"GPCR Pharmacology: The Next Generation"
October 31 to November 2, 2018
The Royal Danish Academy of Sciences and Letters, Copenhagen, Denmark

Organized under the auspices of The Danish Society for Pharmacology

Sponsors:

Organizing committee:
Chair:
Hans Bräuner-Osborne, Department of Drug Design and Pharmacology, University of Copenhagen

Co-organizers:
Ulrik Gether, Department of Neuroscience, University of Copenhagen
Mette Rosenkilde, Department of Biomedical Sciences, University of Copenhagen
David Gloriam, Department of Drug Design and Pharmacology, University of Copenhagen

The aim of the conference is to bring together the next generation of GPCR pharmacologists and we have therefore mainly invited early career speakers. The total number of participants will be limited to 90 in order create a vibrant and interactive atmosphere in the historic venue of the Royal Danish Academy of Sciences and Letters founded in 1742.

Thanks to the generous grants from the sponsors, registration is free of charge including the conference dinner and social activity.

We expect the 90 seats will be overbooked. We will prioritize early career GPCR pharmacologists as participants and also prioritize to diversify the group of participants as much as possible in terms of host laboratories. The organizers will select participants based on these criteria after the registration deadline has been reached.

To stimulate the discussions at the conference we expect all participants to stay for the entire length of the conference and encourage presentation of the most recent data by not permitting recordings, filming or photography during the conference.

Regular participants have to book and pay their own travel and accommodation (we cannot assist with this beyond the accommodation recommendations at the end of this document).

Version: May 1, 2018
**Day 1, Wednesday October 31:**

09:00-10:00 Registration and coffee

10:00-10:15 Welcome address by the chair of the conference (Hans Bräuner-Osborne)

**10:15-12:00 Session I ”Structure based pharmacology”**

Opening keynote lecture (45 min)

**Jonathan A. Javitch**, Columbia University, USA

*How GPCRs continue to surprise me*

**Sébastien Granier**, CNRS, Montpelier, France

*Structural pharmacology of seven transmembrane proteins*

**Dmitry Veprintsev**, University of Nottingham, UK

*The inner workings of a GPCR: Signalling-specific conformations of vasopressin V2 receptor*

12:00-13:00 Lunch

**13:00-14:30 Session II ”Nutrient receptor pharmacology”**

**Trond Ulven**, University of Copenhagen, Denmark

*Ligand design for free fatty acid receptors*

**Birgitte Holst**, University of Copenhagen, Denmark

*Molecular pharmacology of the ghrelin receptor*

2 x 15 min short oral presentations selected from abstracts.

14:30-15:00 Coffee

**15:00-16:30 Session III ”Orphan GPCRs and short oral presentations”**

**David Gloriam**, University of Copenhagen, Denmark

*Endogenous and surrogate ligands for orphan receptors*

**Anthony Davenport**, University of Cambridge, UK

*Discovery of biased apelin receptor agonists and first in human studies*

2 x 15 min short oral presentations selected from abstracts.

16:30-18:00 Poster Session

20:00- Conference dinner, [Restaurant Brdr. Price](#), Tivoli Gardens
Day 2, Thursday November 1:
09:00-11:30 Session IV ”GPCR signaling”
Karen Gregory, Monash University, Australia
*Biased allosteric modulators acting on the metabotropic glutamate receptors*

Rob Lane, University of Nottingham, UK
*The role of kinetics in biased signaling of GPCRs*

Gunnar Shulte, Karolinska Intitutet, Sweden
*Activation mechanisms of Class F receptors*

10:30-11:00 Coffee

Kirill Martemyanov, Scripps Research Institute, Florida, USA
*Molecular Control of G protein Signaling*

11:30-14:00 Session V ”Novel biopharmaceuticals ligands”
Christoffer Clemmensen, University of Copenhagen, Denmark
*GPCRs as therapeutic targets for metabolic diseases: Opportunities and Challenges*

12:00-13:00 Lunch

Mette Rosenkilde, University of Copenhagen, Denmark
*GIP receptor antagonists as potential therapeutics*

Martine Smit, Vrije University Amsterdam, The Netherlands
*Nanobodies as pharmacological agents in cancer*

14:00-18:00 Social activity: *Beer tasting at the Royal Academy & Canal tour*
We will experience a beer tasting at the Royal Academy including a show of the Carlsberg Rebrew documentary produced by Warner Bros. Afterwards we will do a sightseeing of the canals of Copenhagen by boat seeing the Little Mermaid, Opera House, Amalienborg Palace, Christinsborg Parliament and the Black Diamond Library from the harbour side.
Day 3, Friday November 2:
09:00-10:00 Session VI "GPCR interacting proteins"
Asuka Inoue, Tohoku University, Japan
Application of CRISPR/Cas9 gene editing to study GPCR signaling and pharmacology

Hans Bräuner-Osborne, University of Copenhagen, Denmark
Application of G protein inhibitors to study GPCR signaling and pharmacology

10:00-10:30 Session VII "Neuropharmacology"
Ulrik Gether, University of Copenhagen, Denmark
Neuropharmacology of dopamine receptors

10:30-11:00 Coffee

11:00-12:45 Session VII "Neuropharmacology" continued
Tobias Langenham, University of Leipzig, Germany
Adhesion GPCRs - metabotropic mechanosensors in neural and non-neural tissue

Christoph Kellendonk, Columbia University, USA
Striatal D2 Receptors in circuit function and motivated behavior

Closing keynote lecture (45 min)
Bernhard Bettler, University of Basel, Switzerland
Organization and function of GABA<sub>B</sub> receptors

12:45- Closing of conference
Hotel recommendations

Hotels in different price ranges all within walking distance of the conference venue and the city center:

**Venue:**
The Royal Danish Academy of Sciences and Letters
H.C. Andersens Boulevard 35, 1553 Copenhagen V

**Conference hotel used by invited speakers:**
Hotel Scandic Webers ****
Vesterbrogade 11B, 1620 Copenhagen V

**Other hotels in the vicinity of the venue, Tivoli and city center:**
Hotel Danmark ****
Vester Voldgade 89, 1552 Copenhagen V

Hotel Alexandra ***
H.C. Andersens Boulevard 8, 1553 Copenhagen V

CABinn City **
Mitchellsgade 14, 1568 Copenhagen V

**Hostel:**
Danhostel Copenhagen City
H.C. Andersen Boulevard 50
1553 Copenhagen V

Note that we cannot assist with booking of accommodation for non-invited speakers, which you should thus book and pay directly yourself.