

September 04, 2016

- 15:00 Arrival, Registration, Social meeting
- 17:30 Welcome Drink, Welcome Announcements
- 18:00 **Opening lecture by Eric Warrant**
Strategies for seeing in the dark: from phototransduction to higher order visual processing
- 19:00 Dinner

September 05, 2016

- 09:00 **Welcome address by the CSF and the FMV**
- 09:15 - 10:00 **Keynote lecture by U. Benjamin Kaupp**
Sensing at the physical limit – Photoreceptors and sperm
- SESSION 1* ***Supramolecular organization of rhodopsin***
- 10:00 – 10:30 **Martha Sommer**
Structural and functional versatility of arrestin binding to rhodopsin
- 10:30 Coffee Break
- 11:10 – 11:40 **Paul Park**
Nanodomains, oligomers, and aggregates of rhodopsin
- 11:40- 12:00 **Pere Garriga**
Effect of quercetin and resveratrol on wild-type rhodopsin and the G90V mutant associated with retinitis pigmentosa
- 12:00 Lunch
- 13:30 Poster session
- SESSION 2* ***Second messenger homeostasis in rods and cone***
- 14:30 – 15:00 **Daniele Dell’Orco**
A multiscale perspective on Ca²⁺/cGMP homeostasis in rods under normal and altered conditions
- 15:00 - 15:20 **Alexander V. Kolesnikov**
Dark adaptation of photoreceptors: the role of visual pigment dephosphorylation by PP2A
- 15:20 - 15:40 **Ana Mendez**
Novel interacting partners of the RetGC/GCAPs complex responsible for cGMP synthesis in photoreceptor cells: implications in cell physiology and disease.
- 15:40-16:00 **Turunen Teemu**
cAMP modulates mouse rod phototransduction through calcium
- 16:00 Coffee Break

SESSION 3 *Retinal Degeneration I*

- 16:30 – 17:00 **Bernd Wissinger**
Cone Phototransduction Defects: The lowlands of genetic
- 17:00 – 17:30 **Jörg Standfuss**
Structures of rhodopsin mutations leading to retinal degeneration

SESSION 4 *Beyond phototransduction*

- 17:30 -17:50 **Vincent Kunze**
Differential Genetic Profiling of S- and M-Cone Photoreceptors
- 17:50 -18:10 **Anja Günther**
Characterisation of the putative magnetoreceptor cryptochrome in the retina of migratory birds
- 18:10 -18:30 **Haijia Wu**
Protein-protein interaction of the putative magnetoreceptor cryptochrome 4 expressed in the avian retina
- 19:00 Dinner

September 06, 2016

SESSION 5 *Evolution of photoreceptors and phototransduction*

- 9:00 – 9:30 **Trevor Lamb**
Evolution of the vertebrate phototransduction cascade
- 09:30-10:00 **Lorenzo Cangiano**
New insights into the evolutionary ancestry of rod photoreceptors
- 10:00 – 10:20 **Matthias Gesemann**
Evolution of proteins involved in phototransduction and synaptic transmission: A cross species molecular analysis
- 10:20 – 11:00 Coffee Break

SESSION 6 *Phototransduction in microvillar photoreceptors*

- 11:00 – 11:30 **Roger Hardie**
Phototransduction in Drosophila
- 11:30 – 11:50 **Armin Huber**
TTD14, a GTP- and phospholipid binding protein, and the retromer complex are required for TRPL trafficking in Drosophila melanogaster photoreceptors

- 12:00 - 13:30 Lunch

Free Time for discussions, excursion etc.

September 07, 2016

SESSION 7 Retinal degeneration part II

09:00-09:30 **Gebhard Schertler**

The structure of visual pigments: implications for rare GPCR

09:30 - 9:45 **Young scientist award ceremony (sponsored by CSF)**

09:45 - 10:30 Coffee break

10:30-11:00 **Mathias Seeliger**

RBP4 – Syndromic ocular disease due to a liver-based gene

11:00 - 11:30 **Martin Biel**

Retinal degeneration in CNG channelopathies: mechanisms and potential treatment

12:00 **Conclusive remarks**

Lunch and Departure