

Hanse-Wissenschaftskolleg
Institute for Advanced Study

International Conference Vision and Visions: Current Concepts and Future Challenges of Retinal Research

Delmenhorst, October 2 - 3, 2017

Organizers:

Apl. Prof. Dr. Ulrike Jansen-Bienhold
Apl. Prof. Dr. Karin Dedek
Prof. Dr. Martin Greschner
Carl von Ossietzky Universität Oldenburg

Venue:

Hanse-Wissenschaftskolleg
Institute for Advanced Study
Lehmkuhlenbusch 4
27753 Delmenhorst
Germany
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Program

Monday, October 2, 2017

12:00 - 14:00 Welcome Reception

Session 1

14:00 - 14:30 **Heinz Wässle** (Frankfurt am Main, Germany)
The Discovery of Ganglion Cell Types of the Mammalian Retina: From 1854 to 2017

14:30 - 15:00 **Richard Masland** (Boston, USA)
The Diversity of Retinal Neurons: History and Prospects

15:00 - 15:30 **John E. Dowling** (Cambridge, USA)
Reconstructing the Human Fovea Using Connectomic Methods

15:30 - 16:00 Coffee Break

Session 2

16:00 - 16:30 **Thomas Euler** (Tübingen, Germany)
What the Mouse's Eye Tells the (Rest of) the Mouse's Brain

16:30 - 17:00 **Maureen McCall** (Louisville, Kentucky, USA)
The Role of Glycinergic Inhibition in the Visual Responses of Retinal Ganglion Cells

17:00 - 17:30 **Silke Haverkamp** (Frankfurt, Germany)
Glycinergic Inhibition in the Central Primate Retina

18:00 - 19:30 Dinner

Special Lecture

20:00 **David Vaney** (Brisbane, Australia)
Vision and Visions

Tuesday, October 3, 2017

Session 3

09:00 - 09:30 **Maarten Kamermans** (Amsterdam, Netherlands)
The Astonishing Complexity of Outer Retinal Processing

- 09:30 - 10:00 **Nicholas Brecha** (Los Angeles, USA)
Horizontal Cell Feedback and Feedforward Signaling in the Mammalian Retina
- 10:00 - 10:30 **Johann Helmut Brandstätter** (Erlangen/Nürnberg, Germany)
Signal Transmission and Adaptation at the First Synapse in the Visual System
- 10:30 - 11:00 Coffee Break
- Session 4**
- 11:00 - 11:30 **Stephen Massey** (Houston, Texas, USA)
Photoreceptor Coupling in the Retina
- 11:30 - 12:00 **William Baldrige** (Halifax, Canada)
A Fishy Business: The Many Actions of Dopamine in the Teleost Retina
- 12:00 - 12:30 **Stuart Mangel** (Columbus, Ohio, USA)
Dopamine Modulation of GABA_A-Receptor-Mediated Horizontal Cell Feedback and Feedforward Signaling
- 12:30 - 14:00 Lunch
- Session 5**
- 14:00 - 14:30 **Marla Feller** (Berkeley, California, USA)
Activity-Dependent Modulation of Gap Junctions in Developing Retina
- 14:30 - 15:00 **William Stell** (Calgary, Canada)
Ocular Growth and Refractive Development as a Manifestation of Retinal Circuit Functions
- 15:00 - 15:30 **Peter Lukasiewicz** (St. Louis, Missouri, USA)
Signaling in the Healthy and Diseased Retina
- 15:30 - 16:00 Coffee Break
- Session 6**
- 16:00 - 16:30 **Enrica Strettoi** (Pisa, Italy)
New Laboratory Approaches to Challenge Inherited Photoreceptor Degeneration
- 16:30 - 17:00 **Eberhart Zrenner** (Tübingen, Germany)
Restoring Lost Vision with Electronic Retinal Prosthesis
- 17:00 Concluding Remarks
- 17:30 Transportation to Oldenburg
- 18:30 - 19:30 **Reto Weiler** (Oldenburg, Germany)
The Artful Eye – Guided Tour Through the Exhibition “Australias Forgotten Rock Paintings”
- 19:30 Dinner, Speeches and Opera