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

Delmenhorst, October 2 - 3, 2017

Organizers:
Apl. Prof. Dr. Ulrike Janssen-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
www.h-w-k.de
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 Baldridge (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 GABAA-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