RECEPTORLIGHT uses novel and exceedingly promising techniques of „high-end“ LIGHT MICROSCOPY to analyze the FUNCTION of membrane receptors by gaining new spatial and temporal information.

The 1st ReceptorLight Symposium brings together international experts in high-end microscopy and receptor science to discuss latest results and future directions of receptor research.

LOCATION

Conference Center Juliusspital
Klinikstraße 1
97070 Würzburg

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ReceptorLight Symposium No. 1

HIGH-END LIGHT MICROSCOPY
ELUCIDATES MEMBRANE RECEPTOR FUNCTION

Würzburg, June 7th to 9th, 2017

Organizers: Klaus Benndorf
Markus Sauer
**Wednesday, June 7th**

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<td>12:00</td>
<td>Registration &amp; Snacks</td>
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| 13:00 -13:15 | Klaus Benndorf, Jena  
Opening/Welcome                        |
| 13:15 - 14:00 | William N. Zagotta, Seattle  
Molecular mechanisms of regulation of ion channels by intracellular domains |
| 14:00 - 14:45 | Martin Biel, Munich  
Two-pore cation channels of the endolysosomal system               |
| 14:45 - 15:00 | Christian Karras / Jessica Tröger, Jena  
A fast multi-channel structured illumination microscope for enlightening inhibitory neurotransmitter receptor organization and dynamics |
| 15:00 - 15:30 | Coffee & Tea                                                        |
| 15:30 - 16:15 | Markus Sauer, Würzburg  
Quantitative FRET image spectroscopy and integrative modeling unravel the structure and dynamics of biomolecular systems |
| 16:15 - 17:00 | Christian Eggeling, Oxford  
Membrane bioactivity: New insights from super-resolution STED-(FCS) microscopy |
| 17:00 - 17:15 | Thomas Heitkamp, Jena  
Purification of active mNeonGreen-tagged neurtensin receptor 1 and FRET-based analysis of ligand binding |
| 17:15 - 17:45 | Coffee & Tea                                                        |
| 17:45 - 18:30 | Erwin Neher, Göttingen  
Short-term synaptic plasticity: Katz’s concept in the light of recent results from the Calyx of Held |
| 18:30- | Reception & Poster Session                                           |

**Thursday, June 8th**

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<th>Time</th>
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| 9:00 -9:45 | Horst Vogel, Lausanne  
Transmembrane signaling: From single cells to single molecules  |
| 9:45 -10:30 | Daniel Choquet, Bordeaux  
Nanoscale organization of glutamate receptors and synaptic function |
| 10:30 -10:45 | Gerti Beliu, Würzburg  
Unnatural amino acids for live cell labeling and superresolution microscopy |
| 10:45 -11:15 | Coffee & Tea                                                        |
| 11:15 -12:00 | Britta Qualmann, Jena  
Cell-type-specific correlated confocal and super-resolution imaging in brain circuits by VividSTORM |
| 12:00 -12:45 | Dion Dickman, Los Angeles  
Active zones as substrates for the homeostatic modulation of synaptic strength |
| 12:45 -13:00 | Andrea Kliewer, Jena  
Carboxyl-terminal multisite phosphorylation regulates μ-opioid receptor desensitization and tolerance |
| 13:00 -14:30 | Lunch & Poster Session                                               |
| 14:30 -15:15 | Katrin Heinze, Würzburg  
FRET and scanning ion conductance microscopy to study receptor/cyclic nucleotide signaling in microdomains |
| 14:30 -15:15 | Viacheslav Nikolaev, Hamburg  
FRET and scanning ion conductance microscopy to study receptor/cyclic nucleotide signaling in microdomains |
| 15:15 -15:45 | Klaus Benndorf, Jena  
Activation gating in HCN2 channels evoked by voltage and cAMP |
| 15:45 -16:15 | Tobias Langenhans, Leipzig  
Converting force into signal: Metabotropic mechanosensing through adhesion GPCRs |
| 16:15 -16:45 | Coffee & Tea                                                        |