



Optogenetic Tools and Applications in Biology

Symposium honoring

Prof. Dr. Peter Hegemann

28th of June, 2019

University of Regensburg

Faculty of Biology and Preclinical Medicine

Room: H 52

Sponsored by the Vielberth Stiftung



9h00 Welcome by Inga Neumann

(Dean of Faculty for Biology and Preclinical Medicine)

9h00 – 10h30 Optogenetics at Biophysical Level

Chair: Ralph Witzgall

- **Thomas Oertner (Hamburg):** 'Shining light on tiny synapses'
- **Andreas Möglich (Bayreuth):** 'Controlling nucleic acids by light'
- **Reinhard Sterner (Regensburg):** 'Light regulation of enzymatic activity and allostery'

10h30 – 11h00 Coffee Break

11h00 – 12h30 Optogenetics at Cellular Level

Chair: Veronica Egger

- **Anna Moroni (Milan, Italy):** 'From plants to animals and return'
- **Alexander Deiters (Pittsburgh, USA):** 'Optical control of protein function through genetic code expansion in cells and animals'
- **Karl Deisseroth (Stanford, USA):** 'The inner workings of brains and channelrhodopsins'

12h30 – 14h00 Lunch

14h00 – 15h30 Optogenetics at Behavioral Level

Chair: Inga Neumann

- **Ofer Yizar (Rehovot, Israel):** 'Optogenetic dissection of local and long-range connectivity in the prefrontal cortex'
- **Philip Tovote (Würzburg):** 'Brainstem circuits for the defense reaction'
- **Valery Grinevich (Heidelberg):** 'Optogenetics for neuroendocrine neurons: Focus on oxytocin'