

Online Zoom Seminar 10:00 am Tuesday April 20th 2021 **Provided by the EMBL Advanced Light Microscopy Facility**





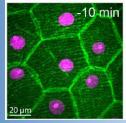


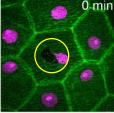


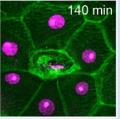
Latest Applications in Fast and Precise Photomanipulation

- **Applications in Cell Biology, Neuroscience & Biophysics**
- **Fast and Precise Photomanipulation Modules**
- Easy and User-Friendly Software-Control and -Communication
- Dr. Gert Rapp, CEO and Founder, Scientific Experience in X-Ray Diffraction / Scattering, Biophysics & Protein Crystallography @ MPI HD & EMBL HH
- Dr. Anja Zimmermann, Application Specialist, Scientific Experience in Cell Biology, Neurology and Virology @ Charité & RKI, BE
- Dr. Martin Brill, Application Specialist, Scientific Experience in Neuroscience and 2-Photon Microscopy @ CSHL & Janelia, USA

Single Cell Wounding



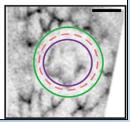




Kakanj et al. 2020 Nature Protocols

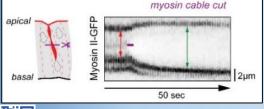
Round Cell Wounding

Arpc5 RNAi



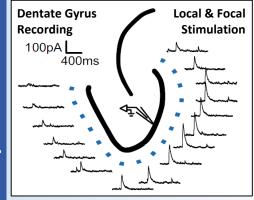
Martin et al. 2021 Developmental Cell

Force Analysis



Ambrosini et al. 2019 Developmental Cell

Functional Network Analysis



Braganza et al. 2020 eLife

Photomanipulation Modules for many Applications

Applications:

DNA-Damage

Opto-Genetics

Ablation / Microdissection **Photolysis / Uncaging** Photoconversion / Photoswitching Photobleaching / FRAP **Photostimulation / Optogenetics**

2-Photon Ablation / Stimulation 2-Photon Microscopy T-Jump / Heat-Shock Experiments

