

# Stimulated Emission Depletion (STED) Microscopy combined with Atomic Force Microscopy (AFM)

February 21<sup>st</sup> & 22<sup>nd</sup>, 2018

## Invitation

Combining Atomic Force Microscopy (AFM) with super-resolution optical techniques, such as Stimulated Emission Depletion Microscopy, STED, allows the even more detailed study of living matter, e.g., the measurement of interaction forces and nanomechanical properties using AFM, and the determination of subcellular structures and biochemical specificity with high spatiotemporal resolution by means of STED. The workshop will provide a venue for academics, researchers, and students to learn more about these techniques and the diverse types of research applications that can be addressed.

## Venue

Medical University Innsbruck, CCB, Innrain 80-82, A-6020 Innsbruck

Hosted by Dr. Martin Offterdinger, Div. of Neurobiochemistry, Biooptics

**Room: 1<sup>st</sup> Floor, M01.470**

## Schedule: February 21<sup>st</sup>:

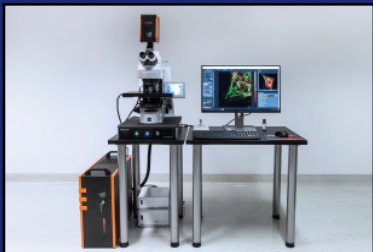
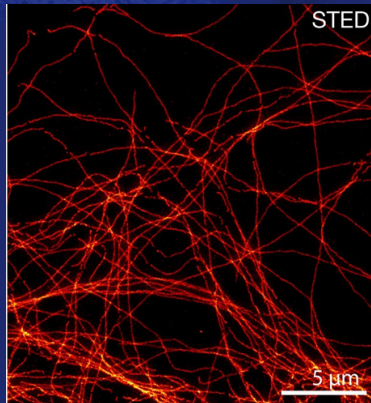
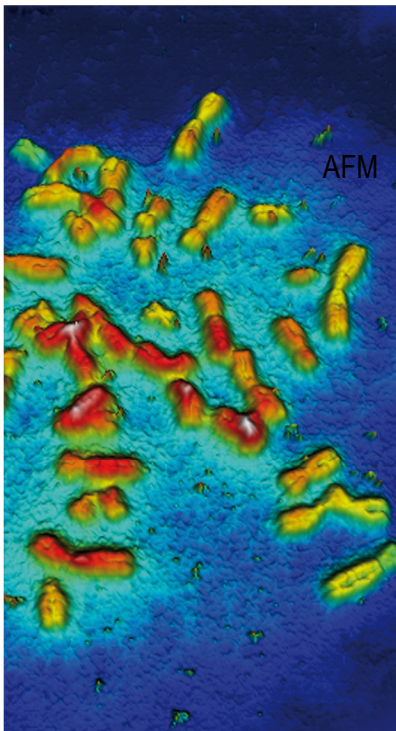
- 1.15 – 1.20 p.m. **Welcome**  
(Dr. Martin Offterdinger, Medical University Innsbruck)
- 1.20 – 1.40 p.m. **Introduction to the Variety of JPK Technology Platforms**  
(Dr. Elmar Hartmann, JPK Instruments AG)
- 1.40 – 2.40 p.m. **Atomic Force Microscopy in Liquid and Combined with Optical Techniques**  
(Dr. Dimitar Stamov, Application Scientist, JPK Instruments AG)
- 2.40 – 3.10 p.m. **Coffee Break** (sponsored by Abberior Instruments & JPK Instruments)
- 3.10 – 4.10 p.m. **Superresolution STED Microscopy from its Inventors: From the Basics to Recent Developments and Applications.**  
(Dr. Sven Sidenstein, Application Scientist, Abberior Instruments GmbH)

## Schedule: February 22<sup>nd</sup>:

- 9.00 – 17.00 **Live demonstration and hands-on sessions:**  
**STEDYCON / NanoWizard®4 AFM**  
In groups according to a reservation list !

## Further Information:

The seminar/workshop is free of charge. In case you need further information, please contact either Dr. Martin Offterdinger ([martin.offterdinger@i-med.ac.at](mailto:martin.offterdinger@i-med.ac.at)) or Dr. Sven Sidenstein, Abberior Instruments GmbH ([s.sidenstein@abberior-instruments.com](mailto:s.sidenstein@abberior-instruments.com)) or Dr. Elmar Hartmann, JPK Instruments AG ([hartmann@jpk.com](mailto:hartmann@jpk.com))



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