



Esplanade Room 158: Monday, February 23

8:30 AM – 10:00 AM

Bruker

Super Resolution in Depth

The Bruker Vutara VXL, a single-molecule localization microscope, transcends the optical resolution limit of traditional fluorescence microscopy, achieving resolutions of 20 nm and beyond, providing additional fine-scale information about the structure, function, movement, and interaction of cellular components. Its unique bi-plane technology enables precise 3D imaging and tracking within biological samples, from cell cultures to tissue sections, without TIRF. Because every image collected by the VXL is innately in 3D, The Vutara VXL is uniquely capable as a platform for 3D Single Particle Tracking and can track multiple particles with different labeled colors simultaneously, enabling new discoveries and more accurate representation of the true motion of particles. This system is also particularly adept at collecting 3D z-stacks in thick samples, providing unparalleled insights into cellular structures, molecular machines, and chromosomal configurations.

This presentation will highlight the capabilities of the Bruker Vutara VXL in pushing the boundaries of cell biology research. Attendees will learn how this compact bench-top system can revolutionize their studies by providing high-resolution, multi-dimensional imaging of live samples. Join us to explore the future of super-resolution microscopy and its applications in unraveling the complexities of cellular biology and biophysics.

Speaker

Abraham Kohrman, Biological Microscopy Applications Specialist, Bruker