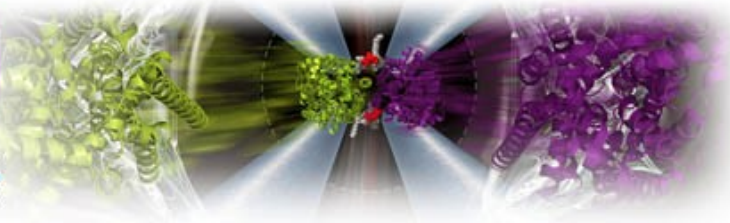


# BPS19

63<sup>RD</sup> ANNUAL MEETING OF THE BIOPHYSICAL SOCIETY

BALTIMORE, MARYLAND • MARCH 2–6, 2019



**Sunday, March 3**

**1:30 pm – 3:00 pm**

**Room 303**

**Carl Zeiss Microscopy LLC**

## **ZEISS ELYRA 7 WITH LATTICE SIM, A NEW PLATFORM FOR FAST AND GENTLE 3D SUPERRESOLUTION MICROSCOPY**

Life sciences research often requires you to measure, quantify and understand the finest details and sub-cellular structures of the sample. Whether you are working with tissue, bacteria, organoids, neurons, living or fixed cells, ZEISS Elyra 7 takes your images beyond the diffraction limit of conventional microscopy to superresolution. Examine the fastest processes in living samples – in large fields of view, in 3D, over long time periods, and with multiple colors.

Lattice SIM enables fast imaging of 3D volumes with resolution down to 120 nm laterally and 300 nm axially. Due to higher light efficiency, the new Lattice SIM technology provides gentle superresolution imaging of living specimens at up to 255 frames per second. Using less light to illuminate the specimen means imaging longer with less bleaching of the sample. The novel Lattice SIM technology allows you to uncover new mechanistic details and quantify the finest subcellular structures in large fields of view.

ZEISS Elyra 7 can be expanded with single molecule localization microscopy (SMLM) for techniques such as PALM, dSTORM and PAINT. ZEISS Elyra 7's SMLM module delivers molecular resolution in large 3D volumes and powerful post-processing algorithms for quantification. Choose freely among labels when imaging with resolutions down to 20 nm laterally and 50 nm axially. Count molecules and come to understand, molecule-by-molecule, how individual proteins are arranged within a structural context.

ZEISS Elyra 7 is a flexible research grade live cell microscope from ZEISS. The new Apotome mode allows fast optical sectioning of 3D samples and total internal reflection microscopy provides live imaging capability for membrane and single molecule studies.

Join this workshop and learn how the newest member of the ZEISS imaging portfolio, ZEISS Elyra 7, can help your imaging experiments in completely new ways.

### **Speakers**

*Renée Dalrymple, Sales Development Manager, Carl Zeiss Microscopy LLC*