Multifunctional & multidimensional super-resolution microscopy

Recent advances in super-resolution fluorescence microscopy have led to ~10 nm spatial resolution and exciting new biology. We are developing new approaches to advance beyond the structural (shape) information offered by existing super-resolution methods, and reveal multidimensional information of intracellular functional parameters, including chemical polarity, diffusivity, and reactivity, with nanoscale resolution and single-molecule sensitivity. By adding remarkably rich functional dimensions to the already powerful super-resolution microscopy, we thus open up new ways to reveal fascinating local heterogeneities in live cells.

Monday, January 7, 2019
2033 Young Hall
4:00 PM

Please contact nikkie@chem.ucla.edu for additional information.