



中国科学院生物物理研究所

贝时璋讲座

Illuminating Biology at the Nanoscale with Single-molecule and Super-resolution imaging

报告人：庄小威院士

报告时间：2016年6月1日（周三）下午3:00

报告地点：生物物理研究所9501会议室

邀请人：徐涛所长

主持人：许瑞明副所长

报告人简介

Xiaowei Zhuang is the David B. Arnold Professor of Science at Harvard University. She is also an investigator of the Howard Hughes Medical Institute.

Zhuang is a biophysicist recognized for her work in the development and application of advanced optical imaging techniques for the studies of biological systems. In particular, she invented Stochastic Optical Reconstruction Microscopy (STORM), one of the first single-molecule-based super-resolution imaging methods, and has established STORM as a powerful tool for biology. She discovered novel cellular structures using STORM, most notably the periodic, actin-spectrin-based cytoskeletal structure in neurons. Recently, Zhuang invented a single-cell transcriptome imaging method, MERFISH (multiplexed, error-robust fluorescence in situ hybridization). Her lab has also developed single-molecule approaches to investigate the dynamics and function of biomolecules.

Zhuang is an elected member of the US National Academy of Sciences, an elected member of the American Academy of Arts and Sciences, a foreign member of the Chinese Academy of Science, a foreign associate of the EMBO, a fellow of American Association of the Advancement of Science, a fellow of the American Physical Society, and an honorary fellow of the Royal Microscopical Society in UK. Partial list of awards: MacArthur Fellowship, Sloan Fellowship, Packard Fellowship, ACS Pure Chemistry Award, APS Max Delbruck Prize in Biological Physics, Raymond & Beverly Sackler International Prize in Biophysics, National Academy of Sciences Award in Molecular Biology.

