



NCCR **CHEMICAL
BIOLOGY**

NCCR LECTURE SERIES

Invited speaker

STEVEN BOXER

Camille Dreyfus Professor
Department of Chemistry, Stanford University, USA



Reactions, dynamics and imaging in model biological membranes

March 19th 2018

16:15

UNIGE - A100

About the talk

Supported lipid bilayers provide an excellent platform for the development of advanced imaging and analysis methods. S. Boxer's lab has prepared DNA-lipid conjugates to create a variety of more complex membrane architectures. These architectures and conjugates are used to simulate membrane fusion, recently extended to enveloped viruses where DNA-lipids serve as surrogate receptors. Imaging mass spectrometry is used to image and quantify the composition and lateral organization of membrane domains with sub-100 nm resolution. Recently, this has been used to probe the nm (1-3 nm) proximity of lipid species.