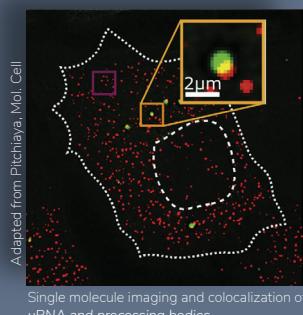


SMART Center

High Resolution Imaging and Characterization

M|SA BIOPHYSICS
UNIVERSITY OF MICHIGANM| CENTER FOR RNA BIOMEDICINE
UNIVERSITY OF MICHIGAN**SINGLE M OLECULE**singlemolecule.lsa.umich.edu**Single Particle Imaging**

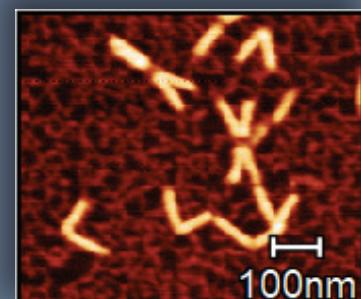
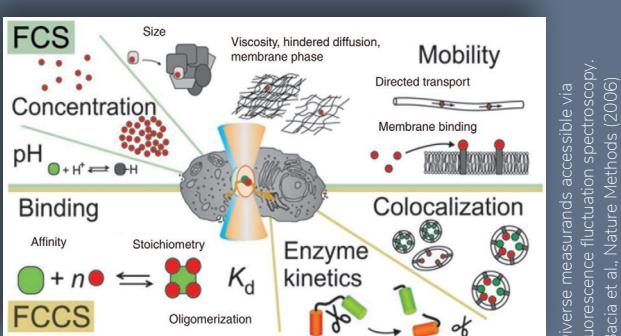
- smFISH
- smFRET
- PALM/STORM/ DNA-PAINT
- Particle tracking
- Colocalization
- Multiplexed sequential imaging, e.g., MERFISH

**Fluorescence Lifetime**

- Lifetime imaging
- Time-resolved FRET
- Fluorescence anisotropy

Atomic Force Microscopy

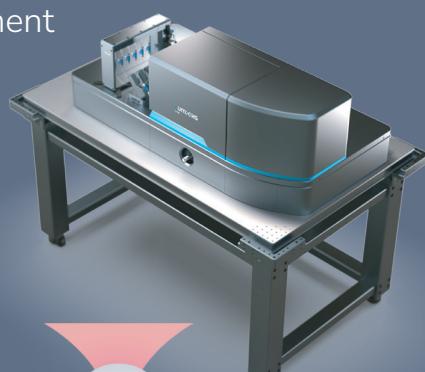
- Nanoscale topography imaging
- Mechanical measurements

**Fluorescence Fluctuation Spectroscopy**

- Binding stoichiometry and kinetics
- Diffusion and mobility
- Homogeneous measurement in complex fluids or in cells

Experimental Planning and Analysis Support**Cell and Molecular Force Measurements****NEW! Lumicks C-Trap® Optical Tweezers!**

- Protein force and displacement
- DNA winding mechanics
- Cell stiffness
- Binding energy
- Condensate mechanics



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