

Carbon Nanotubes to Measure Nanoscale Mechanics of Living Systems

The group of Markita Landry at UC Berkely is researching methods to measure and understand the mechanisms of life on the nanoscale. Her group uses Carbon Nanotubes as a fluorescent probe on the nm length scale. Nanotubes can be built to measure different molecules in living systems, but they can also be precisely engineered to emit at certain wavelength by changing their diameter and chirality. The group published research using nanotube species emitting light at different wavelengths that each target different molecules, multiplexing the collection of information of several biochemical processes. The nanotubes are tuned to emit light in the SWIR/NIR-II range where low absorption and scattering in tissue give the highest spatial accuracy of light emission.

Featured Paper/Publication: [Chemometric Approaches for Developing Infrared Nanosensors to Image Anthracyclines](#), Biochemistry, 2018

Reference Lab: [Markita Landry, UC Berkely, USA](#)

Featured Product: [Isoplane](#), [PylonIR](#), [NIRvana](#)