



Chemical & Physical Sciences

UNIVERSITY OF TORONTO

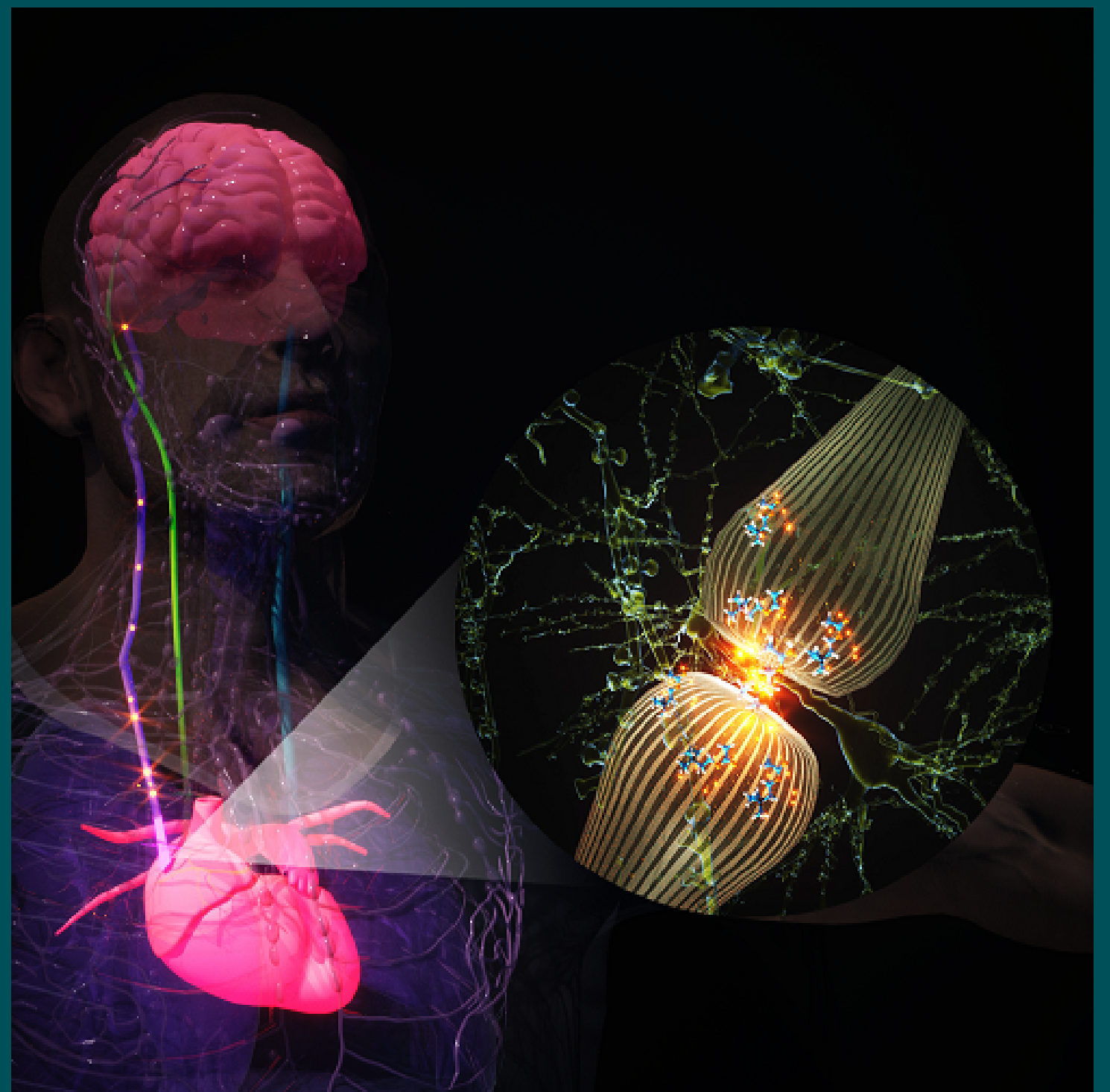
MISSISSAUGA

## COLLOQUIUM SEMINAR SERIES

### NANOSENSORS FOR IMAGING THE CHEMISTRY OF THE BODY



**Professor Heather Clark**  
Department of Bioengineering and  
Chemistry, Northeastern University &  
Founding Director, Institute for Chemical  
Imaging of Living Systems



My group is currently working at the interface of chemistry and biology to develop and apply novel nanoscale probes for biological measurements. In order to fulfill our goal of chemical imaging deep in the body (brain, central nervous system, circulatory system) we are approaching the problem through two directions. First, we are working with fluorescence-based sensors in the peripheral nervous system to understand the capabilities of the sensors for cellular signaling. Second, we are tailoring our sensors to be compatible with advanced imaging techniques (diffuse in vivo flow cytometry, photoacoustics, or MRI) to image deep in the body. Ultimately, we will use the probes to image specific chemical processes and biomarkers in the brain/body, in real-time.

**Colloquium Seminar Series**

**Wednesday, October 20, 2021**

Join us on Zoom at 3:10pm

<https://utoronto.zoom.us/j/84409166490>