

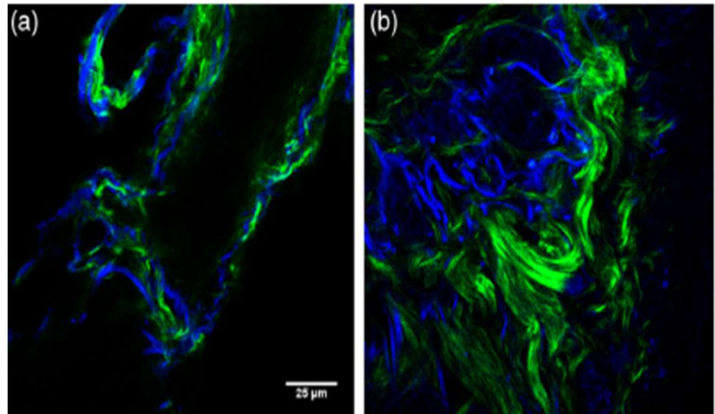


Emera Astronomy Center
and M. F. Jordan Planetarium

From Lightsabers to Tricorders: Harnessing Light for Biomedical Applications

Thursday, May 4 at 7:00 pm

Light surrounds us, but how often do we appreciate the power of light for use as a diagnostic tool? Join us as we explore the possibilities of using small alterations of light as captured by microscopes to aid our human eyes in detection of small alterations. We will discuss 2-photon microscopy techniques, an approach that enables high resolution, 3D data collection. Using the planetarium's full dome technology, we will explore and fly through 3-D images of human lung and ovarian tissues to investigate alterations in tissue organization of human disease.



Dr. Karissa Tilbury is an assistant professor of Bioengineering in the Department of Chemical and Biological Engineering. She completed her Ph.D. in Biomedical Engineering as a Medical Physics Trainee at the University of Wisconsin under the direction of Dr. Paul Campagnola and a postdoc in Biophotonics at Vanderbilt University under the guidance of Dr. Melissa Skala. At the University of Maine, Dr. Tilbury is continuing her work in 2-photon microscopy techniques to understand the interplay between the extracellular matrix and cellular metabolism. Additionally, she is actively involved in STEM education at the P-16 levels.

Tickets are available online at <http://astro.umaine.edu>, by calling 581-1341, or at the box office.

