

## How I Accidentally Became a Biophysicist Microscopy Instrumentation and Application

## **Dr. Tristan Paul**

Postdoctoral Fellow
Physiology and Biophysics Department
University of Colorado
Anschutz Medical Campus

Thursday, October 10, 2024 11:10 am - 12:00 Noon Building 53, Room 215 Pizza will be served!

**Abstract:** Microscopes are one of the most fundamental instruments for cell-related research. Improvements in things like fluorescence, sensitivity, and resolution all contribute to increasing our understanding of biological and chemical processes. This talk will cover microscopy instrumentation, with a specific focus on Structured Illumination Microscopy (SIM) and Spinning Disk (SD) microscopy as well as a microscopy application for single molecule imaging of isolated ion channels, all from the unique perspective of a physicist who stumbled his way into the field after graduating from Cal Poly.

**Bio:** Tristan received his BS in physics at Cal Poly SLO in 2015. He then went to San Diego State University for his masters and University of Colorado, Colorado Springs for his PhD. He is currently a postdoctoral fellow in the Physiology and Biophysics Department at CU Anschutz Medical Campus. His research experience is primarily instrumentation-based ranging from building muon detector readouts, characterizing Surface Enhanced Raman Spectroscopy, and Structured Illumination Microscopy.