



# Microscopy using 3 Photon and 3rd Harmonics

Date

**Seminar: Tuesday April 2, 2019**  
**Instrument available through**  
**May 2019**

Time

**12:00 - 1:00pm**

Location

**LSE244**

Seminar & Workshop RSVP  
[events@azmicroscopy.org](mailto:events@azmicroscopy.org)  
**Seminar lunch provided**

**Hosted by the Keck**  
**Bioimaging Facility**

## 3 Photon Microscopy to Image Biological Systems

A leading technique for in vivo, deep optical imaging is two-photon microscopy. Unfortunately, 2P microscopy has major limitations due to refractive aberration, scattering and absorption by tissue. Development of three photon systems use longer excitation wavelengths minimizes tissue scattering and absorption as well as decreases the out of focus background light. Khanh Kieu at the University of Arizona, as part of a collaborative ABOR funding project with ASU and NAU, has developed an affordable 3P microscope system. Dr. Kieu and Ben Cromey will describe the basics of multi-photon microscope systems including the benefits of label free imaging using second and third harmonics.

Demo scheduled Apr 2-5, 2019. Available for use through May 2019.

