



THE UNIVERSITY OF ARIZONA

Wyant College
of Optical Sciences

INDUSTRIAL AFFILIATES WORKSHOP

STUDENT SPEAKER PROFILE



JINGWEI ZHAO, PH.D. STUDENT

Wyant College of Optical Sciences

Advisor: Dongkyun Kang

Tuesday, February 15, 2022 | 2:38 p.m.

Title: "Scattering-based Light Sheet Microscopy for Imaging Unstained Tissue"

Abstract: Scattering-based light sheet microscopy (sLSM) is a new microscopy technique that can image unstained tissue with high resolution and large field of view. sLSM is a potential tool to facilitate detection of early-stage anal malignancy and increase the biopsy yield to avoid unnecessary biopsy of benign lesions. However, the optimal wavelength for sLSM needs to be investigated that provides a sufficient cellular contrast in the epithelium while achieving an acceptable imaging depth. We recently developed a bench sLSM setup to investigate the optimal wavelength for tissue sLSM imaging.

Bio: Jingwei Zhao is a Ph.D. student working in the Translational Optical Imaging lab under supervision of professor Dongkyun Kang. She previously worked on deep learning-based denoising for portable confocal microscopy and developing cross-polarized microscopy for skin imaging. Her current research is to develop scattering-based light sheet microscopy for anal cancer diagnosis.



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