

SEMINAR

Indiana CTSI Access Technology Program presents:

“Mass spectrometry imaging of metabolites and lipids in tissue sections”

Speaker: Christina Ferreira, PhD, Lipidomics Analyst
Purdue Metabolite Profiling Facility

Hosted by: Metabolite Profiling Facility, Bindley Bioscience Center
Bruce Cooper, PhD, Director
Purdue University

Friday, February 3
12:00 pm – 1:00 pm

Please register to receive the ZOOM meeting link:

<https://iu.zoom.us/meeting/register/tZcof-GrqDwtH9FD6ZcM0oVnl9-43j05Rpli>

Description: We will review the fundamentals and applications of mass spectrometry imaging (MSI) and share current data generated at the Metabolite Profiling Facility. MSI is a label-free and non-destructive technology to profile hundreds of lipids and metabolites in an untargeted fashion. The application section will focus on the use of desorption electrospray ionization (DESI) ion source coupled to a high mass resolution mass spectrometer (Waters Synapt XS). DESI-MSI allows mapping the location and abundance of small molecules present in tissue sections without the need for sample preparation other than sectioning the tissue and placing it onto regular glass slides. The tissue sections can also be imaged multiple times at the positive and negative ion modes before being processed for histological analysis. Therefore, different experiments can be perfectly overlaid to obtain combined morphological and molecular data.

Disclosure Summary

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