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"Ambient Ionization Mass Spectrometry for Cancer Research and Clinical Applications"

Implementation of new clinical technologies that provide precise molecular diagnosis of tissues are highly desirable to guide treatment strategies and improve cancer patient care. Molecular technologies offer the exciting opportunity to incorporate cancer-specific biomarkers into clinical decision making for improved cancer detection and diagnosis. In particular, ambient ionization mass spectrometry (MS) techniques provide the specificity and sensitivity necessary to perform *in situ* analysis of tissue samples for near real time assessment of their molecular signatures. In this talk, I will describe my lab's research applying ambient ionization MS techniques to address critical problem in cancer research. Focus will be given to highlight our recent research using desorption electrospray ionization MS imaging to spatially characterize metabolic signatures of ovarian and thyroid cancers, and the development of MasSpec Pen, a handheld device that can detect cancer by contact with fresh tissue.

Thursday April 12

12:30 p.m.

Room 1315 Chemistry

Joint Analytical & ChemBio Seminar