Metabolomics: Emerging Technologies for Continued Innovation (Metabolomics Interest Group)

Organizers: Andrew D. Patterson (Penn State University) and Tim Garrett (University of Florida)

Date: Monday June 6, 2016 5:45-7pm

Summary of Content

The workshop was well attended with approximately 250-300 participants. We strongly encouraged the participants to use the mobile app to post questions and we all agreed this was a huge success and was helpful to facilitate discussion throughout the workshop. Dr. Robert Mistrik started the workshop off with a discussion of mzCloud and his presentation sparked numerous questions around global vs targeted metabolomics and the need for authentic standards to validate metabolite identities. Other questions related to the use of mzCloud were posted on the mobile app regarding metabolite identification and these discussions were an excellent lead in to the presentation by Dr. Chris Beecher. He discussed his IROA approach as an internal standard and to help with metabolite ID as well as to control for batch effect. There were numerous questions about the IROA approach and the discussion again shifted to the identification of metabolites including unknowns. Dr. Tim Garrett introduced the NIH Common Fund sponsored Regional Comprehensive Metabolomics Resource Core facilities and in addition to describing how these facilities work, he described other unique offerings including chemical synthesis and the Metabolomics Workbench. Several interesting discussions emerged including how investigators evaluate protocols (extraction, chromatography, etc) and whether or not international groups can make use of the metabolomic core facilities. Lastly, Dr. Biswa Misra introduced the Metabolomics Early Career Member Network. Overall the workshop was a great success, fostered interesting and productive discussions, and covered relevant topics for those in attendance.