

Name of Workshop: Lipidomics: Path to Clinical Utility (Lipids & Lipidomics Interest Group)

Date: Tuesday, June 4, 2019

Presiders: John Bowden and Kim Ekroos

Approx. attendance: 150-175

Summary of program and discussion

The workshop style we adapted was to invite three lipidomics researchers (with unique insights into how to accomplish clinical translation, challenges facing this endeavor, and common ground we need to reach as a community to ensure data comparability and standardization). Each speaker was given approximately 5 min to present, followed by 15+ min of community questions and discussion. The remaining 15 min (beyond the three speaker sessions) was covered by Kim and I discussing current community-wide efforts that are ongoing geared toward working together to improve the challenges discussed.

The field of lipidomics is rapidly evolving, driven by high expectation in its ability to afford new opportunities for studying lipids in health and disease and in many other fields of research. Kim and I aimed to invoke a discussion from various angles on this topic. The three speakers invited and title, were Ken Stark (Department of Kinesiology, University of Waterloo) "Unlocking the Potential of Nutritional Lipidomics Requires Acyl Isomer Information", Kevin Huynh (Baker Heart and Diabetes Institute Metabolomics Laboratory) "Lipidomics: Path to Clinical Utility Challenges in High-Throughput Lipidomics: Harmonization Across Platforms, Laboratories and Studies", and Daisuke Saigusa (Tohoku Medical Megabank Organization/School of Medicine, Tohoku University) "Development of sensitive and reproducible methods for clinical or cohort study using mass spectrometry". Overall, in my opinion, the speakers and audience were very engaged and there was a great discussion vibe from the audience. At the end, we encouraged the audience to provide feedback on the workshop style and topics and after review of our scores, I think we accomplished what we intended to accomplish.