

## **ASMS 2020 Workshop Report**

### **Analytical Lab Managers Interest Group**

Organizers: Sam Mackintosh (University of Arkansas for Medical Sciences), Ryan Leib (Stanford University)

1. Title of Workshop: ***Large-Scale Data Analysis and Management: Challenges for Analytical Laboratories***

Speakers/Discussion moderators

- Sam Mackintosh, PhD, University of Arkansas for Medical Sciences
- Ryan Leib, PhD, Stanford University
- Brett Phinney, PhD, University of California at Davis
- Art Salomon, PhD, Brown University
- Stephanie Byrum, University of Arkansas for Medical Sciences

2. Date of workshop  
Thursday, June 4, 2020  
12:00 – 1:30 PM CDT, online forum
3. Attendance: ~75
4. Summary of Discussion

Data analysis and management continue to present significant challenges for analytical laboratories that generate large data sets. Two major factors complicating the development of broadly applicable solutions to these challenges are (1) the rapid advance of technological capabilities and analytical methods in the field of mass spectrometry, and (2) the need to prepare and deliver data for further interpretation and publication by principal investigators who are not mass spectrometrists or bioinformaticists. With these challenges in mind, the 2020 ASMS Analytical Lab Managers Workshop was organized with a focus on techniques for processing and management of data from emerging methodologies in ways that meet the needs of non-specialist clients and collaborators. The workshop featured three speakers discussing the analysis and management of different types of data, followed by a group discussion period.

The three panel presentations were:

- **timsTOF Data Management and Analysis**, Brett Phinney (UC-Davis)
- **A phospho-TMT Approach Utilizing Pervanadate Trigger Channels**, Art Salomon (Brown)
- **DIA Data Management and Analysis in a Core Facility Setting**, Stephanie Byrum (UAMS)

Group discussion following the panel presentations was somewhat limited, most likely due to the restrictions of the online forum. Questions and comments were submitted through the Zoom chat feature, with responses and discussion following among panel members. Discussion continued until the allotted time period for the workshop had elapsed.