ASMS 2019 Workshop Report Analytical Lab Managers Interest Group Organizers: Sam Mackintosh, David R Quilici

1. Title of Workshop: Tackling The Big Data Part II: Visualization, Normalization and Accessibility of Large Data Sets

Speakers/Discussion moderators

- Sam Mackintosh, PhD, University of Arkansas Medical Sciences
- David R Quilici, PhD, University of Nevada Reno
- Ben Neely, PhD, National Institute of Standards and Technology (NIST)
- Aaron Storey, PhD, University of Arkansas Medical Sciences (UAMS)
- Ryan Leib, Stanford University (SUMS)
- Date of workshop
 Tuesday June 4, 2019
 5:45-7 pm, Room A 315
- 3. Attendance: ~100
- 4. Summary of Discussion

Modern quantitative proteomic experiments are producing large complex data sets. These large datasets need to be properly analyzed and presented in a manner that is comprehensible to the researcher and suitable for publication. These data also need to be made available to other researchers after publishing, but it is extremely challenging because there is not yet a community standard.

Three areas of dealing with proteomic data were discussed: Visualization, Normalization and Accessibility of Large Data Sets

- "Standard Reference/Research Materials to Assist in Quality and Normalization": Ben Neely (NIST)
- "Enabling insight through data visualization": Aaron Storey (UAMS)
- "A Fistful of Datas: Storage, Security, Sharing and Solutions?": Ryan Leib (SUMS)

During the 2018 ASMS Analytical Lab Managers workshop a future topics form was passed out to the attendees asking what they would like to have discussed. The topics presented in the 2019 workshop represented approximately 80% of these requests. The presentations were designed to encourage audience participation. Discussion were halted at 7:05 but with greater than 75% of the attendees still present. One on one discussions continued after the allotted time.