2024 ASMS Native MS Interest Group

Native MS: Tactics to support Innovative Protein Characterization in Industry and Academia

Date: Wednesday June 5th, 2024

Location: Anaheim, CA

Organizers: Kristine F. Parson (Biotechnologies USA, Inc.) and Arthur

Laganowsky* (Texas A & M)

Summary:

This workshop highlighted the advancements made within the realm of the native MS. There was a focus on the distribution of this technology within the field, and speakers discussed how they are breaking down barriers for examining previously unruly and complicated samples. This workshop was designed to be informal and welcoming to ensure that it was valuable both for newcomers as well as those already proficient in the native MS field.

There were four speakers, and each was carefully selected to encompass both academia and industry. Speakers each gave ~10 min presentation back-to-back, and the audience was asked to hold questions to the end. The workshop was setup this way to encourage discussion and conversion for the second half of the event. A survey QR code was placed on the screen at the conclusion of the event and feedback was in favor of the discussion format.

Speakers:

Austin Culberson (Andson Biotech) startup company showing off new technology for online buffer exchange using microfluidic device.

Yilin Han (Gilead Sciences), biopharma scientist discussing workflows for performing drug antibody conjugates.

Jared Shaw (University of Nebraska) Professor who spoke about groups' work performing charge reduction for intact mass determination and MS/MS (complex-up and nTD).

Aneika Leney (University of Birmingham) Professor who spoke about groups' work on molecular glues and detecting blue-green algae signatures within complex lake samples. Professor Leney also posed some interesting topics regarding challenges for native MS such as using ChatGPT and trainings for obtaining "good spray" that anyone can get instantaneously.

Workshop Attendance: 50-85 people

*Note: Filling in for Arthur Laganowsky during the event was Carter Lantz (Texas A & M)