

Workshop: Covalent Labeling, and Cross-Linking Interest Group

Date: June 4th, 2024

Organizers: Dr. Saiful Chowdhury, University of Texas at Arlington

This year, I, Saiful Chowdhury, took the lead in organizing the newly renamed "Covalent Labeling and Cross-linking Interest Group" at the ASMS conference. Previously inactive, the group did not host any workshops last year. Our topic for this year was "Advances in Crosslinking and Covalent Labeling Techniques: Advantages, Challenges, and Future Directions." We invited several prominent figures in the field to discuss the latest developments and challenges. The event saw an attendance of approximately 150 people. Although some speakers exceeded their allotted time, which limited the Q&A sessions, we still had engaging discussions during each presentation. The agenda was as follows:

Presider:

Dr. Saiful Chowdhury (introduction to the speakers)

Speakers and Panelists:

- Dr. David Schriemer, University of Calgary - Talked about cryofixation, crosslinking, and click covalent labeling for interactome mapping.
- Dr. Fan Liu, FMP Berlin - Talked about crosslinking technology for spatial interactome.
- Dr. Richard Scheltema, University of Liverpool, UK - Discussed data challenges.
- Dr. Ryan Bomgarden, ThermoFisher - Talked about the history of cross-linking from an industrial perspective and discussed diazirine-based photo crosslinking.
- Dr. Evgeniy Petrotchenko, McGill University - Discussed several structural proteomics techniques.

Conclusions – DR. Saiful Chowdhury

Discussion followed each talk, but in the future, we plan to save all questions for the end. This event clearly demonstrated significant interest in covalent labeling and cross-linking technologies among ASMS members. Several attendees approached me personally after the workshop, eager to learn more about these techniques. It's evident that this workshop is reaching new researchers.