

Bound Together: The Perfect Marriage of Mass Spectrometry and Cryo-EM

February 27th, 2023 at 10 am PST

In this seminar, you'll learn:

- •The basics of Mass Spectrometry and Cryo-EM techniques
- •The details of how the integration of Mass Spectrometry and cryo-EM will help you in your research

Website:

https://dornsife.usc.edu/ bridge-institute/ms-and-cryo-em-seminar/

Registration encouraged:



Location:

Michelson Center For Convergent Bioscience 1002 Childs Way, MCB 101 Los Angeles, California 90089

For more info please contact USC Bridge Institute:

bridgeinstitute@usc.edu 213-821-9823

Structural biologists face several challenges when trying to solve the structure of large and dynamic complexes. However, the combination of different techniques as Mass Spectrometry and Cryo-EM, an approach known as integrative structural biology, is revolutionizing the understanding of protein structure, function and dynamics.

Program:

9.30 am - 10.00 am: Check-in and Coffee

10.00 am - 10.45 am: Natalia de Val PhD, Thermo Fisher

Introduction to Cryo-EM and Its Integration with Mass Spectrometry, Application Results

10.45 am - 11.00 am: Q&A

11.00 am - 11.30 am: Rosa Viner PhD, Thermo Fisher

Introduction to Mass Spectrometry and Its Integration with Electron Microscopy, Application Results

11.30 am - 11.45 am: Q&A

11.45 am - 12.45 pm: Lunch

12.45pm - 1.15 pm: Vadim Cherezov PhD, USC Structural Studies of G Protein-Coupled Receptors

1.15 pm - 1.45 pm: Iain D. G. Campuzano PhD FRSC, Amgen Hydrophobic Protein Analysis in Industry: From Native-MS to High Throughput-MS Therapeutic Project Support

1.45 pm - 2.15 pm: Rachel Loo PhD, UCLA

Complementary MS and CryoEM: Macromolecular Complexes and

Post-Translational Modifications

2.15 pm - 2.45 pm: Coffee Break

2.45 pm - 3.15 pm: Cornelius Gati PhD, USC Structural Basis of GABA Reuptake Inhibition

3.15 pm - 3.45 pm: Lan Huang PhD, UCIrvine

Structural Analysis of Protein Complexes Using Cross-linking

Mass Spectrometry

3.45 pm - 4.00pm: Wrap-up



