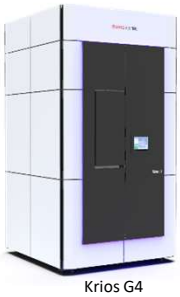
thermoscientific

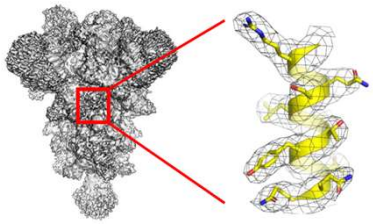
Bound Together: Mass Spectrometry and Cryo-EM

October 10, 2023, 9.30 am EST


Orbitrap Ascend Tribrid MS


Q Exactive UHMR MS


Krios G4


SARS-CoV-2 spike ectodomain, 2.4A resolution
by Suruchi Singh and S. Saif Hasan

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

Registration:

Location:
Institute for Bioscience & Biotechnology Research (IBBR)
9600 Gudelsky Dr.
Rockville, MD 20850

For more info, please contact
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Natalia.deval@thermofisher.com

Structural biologists face several challenges when trying to solve the structure of large and dynamic complexes. However, the combination of different techniques such 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 light breakfast**
10.00 am-10.30 am: **Natalia de Val, Ph.D., Thermo Fisher** "Introduction to Cryo-EM and its Integration with Mass Spectrometry, Application Results"
10.30 am-10.35 am: Q&A
10.35 am-11.05 am**: Rosa Viner, Ph.D., Thermo Fisher** "Introduction to Mass Spectrometry and its Integration with Cryo-EM, Application Results"
11.05 am-11.10 am: Q&A
11.10 am-11.40 am: **Albert Konijnenberg, Ph.D., Thermo Fisher** "Direct Single Molecule Imaging on a Modified QExactive UHMR with Electron Holography Capability"
11.40 am-11.45 am: Q&A
1.45 am-12.45 pm: **Lunch** (provided by Thermo)
12.45 pm-1.15 pm: **S. Saif Hasan, Ph.D., UM Baltimore-IBBR** "Structural Insights into Coronavirus Spike Protein Maturation from Integrated Cryo-EM and Mass Spectrometry Analysis"
1.15 pm-2.15 pm: **Keynote by Ganesh Anand, Ph.D., PSU** "Virus Breathing, Metastability and Epitope Dynamics by Integrative Mass Spectrometry and Cryo-EM"
2.15 pm-2.45 pm: **Coffee Break**
2.45 pm-3.15 pm: **Kyle Anderson, Ph.D., NIST-IBBR** "Advancing HDX-MS for Adoption in QC Programs and Better Comparability of Biosimilars"
3.15 pm-3.45 pm: **Matthew Metcalf, Ph.D., UM College Park-IBBR** "Structural Characterization of an Engineered Soluble Form of the HCV E1E2 Heterodimer"
3.45 pm-4 pm: **Closing remarks** by IBBR leadership
4 pm-6 pm: **Reception** (provided by Thermo)

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