S²C² Stanford-SLAC Cryo-EM Center





CryoEM Current Practices Webinar9:00 AM (PDT)/12:00 PM (EDT)

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Protein Assemblies Made by Evolution and by Design...and Understood through Cryo-EM

Proteins represent the most versatile building blocks available to living organisms or the laboratory scientist for constructing multi-component machines and functional materials. Our lab has been interested both in understanding the functioning of such macromolecular protein machines generated through natural evolution and in designing from scratch new ones with emergent physical and functional properties. Given the large sizes of such protein assemblies (10 nm to several μ m) and their inherent dynamics, their structural characterization by cryo-EM has been necessary. In this presentation, I will give a few examples of our recent work, highlighting the central importance of cryo-EM in these studies.

All are welcome to attend. Registration is at no-cost, but sign-up is required: Registration Link: <u>https://us02web.zoom.us/webinar/register/WN_tMa2wXcmSN-MRgLbmugHfw</u>

This webinar series is jointly hosted by the NIH Transformative High Resolution CryoEM Program Service Centers: the National Center for CryoEM Access and Training (NCCAT), the Pacific Northwest Center for CryoEM (PNCC), and the Stanford-SLAC CryoEM Center (S2C2) who provide no-cost access to cryoEM instrumentation and training. In this monthly series, we will highlight cryoEM methods and use the Q&A session after the seminar to stimulate discussion of best practices and interesting challenges that will be helpful to researchers new to the field. Representatives from all three service centers will also be on hand to answer questions about the CryoEM resources available to biomedical researchers and how to access them.