

# Cellular Level Electron Microscopy: Challenges and Opportunities

*Thursday, June 11, 2020 10:00 AM (45 minutes)*

Following the astonishing success of the single-particle cryoEM “resolution revolution”, the next frontier is to explore and understand these molecular machines within the complex environment inside cells. This presents many challenges requiring linking data between image modalities across many scales, a high level of automation, segmenting structures of interest out of noisy and cluttered environments, visualizing the results, and doing all this at a pace that makes it attractive and useful general method. In turn, these exciting challenges present a wealth of opportunities for the development of new approaches and technologies. This presentation will provide a brief introduction to cellular level electron microscopy and will outline some of the challenges and opportunities for advances.