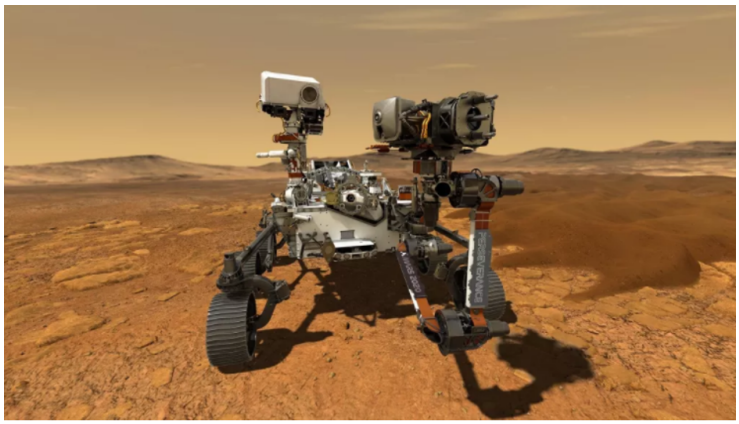
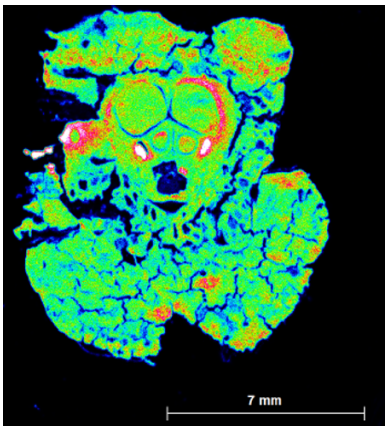
Subject: MSNO March Four Point Quarterly: From Cleveland to Mars

Dear MSNO Community,
Welcome to the second issue of the MSNO Four Point Quarterly. Thank you to everyone who renewed your memberships in January. We are excited to announce several upcoming events below, including March Membership Meeting - we hope to (virtually) see you there!
If you have content for the next FPQ, please send it to microsocietyneo@gmail.com

1. **Upcoming events:**
   The MSNO March Membership Meeting is scheduled online for 3/31/21, from 7:00 pm - 8:15 pm. "Perspectives on Cryo Electron Microscopy" will feature two speakers on the topic of cryo EM, and the cutting edge facilities and research in northeastern Ohio. More information and a link to register is here. The event is free, but registration is required.
   National: Mark your calendar and Save the Date for the premier microscopy education and networking event of the year — Microscopy & Microanalysis 2021, August 1-5, in Pittsburgh, Pennsylvania. The Diagnostic & Biomedical Focused Interest Group (DBM-FIG) will be organizing a one-day Pre-Meeting Congress (PMC) on Biological EM right before the M&M 2021, on "*Contemporary Electron Microscopy Advances in Biomedical Research.*" Additional information on this symposium is available at https://diagnosticbiologicalmicroscopy.com/.
   Microscopy Today publishes a comprehensive list of microscopy related meetings and courses monthly. The most recent list can be found here, along with instructions on how to submit information about your event.

2. **This month's featured vendor is Bruker AXS LLC:** Bruker offers microanalytical tools for electron microscopy including EDS, WDS, EBSD, and also offers AFM, Raman and FTIR microscopy. Did you know there is an instrument that can analyze samples ranging from an entire circuit board to a biological section? One just landed on Mars. Learn more about it here or contact me Mark.Kelsey@bruker.com to discuss your application.





3. **Facility Highlight:** *Cryogenic Electron Microscopy (Cryo-EM)* is an approach that allows the observation of hydrated biological specimens in their native environment at cryogenic temperatures to visualize molecules, down to the level of atomic details. The Case

Western Reserve University Cryo-EM Core facility is located in the Cleveland Center for Membrane and Structural Biology Building on the west side of the CWRU campus. The core supports research across diverse disciplines including cancer, infectious diseases, neurodegenerative diseases, vision loss, drug addiction, and pain, with users spanning CWRU, the Cleveland Clinic, Cleveland State University, Ohio State University, and Kent State University. To learn more about the newly upgraded facility, join us at the MSNO March membership meeting.

4. **Early career research highlight:** Dr. Christopher Morgan, a postdoctoral researcher in Pharmacology in the CWRU School of Medicine, will present at the March membership meeting on “Structural Studies of the AdeB Multidrug Efflux Pump from Acinetobacter baumannii”. Dr. Morgan graduated with a B.A. in Chemistry from Youngstown State University in 2013 and received his Ph.D. in Chemistry from Case Western Reserve University in 2018 working in the Tolbert Lab. Following graduation, he joined the Yu research group in 2018 as a postdoctoral scholar in the Department of Pharmacology at the CWRU School of Medicine. His current research focuses on utilizing Cryo-EM, computational and biophysical techniques to study the mechanisms of bacterial membrane transport proteins and their interactions with antibiotics, ribosome structure and function, and RNA structure