

2021 OMS SPRING MEETING PROGRAM

Thursday, April 22, 2021

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| 8:45-9:00 am | Welcome Remarks |
| 9:00-11:00 am | “Interactive Image Analysis Mini-Workshop with ImageJ/FIJI”
Michael Anderson, Oklahoma State University Center for Health Sciences |
| 11:00-11:30 am | “Advanced Damage Free SEM Sample Preparation Utilizing Broad Ion Milling” Rod Baird, Hitachi |
| 11:30-12:00 pm | “F200: Your Passport into the World of CryoEM” Jaap Brink, JEOL |
| 12:00-1:00 pm | Career Development Panel with Industry Guests Joshua Deal and Jacob Burnett from Nikon, Kyle Driscoll from Miltenyi, and Rod Baird from Hitachi |
| 1:00-1:30 pm | “Thermofisher Quattro S and the Scios 2” Rick Passey, Thermofisher |
| 1:30-2:00 pm | “Advances in Direct Electron Detection: Getting the Most Out of Your Microscope” Sahil Gulati, Gatan |
| 2:00-2:30 pm | “Discover the Cutting Edge of Light Sheet Fluorescent Microscopy” Kyle Driscoll and Amanda Burke, Miltenyi |
| 2:30-3:00 pm | “Utilizing True Dynamic CT Imaging for 3D Non-Destructive in situ Experimentation” Luke Hunter, TESCAN |
| 3:00-3:30 pm | “Super Resolution at the Speed of Spinning Disk Confocal: Theory and Use of Optical Reassignment” Matt Mitschelen, Nikon |
| 3:30-4:00 pm | “Recent Advances in EBSD Detector Technology” Matt Nowell, EDAX LLC |
| 4:00-4:10 pm | Break |
| 4:10-4:30 pm | “Spatial Distribution of Low Molecular Weight BPEI and PEG-BPEI Within Pseudomonas Aeruginosa Biofilms” Hannah Panlilio, Andrew Neel, and Charles Rice, Department of Chemistry and Biochemistry, University of Oklahoma |
| 4:30-4:50 pm | “600-Da Branched Polyethyleneimine (BPEI) as a Potential Adjuvant to Neutralize E.coli LPS and Biofilm Virulence Factors” Neda Heydarian, Cassandra L. Wouters, Hannah Panlilio, and Charles Rice, Department of Chemistry and Biochemistry, University of Oklahoma |

Friday, April 23, 2021

8:45-9:00 am	Welcome Remarks
9:00-10:00 am	“Antimicrobial and biomimetic metaloxide nanoparticles: synthesis, characterization and applications in healthcare” Dr. Fernando Esteban Florez, OU College of Dentistry, University of Oklahoma Health Sciences Center
10:00-11:00 am	“Frontiers in Cellular Cryo-Electron Tomography” Dr. Long Gui, Nicastro Lab, UT Southwestern Medical Center
11:00-11:20 am	“3D Confocal Microscopy: A Resourceful Strategy in the Classroom”, Zinar Simsek and D. Vazquez-Sanroman, Anatomy and Cell Biology Oklahoma State University Center for Health and Sciences
11:20-11:40 am	“Calcium Enhances the Host-Pathogen Interaction of Pseudomonas aeruginosa with Lung Epithelial Cells” Deepali Luthra, Marianna Patrauchan and Erika Lutter, Department of Microbiology and Molecular Genetics, Oklahoma State University
11:40 -1 pm	Break
1:00-2:00 pm	“Seeing Beyond Post-Mortem: In-Situ Capabilities in the ESEM” Dr. Daniel Veghte, Center for Electron Microscopy and Analysis, The Ohio State University
2:00-3:00 pm	“Super-resolution Microscopy Developments for High-throughput, Deep-tissue and Correlative Imaging” Dr. Joerg Bewersdorf, Yale School of Medicine
3:00-4:00 pm	“Seeing Atoms: Unraveling Material’s Functionality” Dr. Stephen Pennycook, University of Tennessee, Knoxville, TN, and a Distinguished Visiting Professor at the School of Physical Sciences and CAS Key Laboratory of Vacuum Sciences, University of Chinese Academy of Sciences, Beijing
4:00-4:30 pm	Closing Remarks and Award Ceremony