



Seminars: Shriners Hospital for Children
3101 SW Sam Jackson Park Road (97239)

Workshops: OHSU Center for Spatial Systems Biomedicine– Waterfront Campus
2730 SW Moody Ave (97201)

PNMS 2016 Program

Thursday Nov 3rd (Shriners Hospital Auditorium):

10-11:00AM PNMS Business meeting

11:00-11:30 Lunch (provided)

11:30-11:35 Opening Remarks: Doug Keene, Shriners Hospital

11:35-12:30 Keynote Speaker:

Joshua Vaughan PhD, University of Washington “Expansion Microscopy”

12:30-2:00 Cutting Edge Methodologies:

12:30PM **Ken Weekes DDM**, Oregon Health & Science Univ. “Antigen Retrieval Mediated by Microwave Energy”

12:45PM **Cedric Bouchet-Marquis PhD**, FEI Company “Tools for Correlative Light and Electron Microscopy”

1:00PM **Xiaolin Nan PhD**, Oregon Health & Science University “Super Resolution Single Molecule Imaging”

1:30PM **Eric Gouaux PhD**, Oregon Health & Science University “Structural Biology and Single Particle Cryo-TEM”

2:00-2:15 Coffee Break; *Organizing Groups for Workshops*

2:30-5:30PM - Concurrent Workshops (OHSU Center for Spatial Systems Biomedicine– Waterfront Campus):

“Correlative Light and Electron Microscopy”, Claudia López PhD, OHSU and Cedric Bouchet-Marquis PhD, FEI Company. *Demonstration of CLEM technology via FEI CorrSight, Helios FIB SEM and MAPS technology.*

“Serial Block Face Scanning Electron Microcopy for 3D Data Acquisition” Jessica Riesterer PhD, FEI. *Demonstration of the FEI Teneo SEM with built-in ultramicrotome and innovative backscatter detection.*

“Microwave Processing of Samples and Antigen Retrieval” Cindy Smith, Ted Pella and Charlie Meshul PhD, Veterans Administration Hospital. *Utilizing microwave assistance for specimen preparation and antigen retrieval.*

“Light Sheet Microscopy and 3D Fluorescence Imaging” Stefanie Kaech Petrie PhD, OHSU. *Demonstration of the Zeiss 880 confocal with Airyscan, Zeiss Lightsheet microscope, and AxioScan LM.*

5:30-8:30PM The Old Spaghetti Factory (715 SW Bancroft St.) Reception and Dinner

Friday November 4th (Shriners Hospital Auditorium)

8:30-9AM Coffee and Pastries

9:00-10:00 Keynote Speaker:

Kristina Kermanshahche, Global Director of Life Sciences, Intel “Enabling Technology. Leveraging Data. Transforming Precision Medicine”

10:00-11:30 Invited Speakers:

10:00AM **Sandra Rugonyi, PhD**, Oregon Health & Science University “Imaging the developing heart: Our quest to understand cardiac malformations”

10:30AM **Summer Gibbs PhD**, Oregon Health & Science University “Improving Fluorescent Contrast for Correlative Light and Electron Microscopy”

11:00AM **Terry Morgan MD PhD**, Oregon Health & Science University “Ultrastructural Changes Associated with Complications in Pregnancy”

11:30-1PM Lunch (provided): **Meet Our Sponsors!**

FEI Company	Ted Pella
Electron Microscopy Sciences	Park Scientific
APTECH	Marine Reef International
Eclipse Technology	BioVision Technologies
Bruker	Thermo Fisher Scientific
Lumencor	

1PM – 2PM Contributions by Attendees:

1:00PM **Elaine Humphrey**, U. Victoria, Canada: "Microscopic Analyses of a corpse, from long ago, found in a Canadian glacier"

1:30PM **Kristin Hirata** and Jay Mellies (Dept. of Biology, Reed College): "Distribution of the Transcriptional Regulator Ler in E. coli Using PALM."

1:45PM **Ying Zhang**, Tao Huang, Danielle Jorgens, Andrew Nickerson, Li-Jung Lin, Josh Pelz, Joe W. Gray, Claudia Lopez, Xiaolin Nan (OHSU): "Quantitating Morphological Changes in Biological Samples During Scanning Electron Microscopy Sample Preparation with Correlative Super-Resolution Microscopy"

2PM Coffee

2:30-4:00 Contributions by Attendees:

2:30PM **Alice Dohnalkova**, Libor Kovarik, Arda Genc. (Environmental Molecular Sciences Lab, Pacific Northwest National Laboratory and FEI): "Atomic-scale resolution imaging in biology - pros and cons".

2:45PM **Richard Swinford** and Erik J. Sánchez, Portland State: "AFM-SIMS: Some practical considerations"

3:00PM **Frederick (Mike) DeArmond** and Erik J. Sánchez, Portland State: "Evaluating Fluorophores for use in Multiphoton Fluorescence Microscopy."

3:15PM **Hamed Heidari**, Martin Pfanmoeller, Owen Lozman, Tom Offermans and Sara Bals, University of Antwerp: "3D nanoscale mapping of a tandem organic solar cell by spectral electron tomography"

3:30PM **Oleg Varlamov**, Oregon Primate Center: "Toward understanding the spatiotemporal dynamics of metabolic fluxes through imaging".

3:45PM TBA

4PM **Wine and Cheese Social** (Shriners Hospital Auditorium Foyer)