

International SMALP 2020 Conference

Organizers: Michael Overduin [overduin@ualberta.ca; 1 780 222 6281], Youzhong Guo, Katie Shedden and the IT team in the School of Pharmacy at VCU are hosting and organizing the web-conference by Zoom. Delegates will be invited to this and future SMALP web-conferences by Zoom from 12-1pm EST on June 19 and Sept 18, 2020

Friday March 20

Session 1: Structural Biology

- 09:00-09:30 **Wayne Hendrickson**, Columbia University: *Alternative Stabilizations for Structure Determination of Membrane Proteins*
- 09:30-10:00 **Thomas Walz**, Rockefeller University: *Cryo-EM studies of Membrane Proteins in Peptidiscs & Nanodiscs*
- 10:00-10:25 **Youzhong Guo**, Virginia Commonwealth University: *SMA-based Membrane Active Polymers for Membrane Protein Structural Biology*
- 10:25-10:45 **Jie Yu**, Oregon Health & Science University: *Mechanism of gating & partial agonist action in the glycine receptor*
- 10:45-11:00 Discussion / break

Session 2: Industry Spotlights 1

- 11:00-11:15 **Giulia Weissenberger**, CryoSol-World: *VitroJet: Bridging the Gap in Sample Prep*
- 11:15-11:30 **Sebastian Fiedler**, Fluidic Analytics: *Monitoring of SMALP-nanodisc formation by microfluidic diffusional sizing*
- 11:30-11:45 **Jan Kubicek**, Cube Biotech: *Recent DIBMA developments and applications*
- 11:45-12:00 **Steven Harborne**, Peak Proteins: *Comparisons between SMALP'ed and detergent solubilised GPCRs*
- 12:00-12:15 **Vlado Gelev**, FB Reagents: *Deuterated phospholipids and detergents, and other stable isotope probes for studying membrane proteins*
- 12:15-12:30 Discussion / break

Session 3: Polymer Design and Methods

- 12:30-13:00 **Tim Dafforn / Naomi Pollock**, University of Birmingham: *SMALPs: past glories and future opportunities*
- 13:00-13:15 **Marta Barniol-Xicota**, KU Leuven: *Comparative study of xMALP composition in eukaryotic and prokaryotic membranes*
- 13:15-13:45 **Michael Overduin**, University of Alberta: *Novel polymers for memtein solubilization and analysis*
- 13:45-14:00 Discussion / break

Session 4: New Opportunities and Future Applications

- 14:00-14:30 **Ann McDermott**, Columbia University
- 14:30-15:00 **Paul Blount**, UT Southwestern: *Advantages of SMALPs for reconstituting channels for patch-clamp analysis and nanodevices*
- 15:00-15:15 **Nathan Brady**, University of Tennessee at Knoxville: *Insights into the formation & future applications of PSI-SMALP*
- 15:15-15:30 Discussion / break

Session 5: Industry Spotlights 2

- 15:30-15:45 **Kacee Sims**, Avanti Polar Lipids
- 15:45-16:00 **Verna Frasca**, Malvern Panalytical: *Biophysical Characterization of SMALPs*
- 16:00-16:15 **Edward Pryor**, Anatrace: *An update on SMA commercialization from Anatrace*
- 16:15-16:30 Discussion and wrap-up

Note: The following are unable to give talks due to last minute issues: Tom Sakmar, Tim Dafforn, Bert Klumperman, Sandro Keller and Anne Grethen

