



# The Oregon Translational Chemical Biology Symposium

Tuesday October 30, 2018

The Knight Cancer Research Building (KCRB) Auditorium at OHSU  
Co-Organized by Kimberly Beatty (OHSU) and Michael Pluth (UO)



On-site registration: 9 to 9:45 am

Session 1 (Chair: Kimberly Beatty)	
9:45	Overview of the OTCB working group
10:00	Carsten Schultz ( <a href="mailto:schulcar@ohsu.edu">schulcar@ohsu.edu</a> ): "A chemistry toolbox for biomedical research"
10:10	Bruce Branchaud ( <a href="mailto:branchau@ohsu.edu">branchau@ohsu.edu</a> ): "Chemical biology in Oregon"
10:20	Vickie De Rose ( <a href="mailto:derose@uoregon.edu">derose@uoregon.edu</a> ): "Towards comprehensive analysis of Platinum anticancer compounds"
10:30	Session 1 Discussion

Morning Coffee Break: 10:35 to 10:50 am

Session 2 (Chair: Summer Gibbs)	
10:50	Joshi Alumkal ( <a href="mailto:alumkalj@ohsu.edu">alumkalj@ohsu.edu</a> ): "Targeting Lethal Prostate Cancer Transcriptional Networks"
11:10	Tom Scanlan ( <a href="mailto:scanlant@ohsu.edu">scanlant@ohsu.edu</a> ): "Design and development of CNS selective thyroid hormone agonists"
11:20	Michael Pluth ( <a href="mailto:pluth@uoregon.edu">pluth@uoregon.edu</a> ): "Chemical Tools for Detecting and Delivering Reactive Sulfur Species"
11:30	Aaron Nilsen ( <a href="mailto:nilsen@ohsu.edu">nilsen@ohsu.edu</a> ): "Site-Selective Targeting of Plasmodium Cytochrome bc1"
11:40	Session 2 Discussion

Lunch: 11:45 to 12:30

Poster Viewing: 11:45 to 1:00 pm

Session 3 (Chair: Darren Johnson)	
1:00	Gordon Mills ( <a href="mailto:millsq@ohsu.edu">millsq@ohsu.edu</a> ): "Delivering on the Promise of Personalized Medicine"
1:30	Summer Gibbs ( <a href="mailto:gibbss@ohsu.edu">gibbss@ohsu.edu</a> ): "Towards Clinical Translation of Novel Fluorescent Contrast for Image Guided Surgery"
1:40	Kimberly Beatty ( <a href="mailto:beattyk@ohsu.edu">beattyk@ohsu.edu</a> ): "Enzyme probes for illuminating human pathogens"
1:50	Ramesh Jasti ( <a href="mailto:rjasti@uoregon.edu">rjasti@uoregon.edu</a> ): "Carbon Nanohoops as New Biological Imaging Tools"
2:00	Brian Druker ( <a href="mailto:druker@ohsu.edu">druker@ohsu.edu</a> ): "Imatinib as a Paradigm of Targeted Cancer Therapies"
2:30	Session 3 Discussion

Short Break: 2:40 to 3:10 pm

Session 4 (Chair: Michael Pluth)	
3:10	Xiangshu Xiao ( <a href="mailto:xiaoxi@ohsu.edu">xiaoxi@ohsu.edu</a> ): "Cancer Chemical Biology for Precision Oncology: Expanding Synthetic Lethality Applications"
3:20	Mike Haley ( <a href="mailto:haley@uoregon.edu">haley@uoregon.edu</a> ): "Fluorescent/Molecular Probes for Anions: Design and Properties"
3:30	Darren Johnson ( <a href="mailto:dwj@uoregon.edu">dwj@uoregon.edu</a> ): "Fluorescent/Molecular Probes for Anions: Applications in Imaging and Environmental Sensing"
3:40	Francis Valiyaveetil ( <a href="mailto:valiyave@ohsu.edu">valiyave@ohsu.edu</a> ): "Unnatural Amino Acid Mutagenesis of Membrane Proteins"
3:50	Craig Yoshioka ( <a href="mailto:yoshiokc@ohsu.edu">yoshiokc@ohsu.edu</a> ): "Potential of Cryo-EM in Structure-Based Drug Research"
4:10	Session 4 Discussion Announcement: UO Event

Networking event and poster session: 4:15 to 6 pm

## **OTCB Poster Session: October 30, 2018**

### **Poster 1: Chemical Tools for Investigating Biological Reactive Sulfur Species**

Sarah Bolton, Yu Zhao, Andrea Steiger, Nathan Lau, Matt Cerda, Turner Newton, Annie Gilbert, Mike Pluth

### **Poster 2: A versatile peptide tag for labeling proteins for light and electron microscopy**

Julia Doh, Jon White, Hannah Zane, Young Hwan Chang, Claudia Lopez, Caroline Enns, and Kimberly Beatty

### **Poster 3: Chemical Biology in the OHSU Medicinal Chemistry Core**

Haihong Jin, Andrew Placzek, and Aaron Nilson

### **Poster 4: Labeling endogenous opioid receptors in living neurons using ligand-directed chemistry**

Seksiri Arttamangkul, Andrew Placzek, Emily Platt, Bridget Sefranek, Kenner Rice, Thomas Murray, Larry David, David Farrens, John T Williams

### **Poster 5: A New Molecular Architecture for Fluorescent Probes**

Terri C. Lovell, Curtis Colwell, Julia Shangguan, Fehmi Civitci, Xiaolin Nan, Ramesh Jasti

### **Poster 6: Targeted prodrugs for CNS-selective drug distribution**

J. Matthew Meinig, Skylar J. Ferrara, Tapasree Banerji, Tania Banerji, Meredith D. Hartley, Hannah S. Sanford-Crane, Thomas S. Scanlan

### **Poster 7: Reversible Supramolecular Receptors for Biologically Relevant Anions**

Hazel A. Fargher, Jeremy P. Bard, Nathanael Lau, Chun-Lin Deng, and Darren Johnson

### **Poster 8: Intracellular Paired Agent Imaging Enables Rapid Assessment of Therapeutic Efficacy for Personalized Pancreatic Cancer Therapy**

Allison Solanki, Lei Wang, Kenneth Tichauer, Kimberley Samkoe, Summer Gibbs

### **Poster 9: The role of backbone hydrogen bonds in the voltage sensor of K<sup>+</sup> channels**

Daniel T. Infield, Kimberly Matulef, Jason D. Galpin, Christopher A. Ahern, and Francis I. Valiyaveetil

### **Poster 10: LSD1 Activates a Lethal Prostate Cancer Gene Network Independently of Its Demethylase Function**

Archana Sehrawat, Lina Gao, Yuliang Wang, Armand Bankhead III, Shannon McWeeney, Carly J King, Jacob Schwartzman, Junior Tayou, Joshua Urrutia, William H Bisson, Daniel J Coleman, Sunil K Joshi, Dae-Hwan Kim, David A Sampson, Sheila Weinmann, Bhaskar VS Kallakury, Deborah L Berry, Reina Haque, Stephen K Van Den Eeden, Sunil Sharma, Jared Bearss, Tomasz M Beer, George V Thomas, Laura M Heiser, Joshi J Alumkal

### **Poster 11: Chemical biology tools to elucidate cell biology mechanisms**

Scotty Farley, Victoria Halls, Aurelien Laguerre, Mason Handford, Kaya Keutler, Nicole Heath, and Carsten Schultz

### **Poster 12: Towards comprehensive analysis of Platinum anticancer compounds: gene expression and new reagents for detection and identification**

Rachael Cunningham, Emily Reister, Christy McDevitt, Emily Sutton, Jack Prochneau, Michael M. Haley, Victoria J. DeRose

### **Poster 13: Targeting EWS-ATF1 in clear cell sarcoma of soft tissue (CCSST)**

Bingbing X. Li and Xiangshu Xiao

### **Poster 14: Topical Application of Nerve-Specific Fluorophores for Image-Guided Nerve Sparing Surgical Procedures**

Connor Barth, Lei Wang, Vidhiben Shah, Adam Alani, Alexander Antaris, Jonathan Sorger, Summer Gibbs