

Sunday, October 14

- 3:00 pm Check-in
- 6:00 pm Reception (*Lobby*)
- 7:00 pm Dinner
- 8:00 pm Speed Dating! (*Lobby*)**
- 9:00 pm Refreshments available at Bob's Pub

NOTE:

Meals are in the **Dining Room**
Talks are in the **Seminar Room**
Posters are in the **Lobby**

Monday, October 15

- 7:30 am Breakfast (*service ends at 8:45 am*)
- 9:00 am Session 1: You light up my life**
Chair: Martin Schnermann
- 9:00 am **Kimberly E. Beatty**, Oregon Health & Science University
A new technology for tracking cellular proteins at high resolution
- 9:20 am **Shinya Tsukiji**, Nagoya Institute of Technology
SLIPT: A chemical approach for controlling protein localization using self-localizing ligands
- 9:40 am **Keith Wood**, Promega Corporation
Interrogating molecular interactions by luminescent energy transfer to intracellular fluorophores
- 10:00 am **Klaus M. Hahn**, University of North Carolina at Chapel Hill School of Medicine
Studying the conformational changes of individual molecules in living cells
- 10:20 am Break
- 11:00 am Session 2: Let it glow**
Chair: Elizabeth New
- 11:00 am **Alexander Lippert**, Southern Methodist University
Chemiluminescent probes for reactive sulfur, oxygen, and nitrogen species
- 11:20 am **Matthew Bogyo**, Stanford University
Using chemical probes to identify novel imaging targets for bacterial infections
- 11:40 am **Sloan Siegrist**, University of Massachusetts, Amherst
Metabolic labeling of the bacterial cell wall
- 12:00 pm **Michael S. VanNieuwenhze**, Indiana University
Probing the dynamics of bacterial cell wall biosynthesis with fluorescent D-amino acids (FDAAs)
- 12:20 pm Lunch (*service ends at 1:00 pm*)

- 2:00 pm** **Session 3: Dyes dyes baby**
Chair: Luke Lavis
- 2:00 pm **Jefferson Chan**, University of Illinois at Urbana-Champaign
Surveillance of cancer stem cell plasticity using an isoform-selective fluorescent probe for aldehyde dehydrogenase 1A1
- 2:20 pm **Kai Johnsson**, Max Planck Institute of Medical Research
Semisynthetic sensor proteins
- 2:40 pm **Mako Kamiya (GABE)**, University of Tokyo
Rational design of reversible fluorescent probes for live-cell imaging and quantification of fast glutathione dynamics
- 3:00 pm **Jackson Del Bonis-O'Donnell**, University of California, Berkeley
Fluorescent nanosensors for infrared imaging of dopamine release in brain tissue
- 3:20 pm Break
- 4:00 pm** **Session 4: Click it**
Chair: Kimberly Beatty
- 4:00 pm **Brian Michel**, University of Denver
Development of fluorescent probes for the detection of ethylene
- 4:20 pm **Elizabeth New**, University of Sydney
Reversible, targeted and ratiometric probes
- 4:40 pm **Joseph Fox**, University of Delaware
Temporally controlled methods based on bioorthogonal chemistry
- 5:00 pm** **Poster Blitz** (1-minute / 1-slide each)
- 5:30 pm** **Poster Reception**
- 7:00 pm Dinner
- 8:00 pm** **Keynote: William Moerner**, Stanford University
Probes and methods for single-molecule tracking and super-resolution microscopy
- 9:00 pm Refreshments available at Bob's Pub

Tuesday, October 16

- 7:30 am Breakfast (*service ends at 8:45 am*)
- 9:00 am Session 5: Bring the light**
Chair: Matthew Bogyo
- 9:00 am **Neal K. Devaraj**, University of California, San Diego
Bioorthogonal probe development for lipids and RNA
- 9:20 am **Gonzalo Cosa**, McGill University
Chemically controlled activation of BODIPY based fluorescent probes
- 9:40 am **Marc Vendrell**, University of Edinburgh
Fluorogenic peptides for enhanced live-cell imaging
- 10:00 am **Daniel Choquet**, University of Bordeaux
New probes to study and modify excitatory synapse nanoscale dynamic organization
- 10:20 am Break
- 11:00 am Session 6: Sweet rhodamine**
Chair: Hari Shroff
- 11:00 am **Claire Deo**, Janelia Research Campus/HHMI
Designing bright synthetic calcium indicators
- 11:20 am **Marcel Bruchez**, Carnegie Mellon University
Semisynthetic physiological indicators based on tandem dyes and activating proteins
- 11:40 am **Laura M. Wysocki**, Wabash College
Learning from Darkness: Tailoring Fluorescent Dyes
- 12:00 pm **Yuan Fang**, University of Nebraska - Lincoln
Phosphinate-based rhodol/fluorescein derivatives and their biological application
- 12:20 pm Lunch (*service ends at 1:00 pm*)
- 1:15 pm Building Tour (*optional - meet at reception*)
- 2:15 pm Session 7: Yellow cyanine**
Chair: Joshua Vaughan
- 2:15 pm **Doron Shabat**, Tel-Aviv University
The emergence of aqueous chemiluminescence: New promising class of phenoxy 1,2-dioxetanes

- 2:35 pm **Martin Schnermann**, National Cancer Institute/NIH
Harnessing cyanine reactivity to prepare novel fluorophores
- 2:55 pm **Ellen M. Sletten**, UCLA
Flavylum polymethine fluorophores for shortwave infrared imaging
- 3:15 pm **Cliff Stains**, University of Nebraska - Lincoln
New fluorophore scaffolds for chemical biology
- 3:35 pm Break
- 4:10 pm Session 8: NIR NIR wine**
Chair: Alexander Lippert
- 4:10 pm **Donal O'Shea**, Royal College of Surgeons in Ireland
Real-time near infrared fluorescence imaging: Research tools with the potential for clinical use
- 4:30 pm **Kalina Peneva**, Friedrich Schiller University Jena
Water-soluble NIR-absorbing rylene chromophores for visualization of cellular organelles
- 4:50 pm **Alison G. Tebo**, Ecole Normale Supérieure
Circularly permuted fluorogenic proteins for the design of modular biosensors
- 5:10 pm **Melike Lakadamyali**, University of Pennsylvania
Visualizing biology at the nanoscale
- 5:30 pm Poster Reception**
- 7:00 pm Dinner
- 8:00 pm Session 9: Riders on the dSTORM**
Chair: Catherine Galbraith
- 8:00 pm **Robert H. Singer**, Albert Einstein College of Medicine
Probing molecular events in neurons
- 8:20 pm **Edouard Bertrand**, Institut de Génétique Moléculaire de Montpellier (IGMM)
Imaging translation of localized mRNA with the SunTag
- 8:40 pm **Markus Sauer**, University of Würzburg
Fluorescent probes and single-molecule localization microscopy
- 9:00 pm Refreshments available at Bob's Pub

Wednesday, October 17

- 7:30 am Breakfast (*service ends at 8:45 am*)
- 9:00 am Session 10: All the right moves**
Chair: Kai Johnsson
- 9:00 am **Erik M. Jorgensen**, HHMI/University of Utah
Live multi-color super-resolution microscopy
- 9:20 am **Thien Vu**, University of Utah
Spontaneously blinking dyes for live multi-color super-resolution imaging
- 9:40 am **Catherine Galbraith**, OHSU
Probing with actin at the leading edge
- 10:00 am **Hari Shroff**, National Institute of Biomedical Imaging and Bioengineering/NIH
Estimating 3D molecular orientation with multiview polarized fluorescence microscopy
- 10:20 am Break
- 11:00 am Session 11: Let me move you**
Chair: Ellen Sletten
- 11:00 am **Marco Fritzsche**, University of Oxford
Nanoscale actin dynamics control T-cell activation
- 11:20 am **Tom Kirchhausen**, Harvard Medical School
Imaging subcellular dynamics from molecules to multicellular organisms
- 11:40 am **Wesley R. Legant**, University of North Carolina - Chapel Hill
Lattice light sheet microscopy - Innovations, advances, and future directions
- 12:00 pm **Joshua C. Vaughan**, University of Washington
Super-resolution microscopy made simple
- 12:20 pm Lunch and Departure
- 1:00 pm First shuttle to Dulles
2:00 pm Second shuttle to Dulles
3:00 pm Last shuttle to Dulles