**Sunday, September 30**

3:00 pm  Check-in

6:00 pm  Reception *(Lobby)*

6:30 pm  Dinner

7:30 pm  Welcome / Opening Remarks *(Organizers)*

7:35 pm  **Poster Blitz** *(1-minute / 1-slide each)*
          Each presenter gives a 1-minute talk highlighting their poster

8:15 pm  Poster Session *(Lobby)*

9:30 pm  Social time at Bob’s Pub

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**NOTE:**
- Meals are in the **Dining Room**
- Talks are in the **Seminar Room**
- Posters are in the **Lobby**
Monday, October 1

7:30 am   Breakfast *(service ends at 8:45 am)*

9:00 am   Session 1  
   Chair: Mike Nitabach

9:00 am   Chandra Tucker, University of Colorado School of Medicine  
   Optical control of protein activity using engineered photoreceptors

9:20 am   Matthew J. Kennedy, University of Colorado Denver  
   Novel approaches for controlling synaptic function with light

9:40 am   Andreas Möglich, Universität Bayreuth  
   Manipulating nucleic acids by light

10:00 am  Don B. Arnold, University of Southern California  
   A photo-activatable system for ablating synapses

10:20 am  Break

11:00 am  Session 2  
   Chair: Chandra Tucker

11:00 am  Michael Lin, Stanford University  
   TBD

11:20 am  Alice Ting, Stanford University  
   Molecular tools for gaining genetic access to activated neural ensembles

11:40 am  Michael N. Nitabach, Yale School of Medicine  
   TBD

12:00 pm  Lunch *(service ends at 1:00 pm)*

1:30 pm   Session 3  
   Chair: Alexander Gottschalk

1:30 pm   Marco Tripodi, University of Cambridge  
   Life-long genetic and functional access to neural circuits using self-inactivating Rabies virus
1:50 pm  Lorena Benedetti, Yale School of Medicine  
*Optogenetic manipulation of membrane phospholipids in neurons with a newly engineered thermostable version of magnets*

2:10 pm  Moritoshi Sato, University of Tokyo  
*Optical control of the genome*

2:30 pm  Selected Talk: Or Shemesh, Massachusetts Institute of Technology  
*Brain control and readout at a single-cell resolution*

2:42 pm  Selected Talk: Yoon Seok Kim, Stanford University  
*TBD*

2:54 pm  Break

3:35 pm  Session 4  
Chair: Lorena Benedetti

3:35 pm  Dirk Trauner, New York University  
*Optical control of lipid pathways*

3:55 pm  Vladislav Verkhusha, Albert Einstein College of Medicine  
*Optogenetic tyrosine kinases activated with near-infrared light*

4:15 pm  Franziska Schneider-Warme, Universitäts-Herzzentrum Freiburg - Bad Krozingen  
*Next-generation optogenetic tools for cardiac inhibition*

4:35 pm  Group Discussion  
Moderator: Mike Nitabach

5:20 pm  Poster Reception

7:00 pm  Dinner

8:00 pm  Refreshments available at Bob’s Pub
Tuesday, October 2

7:30 am  Breakfast  (*service ends at 8:45 am*)

9:00 am  Session 5  
  Chair: Anna Moroni

9:00 am  Robert E. Campbell, University of Alberta  
  *Spectrally orthogonal optogenetic indicators and actuators*

9:20 am  Alexander Gottschalk, Johann Wolfgang Goethe University  
  *New optogenetic tools and applications in actuation and sensing membrane voltage, cyclic nucleotides and protein stability*

9:40 am  Peter G. Hegemann, Humboldt-Universität zu Berlin  
  *Inhibitory two component optogentic systems*

10:00 am  Valentina Emiliani, Vision Institut  
  *Thermal model for multiplexed temporally focused light-shaped in vivo optogenetic multi-cell stimulation*

10:20 am  Break

11:00 am  Session 6  
  Chair: Loren Looger

11:00 am  Harald Janovjak, Monash University  
  *A plant ionotropic receptor for orthogonal control of neuronal activity and synthetic neurotransmission*

11:20 am  Michael Tadross, Duke University  
  *Deconstructing behavioral neuropharmacology*

11:40 am  Scott M. Sternson, Janelia Research Campus/HHMI  
  *TBD*

12:00 pm  **Selected Talk:** Francesco Roselli, University of Ulm  
  *Multiplexed chemogenetics for in vivo analysis of neurological conditions at mesoscale level*

12:12 pm  **Selected Talk:** Hye Jin Kang, University of North Carolina at Chapel Hill  
  *New chemogenetic technologies*

12:24 pm  Lunch  (*service ends at 1:00 pm*)

1:30 pm  Tour  (*optional - meet at reception*)

09/30/18
2:30 pm  Session 7  
Chair: Sonja Kleinlogel

2:30 pm  Karla R. Kaun, Brown University  
*Deconstructing dopamine circuits for movement and memory*

2:50 pm  Hyungbae Kwon, Max Planck Florida Institute for Neuroscience  
*Cortical flexibility is improved by serotonergic inputs into frontal cortex*

3:10 pm  Ryohei Yasuda, Max Planck Florida Institute for Neuroscience  
*Photo manipulation of synaptic plasticity during learning and memory*

3:30 pm  Melissa R. Warden, Cornell University  
*Activity in midbrain dopamine neurons reflects spatial and non-spatial proximity to goals*

3:50 pm  Selected Talk: Naveen Nagarajan, University of Utah  
*Optogenetic dissection of corticostriatal circuit in Hoxb8 mouse model of OCD*

4:02 pm  Break

4:35 pm  Group Discussion  
Moderators: Chandra Tucker & Peter Hegemann

5:20 pm  Reception

7:00 pm  Dinner

8:00 pm  Refreshments available at Bob’s Pub
Wednesday, October 3

7:30 am  Breakfast *(service ends at 8:45 am)*

9:00 am  Session 8  
Chair: Peter Hegemann

9:00 am  Anna Moroni, Università Degli Studi di Milano  
*Engineering synthetic tools for the inhibition of cell excitability*

9:20 am  Sonja Kleinlogel, University of Bern  
*Translational refinement of a designer optogenetic gene therapy for the restoration of vision*

9:40 am  Richard H. Kramer, University of California, Berkeley  
*Re-inventing phototransduction by chemical photoswitching endogenous ion channels in the blind retina*

10:00 am  Erin S. Calipari, Vanderbilt University  
*Pathway-specific and activity-dependent dopamine transporter phosphorylation underlies addiction vulnerability in females*

10:20 am  Selected Talk: Cody Siciliano, Massachusetts Institute of Technology  
*Cortical-brainstem projections gate compulsive alcohol drinking*

10:32 am  Break

11:10 am  Closing Discussion & Final Remarks  
Moderator: Loren Looger

12:00 pm  Lunch and Departure

12:30 pm  First shuttle to Dulles
1:30 pm  Second shuttle to Dulles
2:30 pm  Last shuttle to Dulles