

Sunday, March 29

3:00 pm Check-in

6:00 pm Reception (*Lobby*)

7:00 pm Dinner

8:00 pm Welcome and Opening Remarks

8:05 pm Session 1
Chair: Scott Sternson

8:05 pm **Wolfram Schultz**, University of Cambridge
The dopamine reward signal codes economic utility

8:30 pm **Nora Volkow**, National Institute on Drug Abuse/NIH
DA role in sustaining effort by engaging prefrontal circuits and disengaging default mode network and how these systems get disrupted in addiction

8:55 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, March 30

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

9:00 am Session 2
Chair: Ron Stoop

9:00 am **Naoshige Uchida**, Harvard University
Arithmetic of dopamine reward prediction errors

9:25 am **Patricia Janak**, Johns Hopkins University
Parsing the role of dopamine neurons in learning and performance

9:50 am **Joshua Dudman**, Janelia Research Campus/HHMI
The vigorous pursuit of reward

10:15 am Break

10:45 am Session 3
Chair: Gul Dolen

10:45 am **Howard Fields**, University of California, San Francisco
Mesocorticolimbic mediation of learned appetitive behaviors: A circuit analysis

11:10 am **Kent Berridge**, University of Michigan
Affective neuroscience of reward and motivation: Liking, wanting, dread and disgust

11:35 pm **Jeffrey Friedman**, Rockefeller University
Radiowave control of feeding and glucose metabolism

12:00 pm **Bernardo Sabatini**, HHMI/Harvard University
The circuitry behind a simple context-dependent behavior

12:25 pm Lunch (*service ends at 1pm*)

2:00 pm Session 4
Chair: Nirao Shah

2:00 pm **Ann Graybiel**, Massachusetts Institute of Technology
Building action repertoires based on value: Corticostriatal dynamics

2:25 pm **Okihide Hikosaka**, National Institutes of Health
Voluntary and automatic gaze orienting controlled by basal ganglia circuits

3/27/15

Motivational Circuits in Natural and Learned Behaviors

- 2:50 pm **Rui Costa**, Champalimaud Neuroscience Programme
Generating and shaping novel action repertoires
- 3:15 pm **Anatol Kreitzer**, Gladstone Institutes/UCSF
Distinct encoding of value and choice in basal ganglia circuits
- 3:40 pm Break
- 4:10 pm** **Poster Blitz!** (3 minutes / 3 slides each)
Chair: Scott Sternson
- Mark Andermann**, Harvard Medical School
Michael Bruchas, Washington University
Ami Citri, The Hebrew University
Thomas Kash, UNC Chapel Hill
Karla Kaun, Brown University
Alexxai Kravitz, National Institutes of Health
Sara Matias, Champalimaud Neuroscience Programme
Hitoshi Okamoto, RIKEN Brain Science Institute
Zinaida Perova, MRC Laboratory of Molecular Biology
Eleanor Simpson, NYSPI/Columbia University
Mitsuko Watabe-Uchida, Harvard University
- 5:00 pm Poster Reception
- 6:30 pm Dinner
- 8:00 pm** **Session 5**
Chair: Paul Kenny
- 8:00 pm **Kay Tye**, Massachusetts Institute of Technology
A circuit mechanism for differentiating positive and negative associations
- 8:25 pm **Linda Wilbrecht**, University of California, Berkeley
Nucleus accumbens subcircuits update the value of choices to guide future decision-making
- 8:50 pm **Richard Palmiter**, HHMI/University of Washington
Delineation of a neuronal circuit mediating adverse events
- 9:15 pm Refreshments available at Bob's Pub

Tuesday, March 31

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

9:00 am Session 6
Chair: Rob Malenka

9:00 am **Robert Malenka**, Stanford University School of Medicine
Neural mechanisms of reward and aversion

9:25 am **Christian Lüscher**, University of Geneva
Refining deep brain stimulation to emulate optogenetic treatment of synaptic pathology

9:50 am **Julie Kauer**, Brown University
Blocking kappa opioid receptors, even after stress, rescues LTP-GABA and prevents reinstatement of cocaine seeking

10:15 am **Antonello Bonci**, National Institutes of Health
A central role for the insular cortex in mediating conditioned responses to anticipatory cues

10:40 am Break

11:10 am Session 7
Chair: Kay Tye

11:10 am **Lora Heisler**, University of Aberdeen
Serotonergic influences on eating behavior

11:35 am **Scott Sternson**, Janelia Research Campus/HHMI
tbd

12:00 pm **Tamas Horvath**, Yale University
Hypothalamic POMC neurons promote cannabinoid-induced feeding

12:25 pm Lunch (*service ends at 1pm*)

1:15 pm Tour (*optional – meet at reception*)

2:15 pm

Session 8
Chair: Rui Costa

2:15 pm

Paul Kenny, Icahn School of Medicine at Mount Sinai
Mechanisms of compulsive nicotine seeking

2:40 pm

Garret Stuber, University of North Carolina at Chapel Hill
Visualizing hypothalamic network dynamics for appetitive and consummatory behaviors

3:05 pm

Scott Waddell, University of Oxford
*Neural correlates of water reward in thirsty *Drosophila**

3:30 pm

Kristin Scott, HHMI/University of California, Berkeley
*Regulation of thirst drive in *Drosophila**

3:55 pm

Break

4:30 pm

Session 9
Chair: Patricia Janak

4:30 pm

Andreas Lüthi, Friedrich Miescher Institute for Biomedical Research
Neuronal circuits for fear and anxiety

4:55 pm

Tiago Branco, MRC Laboratory of Molecular Biology
A neural circuit for control of innate defensive behaviors during hunger

5:20 pm

Poster Reception

7:00 pm

Dinner

8:15 pm

Session 10
Chair: Kristin Scott

8:15 pm

Karl Deisseroth, HHMI/Stanford University
tbd

8:40 pm

David Anderson, HHMI/California Institute of Technology
Neural circuits for aggressive behavior in flies and mice

9:05 pm

Refreshments available at Bob's Pub

Wednesday, April 1

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

9:00 am Session 11
Chair: Antonello Bonci

9:00 am **Ron Stoop**, University of Lausanne
Optogenetic dissection of oxytocinergic circuits underlying social buffering of fear

9:25 am **Nirao Shah**, University of California, San Francisco
Control of sexually dimorphic behaviors

9:50 am **Gul Dolen**, Johns Hopkins University
Social reward: Basic mechanisms and autism pathogenesis

10:15 am **Ulrike Heberlein**, Janelia Research Campus/HHMI
*Reward systems in *Drosophila**

10:40 am Break

11:10 am Session 12
Chair: Garret Stuber

11:10 am **Jeremiah Cohen**, Johns Hopkins University School of Medicine
Serotonergic neurons signal reward and punishment on multiple timescales

11:35 am **Michael Yartsev**, University of California, Berkeley
Navigating towards studying decision space under natural and learned conditions

12:00 pm **Tanya Sippy**, New York University
Cell-type-specific sensorimotor processing in striatal projection neurons during goal-directed behavior

12:25 pm Conclusion and Final Remarks

12:30 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