

Sunday, September 27

3:00 pm Check-in

6:00 pm Reception (*Lobby*)

7:00 pm Dinner

8:00 pm Poster Blitz (poster highlights - 5 minutes / 3 slides each)

Joseph Bedont, Johns Hopkins Medical Institute

Mathew Edwards, MRC Laboratory of Molecular Biology

Xin Jin, The Rockefeller University

Caroline Johnson, University of Southern California

Arshad Khan, University of Texas at El Paso

William Krause, University of California, San Francisco

Prabhat Kunwar, California Institute of Technology

Hernando Martinez, European Molecular Biology Laboratory (EMBL)

Edward Nieh, Massachusetts Institute of Technology

Adam Tozer, MRC Laboratory of Molecular Biology

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, September 28

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 1: Agression / Sex / Defensive Behavior**
Chair: Jenna McHenry
- 9:00 am **David J. Anderson**, HHMI/California Institute of Technology
Behavioral decisions and internal state control in the ventromedial hypothalamus
- 9:25 am **Tiago Branco**, MRC Laboratory of Molecular Biology
A neural circuit module for computing escape decisions during foraging
- 9:50 am **Dayu Lin**, NYU Langone Medical Center
Hypothalamic circuit underlying social behaviors
- 10:15 am **Garret D. Stuber**, University of North Carolina at Chapel Hill
An estrogen-gated hypothalamic reward circuit
- 10:40 am Break
- 11:10 am Session 2: Hypothalamus across phylogeny - Part I**
Chair: Edward Nieh
- 11:10 am **Larry W. Swanson**, University of Southern California
Cortical connectome interactions with the hypothalamus
- 11:35 pm **Detlev Arendt**, European Molecular Biology Laboratory (EMBL)
Evolution of hypothalamic cell types: Ancient origin of the apical nervous system
- 12:00 pm Lunch (*service ends at 1pm*)
- 2:00 pm Session 3: Hypothalamus across phylogeny - Part II**
Chair: Prabhat Kunwar
- 2:00 pm **Michael N. Nitabach**, Yale School of Medicine
Neuroendocrine control of multisensory threat-reward decision making
- 2:25 pm **Paul Taghert**, Washington University School of Medicine
Daily rhythms of Ca²⁺ activity in Drosophila circadian pacemaker network in vivo: Control by the molecular clock, by environmental input, and by peptide modulation
- 2:50 pm **Steven W. Flavell**, HHMI/Rockefeller University
Neural mechanisms that generate persistent behavioral states

Hypothalamic Circuits for Control of Survival Behaviors

- 3:15 pm **Supriya Srinivasan**, The Scripps Research Institute
Neural circuits of body fat control in C. elegans
- 3:40 pm Break
- 4:15 pm Session 4: Circadian / Sleep - Part I**
Chair: William Krause
- 4:15 pm **Joe Takahashi**, HHMI/University of Texas Southwestern Medical Center
tbd
- 4:40 pm **Amita Sehgal**, HHMI/University of Pennsylvania School of Medicine
Peptidergic signaling in the Drosophila circadian system
- 5:05 pm **Michael Rosbash**, HHMI/Brandeis University
Regulation of sexually dimorphic circadian neuron activity governs the Drosophila activity-sleep program
- 5:30 pm Poster Reception
- 7:00 pm Dinner
- 8:15 pm Refreshments available in Bob's Pub

Tuesday, September 29

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 5: Circadian / Sleep - Part II**
Chair: Piotr Krzywkowski
- 9:00 am **Joseph T. Bass**, Northwestern University
Hypothalamic clock ablation and chemogenetic pacemaker silencing impairs agrp-driven feeding and glucose metabolism in mice
- 9:25 am **Seth Blackshaw**, Johns Hopkins University School of Medicine
Genetic control of hypothalamic cell specification
- 9:50 am **Luis de Lecea**, Stanford University
Hypothalamic control of arousal
- 10:15 am Break
- 10:45 am **Michael H. Hastings**, MRC Laboratory of Molecular Biology
Exploring cell-autonomous and circuit-level organisation of circadian time-keeping in the suprachiasmatic nucleus
- 11:10 am **Samer Hattar**, Johns Hopkins University
Achieving more with less: How evolutionarily ancient photoreceptors regulate hypothalamic and retinal functions
- 11:35 am **Erik Herzog**, Washington University in St. Louis
Ontogeny of circadian synchrony
- 12:00 pm Lunch (*service ends at 1pm*)
- 1:00 pm Tour (*optional – meet at reception*)
- 2:15 pm Session 6: Circadian / Sleep - Part III**
Chair: Kai Liu
- 2:15 pm **Satchin Panda**, Salk Institute for Biological Studies
Daily transcriptional rhythm in hypothalamic regions of a diurnal species
- 2:40 pm **David Prober**, California Institute of Technology
Neurons and neuropeptides that regulate zebrafish sleep
- 3:05 pm **David Raizen**, University of Pennsylvania School of Medicine
Sleep in response to cellular stress

Hypothalamic Circuits for Control of Survival Behaviors

- 3:30 pm **Clifford Saper**, Harvard Medical School
Chemogenetic stimulation of hypothalamic circuitry regulating sleep and wakefulness
- 3:55 pm Break
- 4:30 pm Session 7: Feeding - Part I**
Chair: Adam Tozer
- 4:30 pm **Tamas Horvath**, Yale University
Reversal of action of POMC and AgRP neurons on feeding by cannabinoids
- 4:55 pm **Roger Cone**, Vanderbilt University School of Medicine
New sites and modalities of melanocortin signaling
- 5:20 pm Poster Reception
- 6:45 pm Dinner
- 8:00 pm **Scott Sternson**, Janelia Research Campus/HHMI
Role of learning in starvation-sensitive hunger circuits
- 8:25 pm **Bradford Lowell**, Beth Israel Deaconess Medical Center
Circuitry underlying melanocortin-4 receptor (mc4r) regulation of hunger
- 8:50 pm Refreshments available in Bob's Pub

Wednesday, September 30

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 8: Feeding - Part II**
Chair: Xin Jin
- 9:00 am **Michael Krashes**, National Institutes of Health
Motivational state competition: Mimicking physiological hunger at the neuron level
- 9:25 am **Joel K. Elmquist**, UT Southwestern Medical Center at Dallas
SF-1 in the hypothalamus: A molecular link between energy balance regulation and exercise
- 9:50 am **Lora Heisler**, University of Aberdeen
Hypothalamic actions of neuropeptides involved in appetite control
- 10:15 am Closing remarks
- 10:30 am Conclusion and Departure (*lunch service runs 11:30 am - 1:00 pm*)
- 11:00 am First shuttle to Dulles
12:00 pm Second shuttle to Dulles
1:00 pm Last shuttle to Dulles