Sunday, March 6th

3:00 pm	Check-in
3-5:00 pm	"Your animals can do it. Can you?" (Lobby) *Have fun with your colleagues while testing your own performance in a variety of behavioral tasks*
5:00 pm	Reception (Lobby)
6:00 pm	Dinner
7:00 pm	**Introductory Remarks**
7:15 pm	**Keynote Lecture I: Okihide Hikosaka**, National Institutes of Health *How long-term reward experience influences behavior: A possible role of the posterior ganglia*
8:00 pm	**Keynote Lecture II: Kenji Doya**, Okinawa Institute of Science and Technology *Serotonin and the regulation of patience*
9:00 pm	Speed Dating (Lobby)
10:30 pm	Refreshments available at Bob's Pub

Monday, March 7th

7:30 am	Breakfast *(service ends at 8:45 am)*
9:00 am	**Session 1: Valuation** **Moderators: Joe Paton and Okihide Hikosaka**
9:00 am	**Camillo Padoa-Schioppa**, Washington University in St. Louis *Contributions of orbitofrontal cortex and lateral prefrontal cortex to economic choice and choice-based behavior*
9:20 am	**C. Daniel Salzman**, Columbia University *Value and context in amygdala and OFC*
9:40 am	**Paul E.M. Phillips**, University of Washington *Phasic dopamine release during decision making*
10:00 am	**Quentin J.M. Huys**, University College London *Pavlovian inhibition: Serotonin, withdrawal and the pruning of goal-directed decision trees*
10:20 am	Break
10:45 am	**Panel Discussion**
11:30 am	Lunch
1:00 pm	**Session 2: Organizing actions across phyla** **Part I. Moderators: Peter Dayan and Anne Churchland**
1:00 pm	**Minoru Kimura**, Tamagawa University *Value signals for decision and action selection in the basal ganglia*
1:20 pm	**Gwyneth M. Card**, Janelia Farm Research Campus/HHMI *Drosophila escape as a model system for simple decision-making*
1:40 pm	**Bernard Balleine**, University of Sydney, Australia *At the limbic-motor interface: Dissociating experienced and expected reward*
2:00 pm	**Scott Waddell**, University of Massachusetts Medical School *Neural circuit control of learned appetitive behavior in Drosophila*
2:20 pm	Break
2:50 pm	**Panel Discussion**

3:30 pm Break

3:45 pm Session 2 (continued): Organizing actions across phyla
Part II. Moderators: Rex Kerr and Gowan Tervo

3:45 pm **Shawn R. Lockery**, University of Oregon
Foraging for a genetic model of decision making

4:05 pm **A. David Redish**, University of Minnesota
The neurophysiology of deliberation in the rat

4:25 pm **Vivek Jayaraman**, Janelia Farm Research Campus/HHMI
Towards a mechanistic demystification of decision-making: Sensorimotor computations in flies

4:45 pm **Zachary Mainen**, Instituto Gulbenkian de Ciência
Serotonin and punishment: An optogenetic confirmation

5:05 pm Break

5:25 pm Panel Discussion

6:00 pm Dinner (BBQ style cook-out on the Dining Room patio)

7:30 pm Poster reception (beer and wine served)

9:00 pm Refreshments available at Bob's Pub

Tuesday, March 8th

7:30 am	Breakfast *(service ends at 8:45 am)*
9:00 am	**Session 3: Evaluation of action in front of the corpus callosum** **Moderators: Alla Karpova and Daeyeol Lee**
9:00 am	**Antonio Rangel**, California Institute of Technology *The computation and comparison of values at the time of choice*
9:20 am	**Jonathan D. Wallis**, University of California, Berkeley *Contrasting the roles of anterior cingulate cortex and orbitofrontal cortex in reward processing*
9:40 am	**Geoff Schoenbaum**, University of Maryland School of Medicine *Respective roles of the ventral striatum and orbitofrontal cortex in distinguishing shifts in value versus changes in identity*
10:00 am	**Matthew Rushworth**, University of Oxford *Contrasting roles of medial and lateral orbitofrontal cortex in credit assignment and value comparison*
10:20 am	Break
10:45 am	**Panel Discussion**
11:30 am	Lunch
12:30 pm	**Session 4: Evaluation of action behind the corpus callosum** **Moderators: Josh Dudman and Dan Salzman**
12:30 pm	**Makoto Ito**, Okinawa Institute of Science and Technology *Various information coded in the striatum during decision making tasks*
12:50 pm	**Daeyeol Lee**, Yale University *Decision making and primate corticostriatal network*
1:10 pm	**Michael Frank**, Brown University *The basal ganglia and frontal cortex interact to support reward-based decision making*
1:30 pm	**Rui Costa**, Champalimaud Neuroscience Programme *Organizing actions in the basal ganglia*
1:50 pm	Break

2:15 pm **Panel Discussion**

3:00 pm Break

3:15 pm Parallel Workshops

I. *Methods of model-based analysis of behavior (Axon/Dendrite Room)*
II. *Behaviorally-valid experimental design (Photon Room)*
III. *Interpreting extracellular physiology data (Electron Room)*

5:15 pm Workshop Summary *(reconvene in Auditorium)*

6:00 pm Dinner (with readings from Tractatus Logico Philosophicus)

7:15 pm **Session 5: "Still good? Valuation over time"**
Moderators: Zach Mainen and Kenji Doya

7:15 pm **Carlos Brody**, HHMI/Princeton University
Optimal integration of evidence for decision-making in the rat

7:35 pm **Matt Smear**, Janelia Farm Research Campus/HHMI
Perception of sniff phase in mouse olfaction

7:55 pm **Anne K. Churchland**, Cold Spring Harbor Laboratory
Variance as a signature of neural computations during decision-making

8:15 pm **Xiao-Jing Wang**, Yale University School of Medicine
A reservoir of time constants for reward memory traces in cortical neurons: Raising the dimension for reinforcement learning

8:35 pm Break

9:00 pm **Panel Discussion**

9:45 pm Refreshments available at Bob's Pub

Wednesday, March 9th

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

8:45 am **Session 6: More than a sum (average) of its parts**
Moderators: Xiao-Jing Wang and Carlos Brody

8:45 am **Elad Schneidman**, Weizmann Institute of Science
Predicting the learning dynamics of individual classification tasks using a feature based maximum entropy model

9:05 am **Joshua Dudman**, Janelia Farm Research Campus/HHMI
A putative inhibitory circuit controlling the activity of dopamine neurons during associative learning

9:25 am **Mattias P. Karlsson**, Janelia Farm Research Campus/HHMI
Cohesive ensemble transitions in the medial prefrontal cortex during complex rodent behavior

9:50 am **Stefano Fusi**, Columbia University
The importance of the diversity of neuronal responses in complex cognitive tasks

10:10 am **Wieland Brendel**, Ecole Normale Supérieure
How to deal with the heterogeneity of neural responses: A demixing method

10:30 am **Joseph J. Paton**, Instituto Gulbenkian de Ciencia
A representation of time for guiding actions in the rat striatum

10:50 am Break

11:15 am **Panel Discussion**

12:15 pm Closing Remarks

12:30 pm Lunch and Departure (To-go boxes available in servery for those on first shuttle)

12:45 pm First shuttle to Dulles
1:30 pm Second shuttle to Dulles
2:15 pm Last shuttle to Dulles