

Full Schedule

Sunday March 8th

3:00 pm Check-in

6:00 pm Reception

7:00 pm Dinner

8:00 pm **Keynote Address:**
Larry F. Abbott, Columbia University College of Physicians & Surgeons
*Issues in modeling *C. elegans* circuitry*

Monday March 9th

- 7:30 am Breakfast
- 9:00 am Session 1: Methods - Seeing and Controlling the Worm**
Chair: Shawn Lockery
- 9:00 am **David H. Hall**, Albert Einstein College of Medicine
*Adding missing pieces to the *C. elegans* connectome*
- 9:30 am **Erik M. Jorgensen**, University of Utah
*To each according to need: Semi-automated reconstruction of the neuromuscular junctions in *C. elegans**
- 10:00 am **Rex A. Kerr**, Janelia Farm Research Campus/HHMI
Whole brain calcium imaging with plane illumination
- 10:30 am Break
- 11:00 am Session 1 (continued): Methods - Seeing and Controlling the Worm**
Chair: Shawn Lockery
- 11:00 am **William R. Schafer**, Medical Research Council
Mapping the behavioural phenotypes of genes and neurons
- 11:30 am **Alexander Gottschalk**, JWU University
Optogenetic control of neural circuits to evoke or inhibit behaviours
- 12:00 pm Session 2: Synapses and Receptors**
Chair: Cori Bargmann
- 12:00 pm **Janet E. Richmond**, University of Illinois at Chicago
*Structure-function analysis of *C. elegans* tomosyn*
- 12:30 pm Lunch
- 1:00 pm Tour (optional)
- 2:00 pm Session 2 (continued): Synapses and Receptors**
Chair: Cori Bargmann
- 2:00 pm **Joshua M. Kaplan**, Harvard Medical School
*Regulation of synaptic transmission in *C. elegans**

Neural Circuits and Behavior in *C. elegans* II: Towards the Ultimate Model

- 2:30 pm **Andres Villu Maricq**, University of Utah
Wnt signaling regulates surface expression of postsynaptic acetylcholine receptors
- 3:00 pm **Yishi Jin**, University of California, San Diego
ACR-2 receptor and its roles in locomotion circuit
- 3:30 pm Break
- 4:00 pm Poster Session 1**
- 5:30 pm Reception
- 6:30 pm Dinner
- 7:30 pm Session 3: Sexual Behavior**
Chair: Martin Chalfie
- 7:30 pm **Douglas Portman**, University of Rochester Medical Center
Sex and the single neuron: Diverse changes in C. elegans behavior arise through the sexual modification of core circuitry
- 8:00 pm **Paul W. Sternberg**, California Institute of Technology/HHMI
Regulation of male mating behavior in C. elegans
- 8:30 pm Refreshments available at Bob's Pub

Tuesday March 10th

- 7:30 am Breakfast
- 9:00 am Session 4: Endocrine Signaling**
Chair: Paul Sternberg
- 9:00 am **Anne C. Hart**, Mass. General Hospital and Harvard Medical School
Notch signaling regulates adult behavior in C. elegans
- 9:30 am **Christine Li**, The City College of New York
The Role of FLP Neuropeptides on C. elegans behavior
- 10:00 am **Piali Sengupta**, Brandeis University
Pheromone signaling in C. elegans: Mechanisms and consequences
- 10:30 am Break and Group Photo
- 11:00 am Session 5: Mechanosensation**
Chair: Rex Kerr
- 11:00 am **Martin Chalfie**, Columbia University
A protein-lipid complex transduces touch in C. elegans
- 11:30 am **Miriam B. Goodman**, Stanford University
TRPV channels are amplifiers, but not detectors of mechanical stimuli in C. elegans nociceptor-like neurons
- 12:00 pm **Catharine H. Rankin**, University of British Columbia
Genes and neural circuits involved in short- and long-term memory for associative and non-associative learning
- 12:30 pm Lunch
- 2:00 pm Session 6: Spatial Orientation**
Chair: Leon Avery
- 2:00 pm **Cori Bargmann**, Rockefeller University/HHMI
Half a wiring diagram is better than none
- 2:30 pm **Yuichi Iino**, The University of Tokyo
Molecular and cellular mechanisms of salt chemotaxis learning in C. elegans
- 3:00 pm **Ikue Mori**, Nagoya University, CREST-JST
Components orchestrating the neural circuit for behavior

Neural Circuits and Behavior in *C. elegans* II: Towards the Ultimate Model

3:30 pm Break

4:00 pm Poster Session 2

5:30 pm Reception

6:30 pm Dinner

7:30 pm Session 6 (continued): Spatial Orientation
Chair: Leon Avery

7:30 pm **Aravi Samuel**, Harvard University
How worms navigate

8:00 pm **Mario de Bono**, Medical Research Council
*Evolutionary sculpting of foraging behavior in *C. elegans**

8:30 pm **Jon Pierce-Shimomura**, University of Texas at Austin
*Analysis of the switch between crawling and swimming locomotory patterns in *C. elegans**

9:00 pm Refreshments available at Bob's Pub

Wednesday March 11th

7:30 am Breakfast

9:00 am Session 9: Modeling
Chair: Rex Kerr

9:00 am **Dmitri Chklovskii**, Howard Hughes Medical Institute
*A biomechanical theory of *C. elegans* locomotion*

9:30 am **Shawn Lockery**, University of Oregon
A stochastic model of locomotory state switching

10:00 am Break

10:30 am Plenary workshop:

The Ultimate Model: What is it and how do we get there?

12:30 pm Lunch (take out boxes from servery available 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