

Sunday, April 21st

All talks are 20 min + 5 min for Q&A

- 3:00 pm Check-in
- 6:00 pm Reception
- 7:00 pm Dinner
- 8:00 pm Welcome and Opening Remarks (Cori Bargmann)**
- 8:05 pm Session 1: Photoreception**
Chair: Craig Montell
- 8:05 pm **David Berson**, Brown University
Retinal output channels: Linking cell types to visual behaviors
- 8:30 pm **Samer Hattar**, Johns Hopkins University
Atypical sensory photoreceptors in the mammalian retina
- 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, April 22nd

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 2: Mechanosensation**
Chair: Cori Bargmann
- 9:00 am **Ching Kung**, University of Wisconsin - Madison
Mechanosensation, from bacteria to animals
- 9:25 am **Jeffrey R. Holt**, Boston Children's Hospital
The role of transmembrane channel-like proteins in hair cell mechanotransduction
- 9:50 am **William R. Schafer**, Medical Research Council
TMC proteins form channels involved in chemosensation and mechanosensation
- 10:15 am Break
- 10:45 am Session 3: Mechanosensation**
Chair: Richard Benton
- 10:45 am **Teresa A. Nicolson**, HHMI/The Vollum Institute
The MET complex in fish: Protocadherin 15 interacts with transmembrane channel-like 2 (Tmc2a)
- 11:10 am **David P. Corey**, HHMI/Harvard Medical School
Structure of a force-conveying cadherin bond essential for inner-ear mechanotransduction
- 11:35 am **Ardem Patapoutian**, The Scripps Research Institute
May the force be with you: Search for ion channels that respond to pressure
- 12:00 pm Discussion
- 12:25 pm Lunch (*service ends at 1pm*)
- 2:00 pm Session 4: Mechanosensation/nociception**
Chair: Elena Gracheva
- 2:00 pm **Michael Caterina**, Johns Hopkins School of Medicine
TRPV ion channels make skin sensational
- 2:25 pm **Miriam B. Goodman**, Stanford University
Illuminating touch mechanics

- 2:50 pm **Bruce A. Bamber**, University of Toledo
Multiple independent calcium pools in a nociceptive neuron in C. elegans
- 3:15 pm Break
- 3:45 pm Session 5: Magnetoreception**
Chair: Gary Lewin
- 3:45 pm **David A. Keays**, Institute of Molecular Pathology
*Iron-rich sensory neurons in the pigeon *Columbia livia**
- 4:10 pm **Steven Reppert**, University of Massachusetts Medical School
Monarch butterfly migration: Sensory processing for navigational mechanisms
- 4:35 pm Discussion
- 5:00 pm Poster Blitz! (5 mins / 3 slides each)
- Carolina Gomez-Diaz**, University of Lausanne
Kotaro Kimura, Osaka University
Lindy McBride, Rockefeller University
Lina Ni, Brandeis University
Christopher Potter, Johns Hopkins University School of Medicine
- 5:30 pm Poster Reception
- 7:00 pm Dinner
- 8:00 pm Session 6: Somatosensation**
Chair: Miriam Goodman
- 8:00 pm **Gary R. Lewin**, Max-Delbrück Center for Molecular Medicine
*How extreme is the sensory world of the extremeophile mammal *H. glaber*: A phylogenetic perspective*
- 8:25 pm **Elena Gracheva**, Yale School of Medicine
Mammalian hibernation as a model to study somatosensation and thermoregulation
- 8:50 pm **Piali Sengupta**, Brandeis University
A role for cGMP signaling and CaMKI in setting the operating range of the AFD thermosensory neurons
- 9:15 pm Refreshments available in Bob's Pub

Tuesday, April 23rd

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 7: Chemosensation/pheromones**
Chair: Shawn Xu
- 9:00 am **Catherine Dulac**, HHMI/Harvard University
Molecular and cellular architecture of circuits underlying opposing social behaviors
- 9:25 am **Patrick McGrath**, Georgia Institute of Technology
*Evolution of pheromone sensation in *C. elegans**
- 9:50 am **Richard Benton**, University of Lausanne
*Chemosensory evolution in *Drosophila**
- 10:15 am Break
- 10:45 am Session 8: Chemosensation/olfaction**
Chair: Emily Liman
- 10:45 am **Frank Zufall**, University of Saarland
Olfactory signaling in mice
- 11:10 am **C. Ron Yu**, Stowers Institute for Medical Research
Nonconventional signal transduction pathways in the activation of mouse vomeronasal organ
- 11:35 am **Yehuda Ben-Shahar**, Washington University in St. Louis
Chemosensory roles for degenerin/epithelial sodium channels – pheromone receptors or modulators?
- 12:00 pm Discussion
- 12:25 pm Lunch (*service ends at 1pm*)
- 1:15 pm Tour (*optional – meet at reception*)

- 2:15 pm** **Session 9: Chemosensation/olfaction**
Chair: William Schafer
- 2:15 pm **Cori Bargmann**, HHMI/Rockefeller University
Encoding time in the olfactory system
- 2:40 pm **Leslie B. Vosshall**, HHMI/The Rockefeller University
Multi-modal sensory integration in the mosquito
- 3:05 pm **Laurence Zwiebel**, Vanderbilt University
Genetics and genomics of olfaction in malaria vector mosquitoes and eusocial ants
- 3:30 pm Break
- 4:00 pm **Session 10: Circuits**
Chair: Diana Bautista
- 4:00 pm **Dan Tracey**, Duke University
Photosystem gating of larval nociception behavior
- 4:25 pm **Michael N. Nitabach**, Yale School of Medicine
*Multisensory integration in *C. elegans**
- 4:50 pm **Shawn Xu**, University of Michigan
*Sensory transduction in *C. elegans**
- 5:15 pm Discussion
- 5:40 pm Poster Reception
- 7:15 pm Dinner
- 8:15 pm Refreshments available at Bob's Pub

Wednesday, April 24th

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 11: Itch/chemosensation**
Chair: David Keays
- 9:00 am **Diana Bautista**, University of California, Berkeley
Molecular and cellular mechanisms of chronic itch
- 9:25 am **Xinzhong Dong**, HHMI/Johns Hopkins School of Medicine
Itch receptors and itch-specific sensory neurons
- 9:50 am **Craig Montell**, Johns Hopkins School of Medicine
The molecular basis for Drosophila salt taste coding
- 10:15 am Break
- 10:45 am Session 12: Chemosensation/taste**
Chair: Leslie Vosshall
- 10:45 am **Emily R. Liman**, University of Southern California
Cellular mechanisms of sour taste
- 11:10 am **Nicholas Ryba**, National Institutes of Health
Mammalian taste
- 11:35 am **Greg Suh**, New York University Langone Medical Center
Interoceptive sugar sensing in Drosophila
- 12:00 pm Discussion
- 12:25 pm Lunch / Departure
- 1:00 pm First shuttle to Dulles
2:00 pm Second shuttle to Dulles
3:00 pm Last shuttle to Dulles