

Sunday, October 9th

- 3:00 pm Check-in
- 6:00 pm Reception I
- 7:00 pm Dinner
- 8:00 pm** **Keynote Talk: Chris Q. Doe**, HHMI/University of Oregon
Neuronal diversity in Drosophila: How far have we come?
- 8:40 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, October 10th

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Introductory Remarks**
- 9:05 am Session 1: Drosophila Neuroblast Fate**
Chair: Jim Truman
- 9:05 am **Heinrich Reichert**, University of Basel
Early embryonic patterning genes act in lineage-specific postembryonic brain development of Drosophila
- 9:30 am **Stefan Thor**, Linköping University
Topology-temporality interplay: Making unique cell types, and in proper numbers
- 9:55 am **Alex Gould**, MRC National Institute for Medical Research
Food for thought: Nutrients and neural stem cells in Drosophila
- 10:20 am Break
- 11:00 am Session 2: From Lineage to Fate Determination**
Chair: Heather Broihier
- 11:00 am **Tzumin Lee**, Janelia Farm Research Campus/HHMI
Molecular mechanisms of neuronal temporal identity
- 11:25 am **Claude Desplan**, New York University
Diversification and retinotopy of optic lobe neurons in Drosophila
- 11:50 am **Omer A. Bayraktar**, University of Oregon
Temporal patterning in transit-amplifying neural progenitors
- 12:05 am **Suewei Lin**, Janelia Farm Research Campus/HHMI
Dual functions for Notch in diversifying Drosophila lateral antennal lobe neurons
- 12:20 pm Lunch
- 1:00 pm Tour (*optional – meet at reception*)

- 2:15 pm** **Session 3: Transcriptional Control of Neuron Fates I**
Chair: Chris Doe
- 2:15 pm **Siew-Lan Ang**, National Institute for Medical Research
Transcriptional control of midbrain dopaminergic neuron development
- 2:40 pm **Wolfgang Driever**, University of Freiburg
Transcriptional and signaling networks controlling dopaminergic differentiation
- 3:05 pm **Paul Taghert**, Washington University School of Medicine
The role of DIMM - a scaling factor for neuroendocrine cell properties
- 3:30 pm Break
- 4:00 pm** **Session 4: Transcriptional Control of Neuron Fates II**
Chair: Susan Dymecki
- 4:00 pm **Marius Wernig**, Stanford University School of Medicine
Direct conversion of fibroblasts to functional neurons by defined factors
- 4:25 pm **Hynek Wichterle**, Columbia University
Constructing and deconstructing motor neuron identity
- 4:50 pm **Stephen Crews**, University of North Carolina at Chapel Hill
Specification and differentiation of a Drosophila midline dopaminergic neuron
- 5:05 pm Poster Reception
- 7:00 pm Dinner
- 8:00 pm** **Keynote Talk: Oliver Hobert**, HHMI/Columbia University
Gene regulatory mechanisms that build nervous systems: Lessons learned from the nematode C. elegans and beyond
- 8:40 pm Refreshments available at Bob's Pub

Tuesday, October 11th

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 5: Neuron Fate Specification I**
Chair: Sally Temple
- 9:00 am **Stewart Anderson**, Weill Cornell Medical College
Notch signaling regulates apical versus basal neurogenesis and cortical interneuron fate determination in the medial ganglionic eminence
- 9:25 am **Constance L. Cepko**, HHMI/Harvard Medical School
Teaching old retroviruses a new trick: Analysis of clones produced by progenitor cells expressing a specific gene
- 9:50 am **Jeffrey D. Macklis**, Harvard Medical School
Molecular logic of neocortical projection neuron development, diversity, and identity
- 10:15 am Break
- 10:55 am Session 6: Neuron Fate Specification II**
Chair: Paul Taghert
- 10:55 am **Josh Huang**, Cold Spring Harbor Laboratory
Developmental origin of chandelier cells in the neocortex: Role of lineage and birth timing
- 11:20 am **Catarina Ramos**, Molecular Medicine Institute
The role of different Notch ligands in the control of spinal cord neurogenesis
- 11:35 am **Christopher D. Wood**, Universidad Nacional Autónoma de México
Development of multi-colour luciferase-based reporters for dynamic imaging of morphogen expression during dopaminergic neuron specification
- 11:50 am General Discussion and/or additional talk(s)**
- 12:30 pm Lunch
- 2:00 pm Session 7: Neuron Fate Specification III**
Chair: Richard A. Baines
- 2:00 pm **Michel Cayouette**, Institut de recherches cliniques de Montréal
Cell lineage and temporal identity in the developing mouse retina

- 2:25 pm **Susan M. Dymecki**, Harvard Medical School
Redefining brain serotonergic neurons by genetic lineage and selective in vivo inhibition
- 2:50 pm **Martyn Goulding**, Salk Institute for Biological Studies
Temporal control of inhibitory interneuron cell types in the developing spinal cord
- 3:15 pm Break
- 3:45 pm Session 8: Vertebrate Neuronal Stem Cell Fate**
Chair: Siew-Lan Ang
- 3:45 pm **Sally Temple**, New York Neural Stem Cell Institute
Regulating neuronal output from forebrain progenitor cells
- 4:10 pm **Hongjun Song**, Johns Hopkins University School of Medicine
Clonal analysis of neural stem cells in the adult hippocampus
- 4:35 pm **Setsuko Sahara**, Salk Institute for Biological Studies
Fgf10 regulates transition period of cortical stem cell differentiation to radial glia controlling generation of neurons and basal progenitors
- 4:50 pm **Zhiyong Liu**, St. Jude Children's Research Hospital
In vivo lineage reprogramming of cochlear supporting cells into hair cell-like cells by inducible overexpression of Atoh1 in postnatal mice
- 5:05 pm Poster Reception
- 7:00 pm Dinner
- 8:00 pm Refreshments available at Bob's Pub

Wednesday, October 12th

- 7:30 am Breakfast (*service ends at 8:45am*)
- 9:00 am Session 9: Neuron Type Identity I**
Chair: Jeffrey Macklis
- 9:00 am **Gerhard M. Technau**, University of Mainz
*Morphological characterisation of the entire interneuron population in the embryonic VNC of *Drosophila**
- 9:25 am **James W. Truman**, Janelia Farm Research Campus/HHMI
*Neuronal diversity within and between lineages of the ventral CNS of *Drosophila**
- 9:50 am **Sacha B. Nelson**, Brandeis University
Genetic and epigenetic determinants of neuronal phenotypes in the mouse forebrain
- 10:15 am **Giorgio A. Ascoli**, George Mason University
Towards an unambiguously identification of the known neuronal classes of the rodent hippocampus
- 10:30 am Break
- 11:00 am Session 10: Neuron Type Identity II**
Chair: Tzumin Lee
- 11:00 am **Heather T. Broihier**, Case Western Reserve University
**Drosophila* FoxO is regulated by microtubule disruption and drives microtubule destabilization at the neuromuscular junction*
- 11:25 am **Richard A. Baines**, University of Manchester
*Intrinsic determination of ion channel expression in *Drosophila* embryonic motoneurons*
- 11:50 am **Meredith A. Clifford**, Georgetown University
Eph/ephrin signaling directs neuronal differentiation in the developing neocortex
- 12:05 pm Closing Discussion**
- 12:30 pm Lunch and Departure (*To-go boxes available in servery for those on first shuttle*)
- 1:00 pm First shuttle to Dulles
1:45 pm Second shuttle to Dulles
2:30 pm Last shuttle to Dulles