Full Schedule

Sunday, October 4th

3:00 pm	Check-in
6:00 pm	Reception
7:00 pm	Dinner
8:00 pm	Opening remarks
8:15 pm	**Keynote Address** **Susan M. Dymecki**, Harvard Medical School *Mapping cell origin to cell fate to cell function in the mouse brain*
9:15 pm	Refreshments available at Bob's Pub

Monday, October 5th

7:30 am	Breakfast
9:00 am	**Session 1: Refining Gene Expression in Time and Space**
9:00 am	**Opening remarks**
9:10 am	**Chairperson's Introduction** **Gerry Rubin**, Janelia Farm Research Campus/HHMI
	PART 1: EXPRESSION SYSTEMS
9:30 am	**Barret Pfeiffer,** Janelia Farm Research Campus/HHMI *Refinement of tools for targeted gene expression*
9:40 am	**Christopher Potter,** Stanford University *The Q repressible binary expression system for manipulating expression patterns, lineage tracing, and mosaic analysis*
9:50 am	**Martin Haesemeyer,** Institute of Molecular Pathology *Developing an expression toolkit for Drosophila to allow precise spatiotemporal expression independent from Gal4/UAS*
10:00 am	**Soeren Diegelmann,** University of Cambridge *Approaches to the identification and characterisation of cholinergic interneurons involved in larval locomotion*
10:10 am	Break and Group Photo
	PART 2: INTERSECTIONAL STRATEGIES
10:50 am	**Chi-Hon Lee,** National Institutes of Health (NICHD) *A Split-LexA system for refining transgene expression*
11:00 am	**Haojiang Luan,** National Institutes of Health (NIMH) *Development of a system for refined spatial and temporal control of transgene expression*
11:10 am	**Bing Zhang,** University of Oklahoma *Deconstructing neural circuits underlying fly behaviors and decision-making using new molecular genetic tools*
11:20 am	**Thomas R. Clandinin,** Stanford University *Developing new tools for measuring and manipulating neural circuits in the visual system (Part 1)*

11:30 am	**Gerald M. Rubin,** Janelia Farm Research Campus/HHMI *Refinement of tools for targeted gene expression*
11:40 am	**General discussion (discussion leader, Chi-Hon Lee)**
12:30 pm	Lunch
1:00 pm	Tour (optional) - meets at registration desk
2:00 pm	**Session 2: Indicators and Modifiers of Neuronal Function**
2:00 pm	**Chairperson's Introduction** **Benjamin H. White**, National Institutes of Health
	PART 1: INDICATORS
2:20 pm	**Loren Looger,** Janelia Farm Research Campus/HHMI *Engineering proteins for the study of neural circuits*
2:30 pm	**Jean-Rene Martin,** Institut Neurobiologie Alfred Fessard, CNRS *GFP-aequorin: a new tool to study in-vivo functional neural circuits by bioluminescence*
2:40 pm	**Gary Struhl,** HHMI/Columbia University *DSL-notch signaling in the adult Drosophila brain in response to olfactory stimulation*
2:50 pm	**Thomas R. Clandinin,** Stanford University *Developing new tools for measuring and manipulating neural circuits in the visual system (Part 2)*
3:00 pm	Break
	PART 2: EFFECTORS
3:40 pm	**Benjamin H. White,** National Institutes of Health (NIMH) *Probing the responsiveness of behavioral circuits at different developmental stages using rat TRPM8*
3:50 pm	**Paul Garrity,** Brandeis University *Drosophila TRPA1: A warmth-activated ion channel useful for manipulating neuronal activity in the fly*
4:00 pm	**Motojiro Yoshihara,** University of Massachusetts Medical School *A large scale screening of GAL4 lines to search for command neuron circuits in the Drosophila brain*

4:10 pm **Andre Fiala,** University of Göttingen
Optophysiological approaches to operant behavior in Drosophila

4:20 pm **Todd C. Holmes,** University of California at Irvine
Cry

4:30 pm – 5:15 pm **General Discussion (discussion leader, Loren Looger)**

6:00 pm Reception

7:00 pm Dinner

8:00 pm **Session 3: Genomics & Genomic Resources, Part 1:**
GENETIC ENGINEERING METHODS & RESOURCES

8:00 pm **Chairperson's Introduction**
Hugo Bellen, HHMI/Baylor College of Medicine

8:20 pm **Koen J. T. Venken,** Baylor College of Medicine
P(acman) transgenesis to investigate aspects of the nervous system

8:30 pm **Kevin White,** University of Chicago
BAC tagging for live imaging and transcriptional network analysis

8:40 pm **Radoslaw K. Ejsmont,** Max Planck Institute of Molecular Cell Biology and Genetics
Expanded recombineering toolkit for cross species genome manipulation

8:50 pm **Hugo Bellen**, HHMI/Baylor College of Medicine
Minos mediated induced cassette (MIMIC) exchange

9:00 pm **Ruifen Weng,** Temasek Life Sciences Laboratory
Recombinase-mediated cassette exchange provides a versatile platform for gene targeting

9:10 pm **General discussion (discussion leader, Norbert Perrimon)**

9:30 pm Refreshments available at Bob's Pub

Tuesday, October 6th

7:30 am	Breakfast
9:00 am	**Session 4: Mapping Circuits**
9:00 am	**Chairperson's Introduction** **Julie Simpson,** Janelia Farm Research Campus/HHMI
9:20 am	**Richard Axel,** HHMI/Columbia University *Genetic approaches to cross a synapse (Part 1)*
9:30 am	**Richard Axel,** HHMI/Columbia University *Genetic approaches to cross a synapse (Part 2)*
9:40 am	**Haig Keshishian,** Yale University *Developing transsynaptic tracers for identifying neural circuits in Drosophila*
9:50 am	**Bassem Hassan,** Vlaams Instituut voor Biotechnologie (VIB) *A novel genetically encoded marker reveals dendritic development and neuronal circuit architecture in Drosophila*
10:00 am	**Kristen Scott,** University of California, Berkeley *Taste recognition in Drosophila*
10:10 am	**Michael N. Nitabach,** Yale School of Medicine *Genetically targetable tools for cellular biophysics and pharmacology*
10:20 am	Break
11:00 am	**Claude Desplan,** New York University *Development of a behavioral assay for color vision*
11:10 am	**Bruce Baker,** Janelia Farm Research Campus/HHMI *Manipulating neurons to study sexual behaviors*
11:20 am	**Masayuki Koganezawa,** Tohoku University *Functional dissection of the neural circuitry controlling male courtship by the manipulation of single neuron activities*
11:30 am	**Julie H. Simpson,** Janelia Farm Research Campus/HHMI *Mapping neural circuits driving grooming behavior*
11:40 am	**General discussion (discussion leader, Kristen Scott)**
12:30 pm	Lunch

2:00 pm **Session 5: Lineages & Development**

2:00 pm **Chairperson's Introduction**
Tzumin Lee, Janelia Farm Research Campus/HHMI

2:20 pm **Tzumin Lee,** Janelia Farm Research Campus/HHMI
High-resolution lineage analysis of Drosophila brain

2:30 pm **James W. Truman,** Janelia Farm Research Campus/HHMI
Strategies for the analysis of the development and function of neuronal lineages in Drosophila

2:40 pm **Makoto Sato,** Kanzawa University
Concentric zones, cell migrations and neuronal circuits in the Drosophila optic lobe

2:50 pm **Gudrun Viktorin,** University of Basel
Clonal analysis and cell fates of transit amplifying meuroblast lineages in the Drosophila brain

3:00 pm **Brian D. McCabe,** Columbia University
Imaging and manipulating Drosophila larval synapses

3:10 pm **General discussion (discussion leader, Jim Truman)**

3:30 pm Break

4:20 pm **Session 6: Genomics & Genomic Resources, Part 2**

4:20 pm **Chairperson's Introduction: Overview of *Drosophila* modENCODE Project**
Susan E. Celniker, Lawrence Berkeley National Laboratory

4:40 pm **Susan E. Celniker,** Lawrence Berkeley National Laboratory
Comprehensive characterization of the Drosophila transcriptome

4:50 pm **Michael O. Duff,** University of Connecticut Health Center
Developmental time-course of Drosophila neural gene-expression at single nucleotide resolution

5:00 pm **Ward F. Odenwald,** National Institutes of Health (NINDS)
Tools for identifying functionally related cis-regulatory elements

5:10 pm -5:30 pm **General discussion (discussion leader, TBA)**

6:00 pm Reception

7:00 pm	Dinner
8:00 pm	**Session 7: Discussion: What tools does the field need and why? Charles Zuker (moderator)**
9:30 pm	Refreshments available at Bob's Pub

Wednesday, October 7th

7:30 am	Breakfast
9:00 am	**Session 8: Genomics & Genomic Resources, Part 3: MicroRNA, PROTEOMICS & GENETICS**
9:00 am	**Norbert Perrimon,** HHMI/Harvard Medical School *A Drosophila resource of transgenic RNAi lines*
9:10 am	**Seymour Knowles-Barley,** University of Edinburgh *BrainTrap: A database of 3D protein expression patterns in the Drosophila brain*
9:20 am	**Akira Chiba,** University of Miami *isPIN: A context-rich proteomics*
9:30 am	**Patrick Callaerts,** VIB and K.U. Leuven *Nanobody technology to dissect transcriptional control of neuronal complexity*
9:40 am	**Kenta Asahina,** California Institute of Technology *Variance of aggressiveness among Drosophila species*
9:50 am	**Kai Zinn,** California Institute of Technology *Using gain-of-function and deficiency screens to identify orphan receptor ligands and define new synaptic targeting and axon guidance phenotypes*
10:00 am	**Break**
10:30 am	**General Discussion (moderated by the organizers)**
12:15 pm	Lunch (To-go boxes from servery available for those on first shuttle)
12:30 pm	First shuttle to Dulles
1:15 pm	Second shuttle to Dulles
2:00 pm	Last shuttle to Dulles