

## Boston Area *Drosophila* Meeting

Hosted by the Whitehead Institute  
June 16, 2021, 12:30p.m. – 6:00p.m. EST

### 12:30 – 2:00p Session 1 – Two Concurrent Sessions

#### Concurrent Session 1.a - Neurobiology

Moderator: Jens Rister, University of Massachusetts Boston

<b>Join Here</b>	<a href="https://zoom.us/j/92902065119?pwd=eGhQOUxLdVNxR0J5VTdXRkJPWE1vUT09">https://zoom.us/j/92902065119?pwd=eGhQOUxLdVNxR0J5VTdXRkJPWE1vUT09</a> IT Support: Lisa Bolduc
12:30 – 12:45	<b>Welcoming Remarks</b> Ruth Lehmann, Whitehead Institute, Massachusetts Institute of Technology
12:45 – 1:00	Kimberly Madhwani, O'Connor-Giles lab, Brown University <i>Neurodevelopmental role of a tRNA regulator underlying intellectual disability</i>
1:00 – 1:15	Paul Marcogliese, Bellen lab, Baylor College of Medicine <i>Loss of IRF2BPL impairs neuronal maintenance through excess Wnt signaling</i>
1:15 – 1:20	Chad Sauvola, Littleton lab, Massachusetts Institute of Technology <i>Drosophila Tomosyn regulates tonic/phasic release differences and is required for presynaptic homeostatic potentiation</i>
1:20 – 1:25	Mohamed Adel, Griffith lab, Brandeis University <i>Establishing an ex vivo model for aversive associative learning in fruit flies</i>
1:25 – 1:30	Sabrina Clemens, Olsen lab, Harvard Medical School <i>A Drosophila model for validating gene-environment interactions in Parkinson's disease</i>
1:30 – 1:45	Ane Martin Anduaga, Kadener lab, Brandeis University <i>Thermosensitive alternative splicing of timeless senses and mediates temperature adaptation in Drosophila</i>
1:45 – 1:50	Torrey Mandigo, Walker lab, Mass General Hospital <i>Drosophila modeling of a human sleep/chronotype GWAS locus highlights a conserved role for the N-glycosylation pathway in the sleep-epilepsy axis</i>
1:50 – 1:55	Matthias Schlichting, Rosbash lab, Brandeis University <i>Dopaminergic input to the Drosophila clock neuron network promotes sleep</i>

**IT Support:** Lisa Bolduc ([bolduc1@wi.mit.edu](mailto:bolduc1@wi.mit.edu), 508-365-7116)  
Craig Andrew ([cbandrew@wi.mit.edu](mailto:cbandrew@wi.mit.edu), 781-696-1354)

**Concurrent Session 1.b - Gametogenesis**  
**Moderator: Vicki Losick, Boston College**

<b>Join Here</b>	<a href="https://zoom.us/j/91739431126?pwd=SE9LZkxOaDVxYzZYanBnVDYzODRHQT09">https://zoom.us/j/91739431126?pwd=SE9LZkxOaDVxYzZYanBnVDYzODRHQT09</a> IT Support: Craig Andrew
12:30– 12:45	<b><i>Welcoming Remarks</i></b> Yukiko Yamashita Whitehead Institute, Massachusetts Institute of Technology, Howard Hughes Medical Institute
12:45– 1:00	Jianjun Sun, University of Connecticut <i>A novel platform utilizing Drosophila ovulation for non-hormonal contraceptive screenings</i>
1:00 – 1:15	Madhumala Sadanandappa, Bosco lab, Dartmouth College <i>Parasite-activated neuronal circuits trigger Drosophila germline modification</i>
1:15 – 1:20	Ari Dehn, Losick lab, Boston College <i>Modeling age-induced polyploidy in Drosophila</i>
1:20 – 1:25	Hammed Badmos, Cagan lab, University of Glasgow <i>The role of SAGA components in cell migration and epithelial integrity</i>
1:25 – 1:30	Diane Lebo, McCall lab, Boston University <i>Molecular Regulation of Clearance by Nonprofessional Phagocytes in the Drosophila Ovary</i>
1:30 – 1:45	Stacey Hanlon, University of Connecticut <i>Female meiotic drive of B chromosomes in D. melanogaster</i>
1:45 – 1:50	Jiaxin Gong, Xiang lab, UMASS Medical School <i>Shear stress activation of TrpA1 underlies mechanical nociception in Drosophila Melanogaster</i>

**2:00 - 3:00p Keynote Speaker Address**

***Flies to study disease associated variants and pathogenic mechanisms***

[Hugo J. Bellen, D.V.M., Ph.D.](#), is an Investigator of the Howard Hughes Medical Institute, the March of Dimes Professor in Developmental Biology and Charles Darwin Professor in Genetics at Baylor College of Medicine in the Departments of Molecular and Human Genetics, and Neuroscience, and the Neurological Research Institute at Texas Children's Hospital.

**Join:** <https://zoom.us/j/93906361830?pwd=ZngwenpKSS9oV2FTSmRQNjdyYmRzZz09>

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**3:00 - 3:15p Break**

**3:15 - 4:00p Workshops**

<b>Workshop 1</b> <i>Genetic/Genomic Technologies</i> <b>Host:</b> Norbert Perrimon Harvard Medical School Broad Institute		<b>Workshop 2</b> <i>Modeling Human Disease</i> <b>Host:</b> Hugo Bellen Baylor College of Medicine Howard Hughes Medical Institute
3:15 – 3:26	Hongjie Li, Baylor College of Medicine <i>Update on the Fly Cell Atlas</i>	China Byrns, Bonini lab, University of Pennsylvania <i>Glial AP1 promotes early traumatic brain injury recovery but chronically drives tauopathy</i>
3:26 – 3:37	Julie Agapite, Harvard University <i>What's new at FlyBase</i>	Sayantane Paul, Veraksa lab, University of Massachusetts Boston <i>ERK-mediated phosphorylation of Capicua, a key regulator of MAPK signaling in development and disease</i>
3:37 – 3:48	Justin Bosch, Perrimon lab, Harvard Medical School <i>Proximity labeling: Application to the fly blood secretome</i>	Guang Lin, Bellen lab, Baylor College of Medicine <i>Altered ceramide metabolism and endo-lysosomal pathway in the pathogenesis of INAD/PARK14</i>
3:48 – 4:00	Jun Xu, Perrimon lab, Harvard Medical School <i>New Nanotag-Nanobody tools for in vivo studies</i>	Liping Wang, Bellen lab, Baylor College of Medicine <i>Glucosylceramide is generated by active neurons and transported to glia for lysosomal degradation by Glucosylceramidase (GBA)</i>

**Join Workshop 1**

<https://zoom.us/j/93689630635?pwd=NmM0RHFsaGExYi9idEhuSGdxK0dwUT09>

IT Support: Lisa Bolduc

**Join Workshop 2**

<https://zoom.us/j/95513762190?pwd=RGh5bWVhTmZnS05HcVdWNjgvNjFmQT09>

IT Support: Craig Andrew

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**4:00 – 4:45p Round Tables**

<p><b><u>Discussion Round Table 1</u></b>  <i>Career Trajectories in Drosophila Research</i></p> <p><b><u>Hosts:</u></b>            Alexis Hill            College of the Holy Cross  <i>How to find a position in academia</i></p> <p>Kristin White            Mass. General Hospital,            Harvard Medical School  <i>The pros and cons of a job in academia</i></p> <p>Susan Gerbi            Brown University  <i>Defining your strengths and weaknesses,            job shadowing and networking</i></p>	<p><b><u>Discussion Round Table 2</u></b>  <i>Toward Inclusive Diversity:            Steps we can take in our labs,            classrooms, and institutions</i></p> <p><b><u>Host:</u></b>            Michele Markstein            Princeton University            University of Massachusetts Amherst</p>
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**Join Round Table 1**

<https://zoom.us/j/92148878350?pwd=VS8zdEZrcm5VdEtSNSs5dGF5SDFUQT09>

IT Support: Lisa Bolduc

**Join Round Table 2**

<https://zoom.us/j/94129337449?pwd=YTE2RUVWb1pRdmp2STVYRThYSjdGdz09>

IT Support: Craig Andrew

**4:45 - 5:00p Break**

**5:00 – 6:00p Session 2 – Two Concurrent Sessions**

***Concurrent Session 2.a - Morphogenesis***

***Moderator: Erica Larschan, Brown University***

<p><b>Join Here</b></p>	<p><a href="https://zoom.us/j/96402785608?pwd=NE5hZnZvKytUUWxadVpmMjhDSDRVUT09">https://zoom.us/j/96402785608?pwd=NE5hZnZvKytUUWxadVpmMjhDSDRVUT09</a>            IT Support: Lisa Bolduc</p>
<p>5:00 – 5:15</p>	<p>Mukulika Ray, Larschan lab, Brown University  <i>Maternal pioneer factor CLAMP regulates sex-specific transcript diversity in early Drosophila embryos</i></p>
<p>5:15 – 5:20</p>	<p>Jacob Malin, Hatini lab, Tufts University  <i>Sidekick alternately interacts with contractile and protrusive effectors to control epithelial morphogenesis</i></p>

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5:20 – 5:25	Mary Ann Collins, Martin lab, Massachusetts Institute of Technology <i>Actin Interacting Protein 1 promotes tissue fusion via intercellular force transmission during Drosophila gastrulation</i>
5:25 – 5:40	Kevin Cabrera, Wunderlich lab, University of California, Irvine <i>Transcriptional Mechanisms Controlling Immune Priming in Drosophila melanogaster</i>
5:40 – 6:00	<b>Closing Remarks</b> Ruth Lehmann, Whitehead Institute, Massachusetts Institute of Technology

### Concurrent Session 2.b - Transposable Elements

Moderator: Nelson Lau, Boston University School of Medicine

<b>Join Here</b>	<a href="https://zoom.us/j/93533393147?pwd=L09uM2ExZjBNNDBTMGtuUkFvakNSZz09">https://zoom.us/j/93533393147?pwd=L09uM2ExZjBNNDBTMGtuUkFvakNSZz09</a> IT Support: Craig Andrew
5:00 – 5:15	Jonathan Nelson, Yamashita lab, Whitehead Institute <i>The essential role of retrotransposons to maintain ribosomal DNA in the Drosophila male germline</i>
5:15 – 5:20	Joyce Rigal, Marr lab, Brandeis University <i>Increasing somatic transposon activity shortens D. melanogaster's lifespan</i>
5:20 – 5:25	Niraj Kumar Nirala, UMASS Medical School <i>The Hinfp-Histone1 axis represses transposable elements to safeguard somatic genomes</i>
5:25 – 5:40	Nick Rice, Theurkauf lab, UMASS Medical School <i>Heat Stress Disrupts piRNA Biogenesis Machinery</i>
5:40 – 6:00	<b>Closing Remarks</b> Yukiko Yamashita Whitehead Institute, Massachusetts Institute of Technology, Howard Hughes Medical Institute

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