

**6<sup>th</sup> Annual BAD meeting**  
Boston College  
Local organizers  
Eric Folker and Vicki Losick

**Program:**

9:00 am Registration & Coffee (Higgins Hall Atrium)

**Session I: Technologies, Cell, & Development (Higgins Hall rm 300)**

Moderator: Vicki Losick, Assistant Professor, Boston College

- 10:00am Sian Gramates, Biocurator, Harvard University  
*New and upcoming features at FlyBase*
- 10:15am Ying Liu, Postdoc, Harvard Medical School  
*Systemic study of tumor-host organ communication using the DRSC FlyPhone online resource*
- 10:30am Ben Ewen-Campen, Postdoc, Harvard Medical School  
*A split-Gal4 system that is fully repressible by Gal80*
- 10:45am Steve DeLuca, Assistant Professor, Brandeis University  
*New tools and a new model for studying gene silencing initiation during development*
- 11:00am Mary Ann Collins, Postdoc, MIT  
*The F-actin disassembly factors, Capulet and Flare, regulate distinct pools of actomyosin dynamics to promote epithelial remodeling during Drosophila gastrulation*
- 11:15am Rebecca Oramas, Graduate Student, University of Connecticut  
*The bHLH-PAS transcriptional complex Sim::Tgo plays active roles in late oogenesis to promote follicle maturation and ovulation*
- 11:30am Shruthi Bandyadka, Graduate Student, Boston University  
*Alternative splicing of vha100-2 exon 2 promotes non-cell autonomous clearance of nurse cells in Drosophila melanogaster oogenesis*
- 11:45am Stacey Hanlon, Assistant Professor, University of Connecticut  
*Uncovering mechanisms that promote and suppress B chromosome meiotic drive*
- 12:00pm Lunch (Higgins Hall Atrium and Outside weather permitting)  
Lunch discussion groups:  
*New fly tools & techniques*  
*Building an inclusive lab*  
*Cytoskeleton & Mechanics*  
*Neurobiology*  
*Starting a lab & Networking*  
*What you wish you knew in grad school*

\*Boxed lunches will be provided per dietary requests to registered attendees only

**Session II: Aging, Neurogenesis, & Immunity (Higgins Hall rm 300)**

Moderator: Eric Folker, Associate Professor, Boston College

- 1:00pm Zeba Wunderlick, Assistant Professor, Boston University  
*Mechanisms of immune priming in Drosophila*
- 1:15pm Levi Duhaime, Research Assistant, Boston College  
*Age-induced polyploidy remodels the actomyosin network altering epithelial mechanics over the fly's lifespan*
- 1:30pm Jenna Harris, Graduate Student, Brandeis University  
*The role of circRNAs in aging in Drosophila melanogaster*
- 1:45pm Torrey Mandigo, Postdoc, Massachusetts General Hospital  
*Protein Glycosylation is a regulator sleep and circadian rhythms in Drosophila*
- 2:00pm Dingbang Ma, Postdoc, Brandeis University  
*Neural connectivity molecules best identify the heterogeneous clock and dopaminergic cell types in the Drosophila adult brain*
- 2:15pm Karen Leopold Cunningham, Graduate student, MIT  
*Regulation of presynaptic calcium channel abundance at active zones through a balance of delivery and turnover*
- 2:30pm Rajan Thakur, Postdoc, Brown University  
*PDZD8 promotes autophagy at ER-Lysosome contact sites to regulate synaptic growth*
- 2:45pm Heena Khurana, Graduate student, University of Massachusetts Boston  
*Mechanisms of induction of Mps*
- 3:00pm Julia Nemtsova, Graduate student, Brown University  
*Mitochondrial dysfunction in a Drosophila model of Amyotrophic Lateral Sclerosis*
- 3:15pm Juliet Girard, Assistant Professor, University of Massachusetts Boston  
*Paths and pathways that generate cell-type heterogeneity and developmental progression in hematopoiesis*
- 3:30pm Coffee Break
- 4:00pm Keynote seminar by Dr. Jennifer Zallen, Memorial Sloan Kettering Cancer Center, HHMI Investigator  
*Signals, forces, and cells: Decoding tissue morphogenesis*
- 5:00pm Poster Session & Reception (Higgins Hall Atrium)
- 6:00pm Reception conclude

## **Poster presentations:**

1. Adam Martin, Associate Professor, MIT  
*A cell adhesion gradient contributes to gastrulation morphogenesis in Drosophila*
2. Aishwarya Krishnamoorthy, Graduate student, Brandeis University  
*Understanding the physiological functions of circular Muscleblind and MBL protein in Drosophila melanogaster*
3. Alexandra Chasse, Graduate student, Boston University  
*The role of professional phagocytes during cell death in the ovary of Drosophila melanogaster*
4. Ane Martin Anduaga, Postdoc, Brandeis University  
*Thermosensitive splicing of timeless in temperature compensation*
5. Ari Dehn, Research Associate, Boston College  
*Blocking cell fusion inhibits age-induced polyploidy and maintains epithelial organization in Drosophila*
6. Austin Rivera, Technician, Boston University  
*Defining the transcriptional enhancers of Flamenco, the most prominent Drosophila piRNA cluster*
7. Cameron Dixon, Graduate student, Boston University  
*Consequences to physiology upon dysregulation of hormonal homeostasis using Drosophila melanogaster*
8. Christian Rosa, Graduate student, Tufts University  
*Regulated actomyosin turnover is essential for eye epithelial morphogenesis*
9. Daniela Barraza, Graduate student, Harvard Medical School/Boston Children's Hospital  
*An intestinal g protein-coupled receptor modulates lipid homeostasis and the stress response in Drosophila melanogaster.*
10. David Loehlin, Assistant Professor, Williams College  
*A tandem duplication in Drosophila melanogaster shows enhanced expression beyond the gene copy number*
11. Deepshe Dewett, Graduate student, UMass Boston  
*Gene expression changes in Drosophila in response to vitamin A deprivation*
12. Ellen Guss, Graduate student, MIT  
*The heparan sulfate proteoglycan Perlecan regulates synaptic stability at the Drosophila larval NMJ*
13. Emily Brown, Graduate student, UMass Boston  
*The Drosophila eye as a model for nanoparticle-based drug delivery*
14. Emily Rivard, Graduate student, Harvard University  
*The evolution of oskar function in insects*

15. Fareeha Syeda, Undergraduate student, UMass Boston  
*The novel transmembrane protein Mps that stabilizes vitamin A deprived photoreceptors also plays a role in photoreceptor development*
16. Guangmei Liu, Graduate student, Boston University  
*Phagocytic defects lead to or exacerbate neurodegeneration through increased immune signaling*
17. Hyuckjoon Kang, Research Instructor, Harvard Medical School/Brigham Women's Hospital  
*Conservation of variant Polycomb complexes in Drosophila*
18. Jacob Malin, Technician, Tufts University  
*Phosphoinositide PI(3,4,5)P3 turnover modulates cytoskeletal forces controlling Drosophila eye morphogenesis*
19. James Kentro, Graduate student, Brown University  
*Chromatin regulatory networks underlying coordinated synaptic gene expression*
20. Jasmine Quynh Le, Graduate student, Brandeis University  
*The Gating of Sleep by Dynamic Dop1R1 Expression in Circadian LN<sub>d</sub> Neurons*
21. Jorel Padilla, Graduate student, Boston College  
*Dystrophin functions through microtubules to regulate myonuclear positioning*
22. Justin Bosch, Postdoc, Harvard Medical School  
*Drosophila germline engineering using prime editing*
23. Katelyn Caldarone, Undergraduate student, Bryant University  
*Neural circuits for low and moderate alcohol responses in Drosophila melanogaster*
24. Lenny Rabinow, Visiting Professor, Harvard Medical School  
*Somatic excision of a FB element accounts for the phenotype of the mottler-of-white mutation*
25. Lianne Cohen, Postdoc, Boston University  
*Identifying enhancers of the Drosophila immune system*
26. Minqi Shen, Graduate Student, Boston College  
*Drosophila as model for Fuchs Endothelial Corneal Dystrophy*
27. Romaisa Shahid, Undergraduate student, UMass Boston  
*Identification of novel regulators of the Hippo tumor suppressor pathway*
28. Shlesha Richhariya, Postdoc, Brandeis University  
*A CRISPR-based Drosophila strategy to study gene function in clock neurons of Drosophila*
29. Taryn Rauff, Undergraduate student, Bryant University  
*Exploring the connectivity patterns of mushroom body output neurons in Drosophila*

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