

6th 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 Stephanie Mohr, Lecturer, Harvard Medical School
Online, cell-based and in vivo technologies and resources from the DRSC/TRiP
- 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 Ruoyu Chen, Graduate Student, Whitehead Institute
Translational de-repression by Drosophila embryonic germ granules
- 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)
TBA Lunch discussion groups
*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 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

- 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
TBA
- 5:00pm Poster Session & Reception (Higgins Hall Atrium)
- 6:00pm Reception concludes

Poster presentations:

Adam Martin, Associate Professor, MIT

A cell adhesion gradient contributes to gastrulation morphogenesis in Drosophila

Aishwarya Krishnamoorthy, Graduate student, Brandeis University

Understanding the physiological functions of circular Muscleblind and MBL protein in Drosophila melanogaster

Alexandra Burgess, Graduate student, Boston College

Subperineurial glial cell nuclear spacing is regulated by the LINC complex in the Drosophila blood-brain barrier

Alexandra Chasse, Graduate student, Boston University

The role of professional phagocytes during cell death in the ovary of Drosophila melanogaster

Amelie Raz, Postdoc, Whitehead Institute

Asymmetric transcript abundance in germline stem cell division

Ane Martin Anduaga, Postdoc, Brandeis University

Thermosensitive splicing of timeless in temperature compensation

Ari Dehn, Research Associate, Boston College

Blocking cell fusion inhibits age-induced polyploidy and maintains epithelial organization in Drosophila

Austin Rivera, Technician, Boston University

Defining the transcriptional enhancers of Flamenco, the most prominent Drosophila piRNA cluster

Cameron Dixon, Graduate student, Boston University

Consequences to physiology upon dysregulation of hormonal homeostasis using Drosophila melanogaster

Christian Rosa, Graduate student, Tufts University

Regulated actomyosin turnover is essential for eye epithelial morphogenesis

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.

David Loehlin, Assistant Professor, Williams College

A tandem duplication in Drosophila melanogaster shows enhanced expression beyond the gene copy number

Deepshe Dewett, Graduate student, UMass Boston

Gene expression changes in Drosophila in response to vitamin A deprivation

Ellen Guss, Graduate student, MIT

The heparan sulfate proteoglycan Perlecan regulates synaptic stability at the Drosophila larval NMJ

Emily Brown, Graduate student, UMass Boston
The Drosophila eye as a model for nanoparticle-based drug delivery

Emily Rivard, Graduate student, Harvard University
The evolution of oskar function in insects

Esteban Marte, Graduate student, Boston College
Regulation of myonuclear positioning by Augmin, a microtubule branching factor

Fareeha Syeda, Undergraduate student, UMass Boston
The novel transmembrane protein Mps that stabilizes vitamin A deprived photoreceptors also plays a role in photoreceptor development

Guangmei Liu, Graduate student, Boston University
Phagocytic defects lead to or exacerbate neurodegeneration through increased immune signaling

Hyuckjoon Kang, Research Instructor, Harvard Medical School/Brigham Women's Hospital
Conservation of variant Polycomb complexes in Drosophila

Jacob Malin, Technician, Tufts University
Phosphoinositide PI(3,4,5)P3 turnover modulates cytoskeletal forces controlling Drosophila eye morphogenesis

James Kentro, Graduate student, Brown University
Chromatin regulatory networks underlying coordinated synaptic gene expression

Jasmine Quynh Le, Graduate student, Brandeis University
The Gating of Sleep by Dynamic Dop1R1 Expression in Circadian LN_d Neurons

Jorel Padilla, Graduate student, Boston College
Dystrophin functions through microtubules to regulate myonuclear positioning

Justin Bosch, Postdoc, Harvard Medical School
Drosophila germline engineering using prime editing

Katelyn Caldarone, Undergraduate student, Bryant University
Neural circuits for low and moderate alcohol responses in Drosophila melanogaster

Lenny Rabinow, Visiting Professor, Harvard Medical School
Somatic excision of a FB element accounts for the phenotype of the mottler-of-white mutation

Lianne Cohen, Postdoc, Boston University
Identifying enhancers of the Drosophila immune system

Loiselle Gonzalez, Graduate Student, Boston College
The role of melanization in regulation of wound-induced polyploidization

Minqi Shen, Graduate Student, Boston College
Drosophila as model for Fuchs Endothelial Corneal Dystrophy

Romaisa Shahid, Undergraduate student, UMass Boston
Identification of novel regulators of the Hippo tumor suppressor pathway

Shlesha Richhariya, Postdoc, Brandeis University
A CRISPR-based Drosophila strategy to study gene function in clock neurons of Drosophila

Suresh Kumar Jetti, Postdoc, MIT
Molecular logic of functional synaptic diversity in Drosophila tonic and phasic larval motor neurons

Taryn Rauff, Undergraduate student, Bryant University
Exploring the connectivity patterns of mushroom body output neurons in Drosophila