

Thursday April 27th

Education Session: 6:30-8:30

- 6:30-6:45 **Welcome and Introductory Remarks by Cathy Savage-Dunn and David Matus**
- 6:45-8:15 **Alan Alda Center for Communicating Science, Nancy Serrell**
- 8:15-8:30 Fast Track Talks

Jasmin Camacho, Harvard University
Sophie Chase, Smith College
Matthew Koslow, University of Albany
Megan Norris, Harvard University
Jocelyn Steinfeld, University of Massachusetts Boston

Poster Session and Mixer: 8:30-10:30 (odd number posters present)

Friday April 28th

Breakfast: 7:00-8:30

Session I: Morphogenesis and Motility 9:00-12:00

Chair: Mansi Srivastava

- 9:00-9:20 **Anna-Katerina Hadjantonakis**, Memorial Sloan Kettering Cancer Center, Member, FGFR signaling and the emergence of pluripotency in the mouse embryo.
- 9:20-9:35 **Natalia Shylo**, Yale University, Graduate Student, Tmem107 mouse models provide key insights into the phenotypic variability of cilia-mediated developmental patterning.
- 9:35-9:50 **Elizabeth Bearce**, Boston College, Graduate Student, TACC3, a microtubule plus-end tracking protein, regulates neural crest cell motility in vitro and in vivo.
- 9:50-10:05 **Mayu Inaba**, University of Connecticut Health, Assistant Professor, Cellular protrusion mediated niche-stem cell communication.
- 10:05-10:30 Coffee Break

Chair: Lionel Christiaen

- 10:30-10:50 **Kathryn Kavanagh**, University of Massachusetts, Dartmouth, Assistant Professor, Shared developmental rules predict patterns of size evolution in vertebrate segmented structures.
- 10:50-11:05 **Tyler Huycke**, Harvard Medical School, Graduate Student, Genetic and mechanically mediated patterning of gut smooth muscle.
- 11:05-11:20 **Diana Rubel**, Stony Brook University, Undergraduate Student, Deletion of B3glct disrupts craniofacial, skeletal, and cardiac development in mice.
- 11:20-11:35 **Amanda Baumholtz**, McGill University, Graduate Student, Claudins regulate cell shape and localization of signaling proteins at the apical cell surface during neural tube closure.
- 11:35-11:50 **Jenny Lanni**, Wheaton College, Assistant Professor, Essential function of ion pump Slc12a7a/KCC4a in regulating zebrafish fin proportion and pigment stripe formation.

Lunch: 12:00-1:30

Session II: Genomics and Gene Regulation 1:45-5:15

Chair: Carrie Adler

- 1:45-2:05 **Marcos Simoes-Costa**, Cornell University, Assistant Professor, Gene regulatory control of neural crest axial identity and cell fate.

- 2:05-2:25 **Cesar Arenas-Mena**, CUNY College of Staten Island, Associate Professor, The origins of developmental gene regulation.
- 2:25-2:40 **Sushma Teegala**, Queens College, CUNY, Graduate Student, Tbx2 is required for the suppression of mesendoderm during early *Xenopus* development.
- 2:40-3:00 **Kenneth Birnbaum**, New York University, Associate Professor, The link between injury and development in plant regeneration.
- 3:00-3:30 Coffee Break (sponsored by Nightsea)
- Chair: Mara Schvartzstein*
- 3:30-3:50 **Lionel Christiaen**, New York University, Associate Professor, Regulation of cardiopharyngeal fate specification in a simple chordate.
- 3:50-4:05 **Jeffrey Farrell**, Harvard University, Postdoctoral Fellow, A pre-gastrulation damage response uncovered by single-cell RNAseq.
- 4:05-4:20 Fast Track Talks
- Casey Kimball**, Keene State College
Abraham Q. Kohrman, Stony Brook University
Uday Madaan, Queens College, CUNY
Daniel McIntyre, NYU Medical Center
Ashley Waldron, University of Vermont
Rachael Norris, UConn Health
- 4:20-4:50 Coffee Break

Keynote Address: 4:55-6:00

Monica Driscoll, Rutgers University, Professor, Neurons Can Take Out the Trash: A Novel Facet of Proteostasis and Mitochondrial Quality Control.

Dinner: 6:15-7:30

Poster Session and Mixer: 8:00-10:00 (even number posters present)

Saturday April 29th

Breakfast: 7:00-8:30

Session III: Germline, Stem Cells and Regeneration 9:00-12:00

- Chair: Benjamin Martin*
- 9:00-9:20 **Mansi Srivastava**, Harvard University, Assistant Professor, The evolution of mechanisms for animal regeneration.
- 9:20-9:35 **Austen Barnett**, Harvard University, Postdoctoral Fellow, The role of Hox genes in germ cell development in a basally-branching insect.
- 9:35-9:50 **Amelie Raz**, MIT, Graduate Student, Acoel regeneration mechanisms indicate ancient and widespread role for muscle in regenerative patterning.
- 9:50-10:10 **Mara Schvartzstein**, CUNY Brooklyn College, Assistant Professor, Chromosome inheritance in gamete and development.
- 10:10-10:35 Coffee Break

Chair: Chitra Dahia

- 10:30-10:50 **Prashanth Rangan**, SUNY Albany, Assistant Professor, RNA secondary structure regulates translation control of a germ line RNA in *Drosophila*.
- 10:50-11:05 **Nicholas Palmisano**, Queens College, CUNY, Graduate Student, The recycling GTPase, RAB-10, regulates autophagy flux in *Caenorhabditis elegans*.
- 11:05-11:20 **Nicholas Leigh**, Harvard Medical School, Postdoctoral Fellow, von Willebrand Factor D and EGF-Domains is essential for axolotl limb regeneration.
- 11:20-11:40 **Carolyn Adler**, Cornell University, Assistant Professor, A divergent neurexin-1 homolog controls muscle regeneration in planarians .

Lunch: 12:00-1:30

Session IV: Signaling and Organogenesis 1:45-4:45

Chair: Anna-Katerina Hadjantonakis

- 1:45-2:05 **Kristi Wharton**, Brown University, Professor, The varied BMP signaling output critical for development requires regulated proprotein processing.
- 2:05-2:20 **Matthew Harris**, Harvard Medical School, Graduate Student, When fish fly: using mutational phenocopy and phylogenetics to understand allometry in evolution.
- 2:20-2:35 **Jennifer Fish**, University of Massachusetts, Lowell, Assistant Professor, Tissue interactions and differing threshold requirements for Fgf8 contribute to variation in disease penetrance.

2:35-3:00 Coffee Break

Chair: Kenneth Birnbaum

- 3:00-3:20 **Benjamin Martin**, Stony Brook University, Assistant Professor, Combinatorial signaling interactions pattern the dorsal-ventral mesodermal axis by controlling bHLH transcription factor activity.
- 3:20-3:35 **Margherita Perillo**, Boston College, Postdoctoral Fellow, Positioning of nuclei at the neuromuscular and myotendinous junctions in the developing muscle.
- 3:35-3:50 **Tessa Montague**, Harvard University, Graduate Student, Vg1-Nodal heterodimers are the endogenous inducers of mesendoderm.
- 3:50-4:10 **Vivian Irish**, Yale University, Professor, Petal Development: a twist in fate.
- 4:10-4:45 Coffee Break

Keynote Address: 4:45-5:50

Leonard Zon, Harvard Medical School, Professor, Pathways Regulating Stem Cell Induction, Self-Renewal and Engraftment.

Business Meeting: 5:50-6:10

Dinner: 6:30-8:30

Student and Postdoc Presentation Awards: 8:00-8:30

Sunday April 30th

Breakfast: 8:00-9:00

Departure