Mid-Atlantic Regional Meeting of the Society for Developmental Biology

University of Pennsylvania, Philadelphia, PA

May 30-31, 2003

Friday, May 30, 2003

9:00 – 12:00 **Education Workshop for Science Teachers**
Jamie Schaefer (Thomas Jefferson University)

11:00 – 1:00 **Registration**

1:00 – 1:15 **Welcome and Opening Remarks**
Nancy Bonini and Daniel Kessler

1:15 – 2:50 **Session I: Germ Cells and Stem Cells**
Chair: Stephen DiNardo

1:15 – 1:35 **William Kelly** (Emory University)
A conserved chromatin status marks germline restriction in worms and flies

1:35 – 1:50 **Girish Deshpande** (Princeton University)
Hedgehog as a chemoattractant during germ cell migration

1:50 – 2:10 **Doris Wagner** (University of Pennsylvania)
Stem cell maintenance in the shoot apical meristem of Arabidopsis

2:10 – 2:35 **Larysa Pevny** (University of North Carolina, Chapel Hill)
SOX2 functions to maintain neural progenitor identity

2:35 – 2:50 **Keith Latham** (Temple University)
Inefficient nuclear reprogramming and somatic cell-like features in cloned mouse embryos

2:50 – 3:20 **Coffee Break**

3:20 – 5:15 **Session II: Embryonic Induction and Pattern Formation**
Chair: Mary Mullins

3:20 – 3:45 **Jessica Treisman** (Skirball Institute, NYU Medical Center)
Developmental functions of the Drosophila mediator complex

3:45 – 4:10 **Xuemei Chen** (Waksman Institute, Rutgers University)
Post-transcriptional processes in flower development in Arabidopsis

4:10 – 4:35 **Paul Mead** (St. Jude Children's Research Hospital)
Transposon transgenesis and insertional mutagenesis in Xenopus

4:35 – 5:00 **Shannon Fisher** (Johns Hopkins University)
Regulation of Chordin by proteolytic cleavage in the zebrafish gastrula

5:00 – 5:15 **Terry Yamaguchi** (National Cancer Institute, NIH)
Wnt pathways and formation of the mammalian body plan

5:15 – 5:45 **Coffee Break**

5:45 – 6:45 **Keynote Lecture**

Phil Beachy (Johns Hopkins University)
Hedgehog signaling in development and disease

6:45 – 9:00 **Poster Session and Reception**

Saturday, May 31, 2003

8:00 – 8:30 **Continental Breakfast**

8:30 – 10:30 **Session III: Neural Development**
Chair: Doug Epstein

8:30 – 8:55 **Jonathan Eggenschwiler** (Princeton University)
Novel antagonists of Hedgehog signaling required for dorsal-ventral neural patterning

8:55 – 9:20 **Jean-Pierre Saint-Jeannet** (University of Pennsylvania)
Control of neural crest formation along the AP axis by Sox9 and Sox10

9:20 – 9:45 **Marnie Halpern** (Carnegie Institution of Washington)
Asymmetry in the zebrafish forebrain

9:45 – 10:05 **Thomas Brody** (National Institute of Neurological Disorders and Stroke, NIH)
A search for targets of the Drosophila neuroblast temporal network

10:05 – 10:30 **Michael Matise** (UMDNJ, Robert Wood Johnson Medical School)
Gli gene function in Sonic Hedgehog signaling in the developing vertebrate spinal cord

10:30 – 11:00 **Coffee Break**

11:00 – 12:40 **<u>Session IV: Cell Migration and Cell Connections</u>**
Chair: Michael Granato

11:00 – 11:25 **Greg Bashaw** (University of Pennsylvania)
To cross or not to cross: Axon guidance at the CNS midline in Drosophila

11:25 – 11:50 **Anirvan Ghosh** (Johns Hopkins University)
Calcium regulation of neuronal morphogenesis

11:50 – 12:10 **Lance Davidson** (University of Virginia)
The role of matrix during convergence and extension in Xenopus gastrulation

12:10 – 12:25 **Elaine Maria Pinheiro** (Johns Hopkins University)
Identification of two PDZ-domain proteins, PAR-6 and Bazooka, that function in border cell migration

12:25 – 12:40 **ZaiFang Yu** (University of Pennsylvania)
mig-15 acts downstream of ced-12 and racs, and upstream of JNK/p38 MAPK to control vulval cell migrations in C. elegans

12:40 – 3:00 **Lunch and Poster Session**

3:00 – 4:00 **Keynote Lecture**

Virginia Papaioannou (Columbia University)
Critical roles for T-Box genes in development

4:00 – 4:30 **Coffee Break**

4:30 – 6:30 **<u>Session V: Development and Disease</u>**
Chair: Michael Pack

4:30 – 4:55 **Monica Driscoll** (Waksman Institute, Rutgers University)
Elaborating cellular and molecular mechanisms of aging in C. elegans: Lessons and themes from simple old animals

4:55 – 5:20 **Barbara Thomas** (National Cancer Institute, NIH)
The Anaphase Promoting Complex/Cyclosome regulates String/Cdc25 stability and G1 arrest during Drosophila eye development

5:20 – 5:45 **Steven Farber** (Kimmel Cancer Center, Thomas Jefferson University)
A new modulator of lipid metabolism in vivo: Cholesterol transport is regulated by an Annexin II – Caveolin I lipid complex

5:45 – 6:00 **Myung Shin** (Fox Chase Cancer Center)
SOX10 regulates Endothelin Receptor-B during enteric neuron development in a dosage-dependent manner: A possible explanation for SOX10 haploinsufficiency in Hirschspung

6:00 – 6:15 **Aaron Gitler** (University of Pennsylvania)
Regulating heart development: New insights into the role of the neurofibromatosis type 1 gene product

6:15 – 6:30 **Hideyuki Yoshitomi** (Fox Chase Cancer Center)
A dual role for endothelial cells in promoting pancreatic development