

PRELIMINARY PROGRAM

Society for Developmental Biology 68th Annual Meeting

July 23-27, 2009

Hyatt Regency, San Francisco, CA

Organizing Committee: Marianne Bronner-Fraser (Chair, SDB President), Claude Desplan, Robb Krumlauf and Andrea Streit

Local Organizers: Laura Burrus and Richard Schneider

Additional 15-min short talks in Concurrent Sessions will be selected from abstracts submitted by SDB members.

Wednesday, July 22, 2009

1 pm – 9 pm [First Faculty Re-Boot Camp](#)

Chair: Karen Bennett, Univ of Missouri-Columbia

Thursday, July 23, 2009

8 am – 1 pm *First Faculty Re-Boot Camp* (continuation)

Chair: Karen Bennett, Univ of Missouri-Columbia

8 am – 5 pm *Satellite Symposia* (not organized by SDB)

Symposium I - [Neural Crest and Ectodermal Placodes](#)

Co-Chairs: Paul Trainor, Andrea Streit and Robb Krumlauf

Symposium II – [Plant Development in a Changing World](#)

Co-Chairs: Dominique Bergmann, Andrew Groover and Chelsea Specht

1 pm – 5 pm SDB Committees Meetings

6 pm – 8 pm *Presidential Symposium*

Elliot Meyerowitz, Caltech. *Computational morphodynamics of the plant shoot apex*

Claudio Stern, Univ College London, UK. *Gastrulation: from cells to embryo*

Nadia Rosenthal, EMBL, Italy. *Enhancing regeneration in mouse and man*

8 pm – 11 pm *Opening Reception and Poster/Exhibit Session I*

Friday, July 24, 2009

7:30 am – 9 am Continental breakfast at Posters

Tutorials - TBD

9 am – 12:30 pm **Concurrent Sessions**

Concurrent 1 - Germ and Embryonic Stem Cells

Yukiko Yamashita, U Michigan-Ann Arbor. *Asymmetric stem cell divisions; common theme and variation*

Jeff Long, Salk. *Specifying root/shoot stem cells during Arabidopsis embryogenesis*

Philip Benfey, Duke. *Getting to the root of developmental networks*

Mark Van Doren, Johns Hopkins. *The development of sexual dimorphism in the soma and germline*

Concurrent 2 - Developmental Neurobiology

Leslie Vosshall, Rockefeller. *The evolution of chemosensory perception in insects*

Josh Sanes, Harvard.

David Wilkinson, NIMR, UK. *Feedback regulation of neurogenesis*
Ben Novitch, UCLA. *Transcriptional control of neurogenesis in the developing spinal cord*

Concurrent 3 - Mechanisms of Developmental Patterning

Angela Stathopoulos, Caltech. *Dynamic interpretation of morphogen gradients supports patterning in *Drosophila**

Elizabeth Robertson, Oxford, UK. *Pathways controlling cell fate decisions in the early mouse embryo*

Hisato Kondoh, Osaka Univ., Japan. *Anterior and posterior neural plates from the epiblast are derived by distinct molecular mechanisms*

Neelima Sinha, UC Davis. *The regulation of leaf shapes*

12:30 pm – 2 pm **Funding Opportunities in Developmental Biology**

Ida Chow, SDB – Moderator, with participation of representatives from NSF, NIH and other funding agencies.

Lunch on your own
Informal Poster viewing

2 pm – 4 pm **Postdoctoral Symposium**

Co-Chairs: Tara Alexander, Stowers Institute and Sujata Bhattacharyya, Emory University

Eight short talk speakers will be selected from abstracts submitted by postdoctoral fellows who are current SDB members

4 pm – 4:30 pm **SDB Business Meeting**

4:30 pm – 6:30 pm **Plenary Session I – DEVELOPMENTAL BIOLOGY Symposium: Evolution of Developmental Regulatory Systems**

Claude Desplan, NYU. *Recycling genetic pathways during development*

Patrick Lemaire, U Marseille, France. *Analysis of *Ciona intestinalis* neural induction reveals a conserved genomic cis-regulatory code independent of transcription factor binding sites*

Edith Heard, Institute Curie, France. *Developmental dynamics and evolutionary plasticity of X-chromosome inactivation in mammals*

Alejandro Sanchez Alvarado, Utah. *Planarians, stem cells and regeneration*

6:30 pm – 7:30 pm **Meet the SDB Directors Reception for Students and Postdocs**

6:30 pm – 8pm Dinner on your own

8 – 11 pm **Poster/Exhibit Session II**

Saturday, July 25, 2009

7:30 am – 9 am Continental breakfast at Posters
Tutorials - TBD

9 am – 12:30 pm **Concurrent Sessions**

Concurrent 4 – Neural and Tissue Specific Stem Cells

Sean Morrison, U Michigan-Ann Arbor. *The regulation of stem cell self-renewal*

Sohyun Ahn, NICHD/NIH. *Sonic hedgehog signaling in neural stem cells*

Amy Wagers, Harvard. *Blood stemcells: regulation by the niche*

Julie Baker, Stanford. *Transcriptional network that specifies endoderm from human embryonic stem cells*

Concurrent 5 – Pattern Formation

Scott Holley, Yale. *Duplication and diversification of hairy/enhancer of split related genes in the zebrafish segmentation oscillator*

Dominique Bergmann, Stanford. *Pattern and polarity in the plant epidermis*

Richard Harland, UC Berkeley. *BMP antagonists*

Igor Dawid, NICHD/NIH. *Regulation of dorsal-ventral axis formation by the control of protein stability*

Concurrent 6 – Evolution of Complex Body Plan

Eric Davidson, CALTECH. *Gene Regulatory Networks and the Encoded Logic of Development*

Vivian Irish, Yale. *Petal Development: variations on a theme*

Nicole King, UC Berkeley. *Choanoflagellate colonies and the origin of animal development*

Chris Lowe, U Chicago. *Deep conservation of deuterostome anterior patterning: origins of the vertebrate head*

12:30 pm – 2 pm Lunch on your own
 Informal poster viewing

2 pm – 4 pm Education Symposium – Talking about Science/Evolution to a Fellow Bus Rider

Chair: Steven Farber, Carnegie Institution for Science and Co-Chair: Diana Darnell, U of Arizona

George V. Coyne, U of Arizona, former Astronomer of the Vatican Observatory. *Keynote Address*

Interactive presentations

Historical Session - SDB, Then and Now

Chair: Marnie Halpern, Carnegie Institution of Science. *History of SDB*

Presidents' Roundtable – participation by SDB Presidents

4:30 – 7 pm Plenary Session II — History of Developmental Biology

Diana Buchwald, CALTECH.

William (Ned) Friedman, U Colorado-Boulder. *From Goethe to MADS-box genes: Two centuries of botanical thought on homology and evolutionary developmental biology*

Jane Maienschein, Arizona State U. *Regeneration, transplantation, and translation: What's new, what's new, and why it matters*

Manfred Laubichler, Arizona State U. *Development and evolution from Darwin to Davidson: Steps towards a mechanistic explanation of phenotypic evolution*

Claudio Stern, UCL, UK. *Organizers and genes - Waddington's legacy*

Susan Ernst, Tufts. *Offerings from an urchin*

7 pm – 8 pm Dinner on your own

8 pm – 11 pm Poster/Exhibit Session III

Sunday, July 26, 2009

7:30 am – 9 am Continental breakfast at Posters
 Tutorials - TBD

9 am – 12:30 pm Concurrent Sessions

Concurrent 7 - Development and Tissue Engineering

Rocky Tuan, NIAMS/NIH.

Mary Dickinson, Baylor Coll of Med.

Anand Asthagiri, CALTECH. *Computational exploration of the evolutionary landscape of multicellular phenotypes*

Linda Griffith, MIT.

Celeste Nelson, Princeton. *Morphogenesis of model tissues*

Concurrent 8 – Epigenetic Influences on Development

Carole LaBonne, Northwestern.

William Kelly, Emory. *Epigenetic erasure and transcriptional repression during C. elegans primordial germ cell specification*

Pablo Wappner, Instituto Leloir, Argentina. *Modulation of Drosophila development by hypoxia*

Concurrent 9 – Organ Development

Guillermo Oliver, St. Jude. *Everything you wanted to know about the development of the lymphatic vasculature but were afraid to ask*

José Xavier Neto, Univ de São Paulo, Brazil. *Insights into dorsoventral spinal cord patterning from an evolutionarily conserved Raldh2 (Aldh1a2) intronic enhancer*

Lisa Goodrich, Harvard. *Deaf and Dizzy mice: a genetic dissection of inner ear development*

Cheng Ming Chuong, USC. *Regulation of ectodermal organ regeneration*

12:30 pm – 1:30 pm Lunch on your own
 Informal poster viewing

1:30 pm – 3:30 pm **Plenary Session III – Past Presidents: What are they up to now?**

Gail Martin, UCSF. *Sprouty genes and vertebrate organogenesis*

Bill Jeffery, U Maryland-College Park. *Origin and evolution of the neural crest in Chordates*

Ruth Lehmann, NYU. *Germ cell migration in vivo*

Eric Wieschaus, Princeton.

4:00 pm – 5:30 pm **Awards Lectures**

Conklin Medal: David Kingsley, Stanford. *Fishing for the secrets of vertebrate evolution*; presentation by Richard Harland, SDB President-elect

DB-SDB Lifetime Achievement Award: Donald Brown, Carnegie Institution for Science. *Studying gene expression for 50 years*; presentation by Marianne Bronner-Fraser, SDB President

Hamburger Outstanding Educator Prize: Sean Carroll, Univ of Wisconsin-Madison. *Remarkable creatures : Epic adventures in the search for the origins of species*; presentation by Bill Wood, SDB Professional Development and Education Committee Chair

7:00 pm – 11 pm **Closing Reception, Banquet and Best Student Poster Awards Presentation**

Monday, July 27, 2009

Departure

8:30 am – 5 pm SDB Board of Directors Meeting