



## Division of Evolutionary Developmental Biology

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### DEDB Officers & Representatives

**Mark Q. Martindale**  
Chair 2010-2012

**Chris Lowe**  
Chair-Elect 2011-2012

**Linda Holland**  
Past Chair 2010-2012

**Michael Shapiro**  
Secretary 2011-2013

**L Patricia Hernandez**  
Program Officer 2010-2012

**Jacob Musser**  
Student/Postdoctoral Representative  
2011-2014

**Paulyn Cartwright**  
ICB Editorial Board Representative 2008-  
2013

### Message from the Chair

*Mark Q. Martindale*

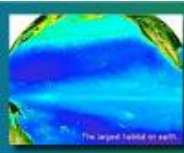
Greetings EvoDevo-ites,

It was good to see so many of you at the Utah meeting and hope that you all survived the "Salt Palace" (no more 'salt' jokes, please...). For those of you that couldn't join us, you missed a good one! Our division had a record number of student presentations representing projects from a bunch of different taxa that really sets the stage for our next meeting in Charleston, S.C. I would like to send my congratulations to all the winners of the poster/presentation awards: Naveen Wijesena, Austen Barnett, and Siyu Ding. My personal thanks to all of the people that served as judges!

SICB really is the natural home for EvoDevo for workers at all stages of their careers (even old farts like me!). It is just such a great opportunity to learn about organismal diversity and modern approaches to understanding the evolutionary origins of biological diversity, not only from members of our Division, but from participants from other Divisions, from whom we all have a lot to learn. We hope that our colleagues from the Division of Developmental and Cell Biology (who merged with our Division at the conclusion of the meeting this year) will bring their expertise and knowledge to DEDB and see that we are eager to understand and appreciate their work in an evolutionary perspective.

In that vein, it would be terrific to see some of our brethren organize symposia integrating cellular approaches to understanding the evolution of developmental processes at the meeting in San Francisco in 2013. Symposia proposals for S.F. are due this summer, so please contact me, or our Program Director (Patricia Hernandez), for information on how to sponsor a symposium. It is a great way to creatively put together a group of people with complimentary views and approaches and generate a collection of manuscripts for publication in *Integrative and Comparative Biology*. The turn around at the journal has been dramatically improved and provides an attractive opportunity to publicize our message.

And do not forget to vote in the Spring Elections! This is your opportunity to help decide the future direction of our Division and help it remain the vibrant and exciting venue for our important contributions to our Society well into the future.



## Message from the Program Officer

Patricia Hernandez

Hello All,

I hope that this newsletter finds you well.

While we are still a long way off from abstract submission for the Charleston meeting, I wanted to share some of the most important things I have learned regarding making up the program for the meeting. It is imperative that you pick the correct categories that your presentation fits into. It is especially important that the first category chosen truly reflects the session that you would like to be placed in. I feel that many of us are flustered doing last minute submissions and do not give due emphasis to those categories.

I also wanted to point out that we had relatively few abstracts submitted for our last meeting. I feel that we are missing an opportunity to recruit students and postdocs into our society. I think that many of the students that are members of the Society for Developmental Biology (SDB) would also get a lot out of our meetings, including being able to give oral presentations. SDB meetings often have several poster sessions dedicated to evo-devo, thus our entire membership should make a more concerted effort to recruit these folks into our society. I think we would be wise to speak to students and young postdocs about the many benefits of membership in our society.

Our next meeting in Charleston promises to be a wonderful meeting with many symposia that will assuredly be of interest to our division. We should keep these in mind since all of these symposia will have contributed papers associated with them. Symposia that we are especially excited about and that are being at least partially supported by our division include:

Matthew A. Wund: *The Impacts of Develop-*

*mental Plasticity on Evolutionary Innovation and Diversification*

K. Emily Knott: *Poecilogony as a window on larval evolution: Polymorphism of developmental mode within marine invertebrate species*

Edward F. Orlando: *Pushing the boundaries of phenotypic variation: the mangrove rivulus, *Kryptolebias marmoratus*, an exemplar of integrative biology*

Finally, it is never too early to start thinking about future symposia. The deadline for symposia applications for the San Francisco meeting is August 19, 2011. Please consider organizing a symposium.

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## Message from the Secretary

Mike Shapiro

I'm pleased to begin my term as Secretary of DEDB, and on behalf of the Division, I'd like to thank Elaine Seaver for her dedicated service as Secretary for the past couple of years. Elaine also kindly provided the minutes for the DEDB business meeting, which I encourage you peruse below.

We had many outstanding student presentations at this year's meeting, and after much deliberation, the winners of the 2011 Best Student Presentation Awards are:

### Oral Presentation Winner:

Naveen Wijesena, University of Miami

Wnt signaling in the cnidarian "*Nematostella vectensis*": Insights into the evolution of gastrulation



Austen Barnett

Poster winner:

Austen Barnett, Southern Illinois University

Building a Model Organism: Major Embryological Events of the Mite "Archegozetes longisetosus"

might be interested in applying for support. EDEN also offers competitive undergraduate internships, but this year's deadline has already passed (March 11). These internships will also be offered in future years, so please help identify our next generation of Evo-Devo-Eco researchers and urge them to apply for support next year! I'll remind you of the EDEN deadlines in the next newsletter as well.

Finally, we have one item of election business: I just started my term as Secretary, but it's already time for you to choose my replacement. Please take a few minutes to read the biographies of our two candidates for the Secretary-elect position as voting will open soon.

Special Mention Undergraduate Poster Award:

Siyu Ding, University of the Pacific

Origins of the Pax/Six Gene Regulatory Network

Congratulations to this year's winners, and please encourage your undergraduate and graduate students to enter next year's competition to ensure another strong field. Also on this topic, we have one proposed bylaw change related to the student competition – please read the proposal below because you'll need to vote on it soon.

I want to encourage you to check out a new NSF-sponsored funding opportunity that will be of interest to many students, postdocs, and faculty in our division. The Evo-Devo-Eco Network (EDEN) research coordination network is offering funding for research exchanges with the goal of transferring tools and techniques among labs using emerging model organisms. The next application deadlines for graduate students, postdocs, and faculty exchanges are April 30 and October 31, 2011. Some advance planning is definitely necessary to assemble a successful application, so please check out the EDEN website (<http://www.edenrcn.com/>) soon if you think you

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## Message from the Graduate Student/Postdoctoral Affairs Committee Representative

*Jacob Musser*

Student and Postdoc members of DEDB,

Greetings! I am your new student and postdoc representative. After a whirlwind week at the Salt Lake City meeting this January, I have finally settled down into the rhythm of a new year, and hope you have as well. I was fortunate to meet many of you for the first time at this year's meeting, discussing posters, talking over coffee, and at the business meeting. I look forward to the opportunity to meet many more of you in the future as well.

To tell you a bit about myself, I am a second year graduate student at Yale University, and work in the labs of Gunter Wagner and Richard Prum studying the



evolution and development of feathers. I am excited to work as your new representative, and will serve as a resource where you can receive assistance navigating SICB, find information regarding grants, and get your voice heard in our organization. In addition, I will keep you apprised of new grants available for student and postdoc researchers, relevant workshops, and other exciting opportunities. Finally, as a member of the SICB Student/Postdoctoral Affairs Committee, I will endeavor to bring workshops to future meetings that cover topics of value to you.

However, for me to be of most help, I need to hear from you! Discussions are already underway regarding workshops for next year's meeting. Please write and let me know what workshop topics you would like to see. Also, as I work to continue improving DEDB for students and postdocs, I need to know what new resources you would find most useful. I encourage you to write, ask questions, and offer your advice so that we can make this an even greater organization. I am always available, and quick to respond, at [Jacob.musser@yale.edu](mailto:Jacob.musser@yale.edu).

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### Minutes of the DIVISION OF EVOLUTIONARY DEVELOPMENTAL BIOLOGY BUSINESS MEETING, January 4, 2011, Salt Lake City, UT

Opening of the meeting by DEDB Chair, Mark Martindale

Mark Martindale opened the meeting by stating that the SICB meeting is the natural home for the field of evolution and development.

Mark Martindale brought up the possibility of the division of DDCB merging with DEDB.

Scott Gilbert, Program Officer for DDCB, briefly discussed the history of the two divisions and brought up the fact that most developmental biologists who attend SICB have evolutionary interests and thus have a strong fit with the DEDB division. Mark Martindale asked for input from the group regarding the issue. The group agreed with the proposal to merge the two divisions. This recommendation will be forwarded to the SICB Executive Committee, which will act on the issue at its next meeting on January 7, 2011.

Program Officer Patricia Hernandez asked the membership to encourage SDB members to attend the SICB meetings as a way to bolster DEDB membership. Hernandez highlighted the substantial difference in cost for students between the two societies, and that it was much more affordable for students to attend the SICB meetings.

Mark Martindale encouraged the division to come up with ideas for symposia for upcoming SICB meetings. Billie Swalla reported on planned symposia for the 2012 meeting that would be of particular interest to DEDB members.

Mark Martindale reported that the society's journal, *Integrative and Comparative Biology*, has applied to be listed in PubMed.

Secretary Elaine Seaver encouraged membership to utilize the SICB website and submit content to the researchers database. Seaver noted that postdoctoral researchers are eligible to serve as best student poster judges and that this represents a professional opportunity for postdocs.

Mark Martindale announced that the student DEDB representative was no longer eligible to hold the position since she had begun a faculty position in Fall 2010. Martindale stated that he was looking for students interested in the vacated position. Lou Burnett clarified that the position is a three-year term.



**Visit from Gert de Couet, Program Officer for Mechanisms of Development/Evolution of Developmental Mechanisms at the National Science Foundation.** De Couet emphasized importance of quality ad hoc reviews in the process of evaluating grant proposals and stated the number of proposals received and funded in 2010 by the program. The process of proposal evaluation was explained, including meeting funding portfolio requirements. De Couet made the point that integrative proposals often do worse in the review process.

Jim Hanken asked de Couet about the extended turnaround time (greater than 6 months) for some proposals and de Couet confirmed that each Program Officer has the discretion of whether or not to communicate to the applicant that their proposal may get funded if additional monies come through. Gunter Wagner mentioned the close correlation between the January NSF proposal deadline and the dates of the SICB meeting, highlighting the fact that since the proposal deadline has become a hard deadline, many folks had to choose between participating in the SICB meeting or writing a grant proposal. Wagner asked if the NSF deadline could somehow be changed.

**Visit from SICB Executive Committee.** Introduction of current and elect executive committee members. Attendance at the general SICB business meeting was encouraged.

Continuation of discussion with NSF program officer Gert de Couet. Inclusion of a data management plan was brought up as an upcoming requirement for proposals. Several additional questions were fielded by de Couet.

The time and location of the multi-divisional dessert social was mentioned and members encouraged to attend.

Meeting adjourned.

Submitted by Secretary Elaine C. Seaver

## Proposed Bylaws Changes

Changes in the DEDB bylaws describing our student presentation awards are proposed below. These changes help bring us into compliance with Society-wide bylaws, clarify the awards categories, and allow us some flexibility in the prizes we award. Strikethrough text indicates proposed deletions, and bold underlined text indicates proposed additions.

1. Change to title of Article XIV and adjust wording to be consistent with the title and SICB bylaws.
2. Remove specific mention of dollar amount.

### Article XIV. Best Paper **Student Presentation** Awards

~~An annual prize **Annual awards** shall be **made** awarded for the best paper presented **presentations by students** by a student at the annual meeting, **one for the best contributed paper and one for the best poster**. In addition to a certificate, the prize will carry with it an award of \$100.00.~~

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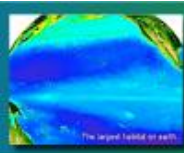
## Candidates for Elections

### Secretary-Elect (listed in alphabetical order)

#### Brad Davidson

**Current position:** Assistant Professor of Biology, University of Arizona.

**Education:** B.A., 1991, Swarthmore Col-



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lege; Ph.D., 2003, University of Washington.

**Professional experience:** Assistant Professor, Department of Molecular and Cell Biology, University of Arizona, 2007-present; NRSA Postdoctoral Fellow, laboratory of Michael Levine, UC Berkeley, 2003-2006; Graduate work in the laboratories

of Billie Swalla and Bill Moody, University of Washington.

**SICB activities:** Co-Organizer, Symposium on Mesoderm Evolution, 2006 SICB meeting; Student/Postdoc Representative, DEDB, 2002-2003; member of SICB since graduate school.

**Other memberships:** Society for Developmental Biology, American Society for Cell Biology.

**Research interests:** I have a broad interest in evolution/development including; evolutionary transitions in life history; regulatory gene network function and evolution and; dynamic properties of inductive signaling. My recent work has focused on fate specification and morphogenesis of the heart in the invertebrate chordate, *Ciona intestinalis*.

**Goals statement:** I am honored by the nomination to run for Secretary of DEDB. I have been an active member of SICB since attending my first meeting in Chicago in 2001. The excitement of this conference and the opportunity to present my work as a fledgling PhD student had a significant impact on my career. SICB is an extraordinary forum for sharing scientific discovery. In particular, this meeting provides a unique opportunity for students and post-docs to give platform presentations of their work and actively engage with fellow students, post-docs and P.I.s. Thus, SICB can play a

vital role in cultivating new scientists and in potentiating new ideas and collaborations. My attachment to SICB and in particular to my colleagues in DEDB have led me to gradually deepen my commitment to the division. Most recently, I have encouraged my students to attend and it has been extremely gratifying to see them discover new colleagues and interests through their participation. I am therefore very excited by the prospect of serving the division as secretary. If elected, I would dedicate my efforts towards broadening our membership and the participation of current members in the meeting. I would also work closely with my fellow officers to promote opportunities for students/post-docs to formally present and informally discuss their research.

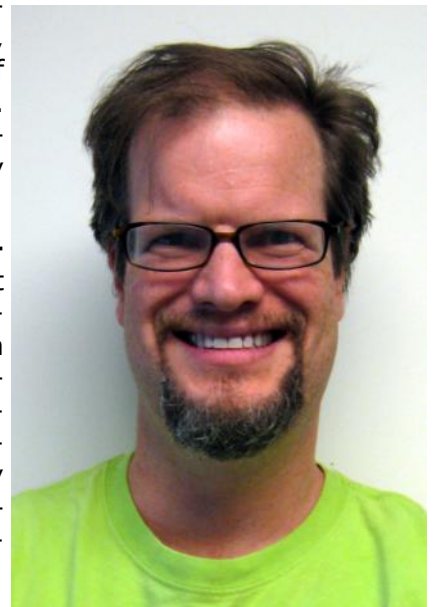
### Gregory K. Davis

**Current position:** Assistant Professor of Biology, Bryn Mawr College.

**Education:** B.S., 1992, Duke University; M.A. (History and Philosophy of Science), 1995, University of Pittsburgh; Ph.D. (Developmental Biology), 2002, University of Chicago.

**Professional experience:** Assistant Professor, Department of Biology, Bryn Mawr College, 2008-present; NRSA Postdoctoral Fellow, Department of Ecology and Evolutionary Biology, Princeton University, 2002-2008.

**SICB activities:**





Member of SICB since 2000.

**Other memberships:** Society for Developmental Biology, Genetics Society of America.

**Research interests:** I am broadly interested in the developmental basis of evolutionary change and in particular the development and evolution of phenotypic plasticity. My recent work has focused on the reproductive polyphenism in aphids, in which differences in day length determine whether mothers will produce daughters that reproduce either sexually or asexually.

**Goals statement:** I joined SICB as a graduate student in 2000, motivated by the inaugural symposium of the Division of Evolutionary Developmental Biology. Since then I have enjoyed the interdisciplinary fruits that the DEDB has continued to offer up at our annual meetings. I expect that in the coming years the division will continue to remain strong and vibrant, particularly as newly available technical tools, such as those from next gen sequencing, become more widely used. Having joined SICB as a graduate student, I have always valued the fact that our annual meeting offers students and postdocs more opportunities to showcase their research than one typically finds at meetings of this size. Should I become elected as secretary I hope to not only keep accurate records and maintain the flow of news and information to all members of the division, but in particular to try to think of ways we can reach some of our younger members and foster connections between them and long-standing members. To achieve this goal I'm looking forward to working closely with the division's senior officers and the student/postdoc representative.

## Candidates for Program Officer (in alphabetical order)

### Louise R. Page

**Current position:** Associate Professor of Biology, University of Victoria, Canada

**Education:** B.Sc. 1975 University of Alberta; M.Sc. 1978 University of Alberta; Ph.D. 1987 University of Victoria.

**Professional experience:** Co-organizer Northwest Developmental Biology conference 2005; Section Chair, Comparative Morphology & Development, Canadian Society of Zoologist 2007-08; Organizer Plenary Symposium CSZ ('Innovation & Development in Evolution') 2008; Editor, *Invertebrate Biology* 2006 to present.

**SICB activities:** Active member of ASZ and then SICB since 1977.

**Other memberships:** [American Microscopical Society](#), Canadian Society of Zoologists.

**Research interests:** I study comparative development of gastropod molluscs to address questions about morphological evolution within the context of a biphasic life history. Past and ongoing research has focused on gastropod torsion, evolution of derived foregut morphologies, and morphogenesis of gastropod nervous systems.





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**Goals statement:** Having attended many meetings of SICB over the years, I am well aware of the importance of good program planning for the value and enjoyment that members derive from our annual meetings. A successful program for the highly interdisciplinary interests of the DEDB membership poses particular challenges for a meeting where concurrent sessions are necessary. Nevertheless, the organization of a SICB division focused on the many exciting aspects of the interplay between evolution and development has been a hugely valuable venue for exchange of ideas within this exciting new discipline. To ensure that the goal of cross-pollination of ideas is achieved, a successful program must be organized around the core guiding principles of: integrating junior, sophomore and senior researchers in information exchange, effectively showcasing member-selected themes at each meeting through effective scheduling of symposia and satellite symposia, and avoiding as much as possible likely conflicts between disciplines with overlapping interests. I firmly believe that attention to details is a critical aspect of planning a successful program.

### Yuichiro (Yui) Suzuki



**Current position:** Assistant Professor of Biological Sciences, Wellesley College.

**Education:** A.B., 2001, Bowdoin College; Ph.D., 2006, Duke University.

**Professional experience:** Assistant Professor, Department of Biological Sciences, Wellesley College, 2008-present; Postdoctoral Research Associate, Department of Biology, University of Washington,

2006-2008.

**SICB activities:** Member of SICB since 2008.

**Other memberships:** Society for Developmental Biology, Society for the Study of Evolution, American Association for the Advancement of Science, Entomological Society of America.

**Research interests:** I am interested in the developmental, physiological and genetic bases of postembryonic development in insects and their evolution. My recent work has focused on the evolution of metamorphosis and developmental plasticity.

**Goals statement:** Evo-devo is rapidly evolving as a result of the exciting developments in technology and emerging model systems. If elected to be a program officer, I would encourage presentation of novel studies in emerging model organisms that should be of interest to scientists in evo-devo and other disciplines. At the same time, Evo-devo can benefit tremendously from looking beyond just genes and development. If elected as program officer, I will aim to broaden the scope of coverage of evo-devo topics to promote exchange of ideas between various disciplines that SICB uniquely brings together. Finally, as a member from an undergraduate institution, I am committed to increasing undergraduate and graduate student participation at SICB.