



Division of Evolutionary Developmental Biology

Contents

| | |
|---|---|
| Message from the Chair | 1 |
| Message from the Program Officer | 3 |
| Message from the Student/Postdoc Affairs Representative | 3 |
| Message from the Secretary | 4 |
| Minutes from the Business Meeting | 4 |
| Elections | 4 |

DEDB Officers & Representatives

Sally Leys
Chair 2014-2016

Cassandra Extavour
Chair-Elect 2015-2016

Chris Lowe
Past-Chair 2014-2016

Gregory Davis
Secretary 2015-2017

Louise Page
Program Officer 2013-2016

Amanda Kahn
*Student/Postdoctoral Affairs
2014-2017*

Message from the Chair

Sally Leys, Chair.DEDB@sicb.org

Hello DEDB members!

This is a forum in which your divisional officers can fill you in on events that took place during and since the great meeting in West Palm Beach.

2015 Meeting follow up – If you're like me, you're still running on ideas that were fuelled by the talks at West Palm Beach. Although I often find myself struggling to get to the meeting after the holidays, I'm rewarded in being so stimulated by the posters and presentations, great research, new research techniques and teaching approaches.

Thank you, students, for all of your hard work in preparing and presenting (and in helping out with all the behind-the-scenes work). In particular I'd like to congratulate our two student Best Student Presentation award winners: Katherine O'Shaughnessy from the University of Florida, whose talk was titled "Development of chondrichthyan claspers and the evolution of copulatory organs," and Kristen Koenig from the University of Texas at Austin, whose poster was titled "The Cephalopod Single-Chambered Eye as a Model for Complex Eye Evolution and Development." Nice work!

I also want to thank Amanda Kahn, our Student/Postdoctoral Affairs Committee representative, for putting together a set of highly successful dinner date events, as well as all the faculty and students who participated. Word has it that this is an especially fun activity and there continue to be many faculty offering to host students for a dinner or lunch. So, students: do not hesitate to sign up next year!

Just a quick note on West Palm Beach: it most likely will be our venue again, three years from now. The Executive Committee just voted in favour of WPB, but a contract still has to be negotiated. New hotels are currently being constructed and should make for easier access to the meeting site. Stand by for more news on this. In the meantime, next year's venue will be Portland, Oregon, and it's anticipated to be popular, so be sure to register and make hotel reservations in a timely manner.

2016 Symposia – Although DEDB did not propose any divisional symposia for the Portland meeting, other divisions did propose an unusually high number and some of those may be re-submitted for New Orleans in 2017. Nevertheless, we need to take the opportunity to develop our own symposia for New Orleans. Proposals are due on August 24, 2016. While our Divisional Program Officer, Louise Page, describes in her message below the specifics of how to develop a proposal, here I want to just mention some general points for those considering proposing a symposium.



Here's the way it works: The organizers should come up with a slate of speakers and ask them to present, getting confirmation/commitment. Try to get some local speakers (less cost) and some from further afield, which will be funded. It is important to get a mix of speakers (gender, new and veteran researchers, and anything else that adds to the diversity of the symposium). This will not only make for a more interesting symposium, but should also garner more support from the Program Committee in aligning better with the funding priorities of the Society. It is important that symposium speakers know that they are committing to writing a paper on the topic of their presentation for the journal *Integrative and Comparative Biology* within a set period following the meeting.

With regard to funding, the divisions each have \$2000 to support symposia (i.e., for symposia sponsored primarily by our division or other divisions) as well as an accumulated fund of \$2500 that our division has as a result of member dues. The Society will additionally try to help fund airfare for foreign speakers. Clearly it's best if our division submits at least two symposia proposals so that the program committee has options when reviewing proposals.

Ideas for symposia for New Orleans that were raised at the DEDB business meeting included "basal metazoans – sponge cell/developmental biology," "unifying EVO-DEVO," "Epigenetics in Evo-Devo (both Waddingtonian and chromosomal modification types)." (Note: International SICB members need to work with SICB members who are US citizens in order to submit a meeting proposal to NSF.) Another idea put forward at the business meeting was that, even though it is too late to propose symposia for the Portland meeting, we could still propose to organize a session of 5-minute presentations – for example, by members of a lab or with a focus on local research groups – that would have a distinct DEDB flavor, somewhat like a mini-symposium. If you have any feedback on this idea or have additional ideas for either Portland or New Orleans, please email our Program Officer, Louise Page, and me early on and we can help get you started or help work out specifics.

Discussion on Best Student Oral Presentation Competition – Although both Amanda and Louise cover this topic below, it is worth repeating. Briefly, it has been proposed that we follow the lead of some other divisions that have begun to select a slate of competitors who then all compete in a single oral session dedicated to the competition. Anticipated ad-

vantages include enhanced quality of talks, as well as more consistent judging (same judges, side-by-side comparison for all presentations). Those present at the business meeting voted and passed the proposal. This comes with a bit of work for our new Secretary, Greg Davis, who will now need to organize a committee to select among the abstracts submitted by authors who indicated a desire to be considered for the competition. The plan is that we will notify students early on as to whether they have been selected and give those not chosen for the competition the option to enter the poster competition instead (that is, if they still want to compete for a prize). The poster competition procedures will not change.

A new evo-devo society: the Pan American Society for Evolutionary and Developmental Biology – At our business meeting we also discussed the formation of this new evo-devo society and how best to integrate our respective efforts and engage the energy surrounding this new society. Pan-Am Evo Devo arose out of discussions held at an [NSF-sponsored workshop held at NESCent](#) in December 2014. Cassandra Extavour, who is the next Chair of our division (2017 – New Orleans), was one of the organizers of the workshop. Although she's currently on sabbatical in New Zealand and was thus unable to attend the WPB meeting, we have communicated about the goals and energies of Pan Am Evo-Devo, and her thoughts on how to strengthen the two societies. She relayed that attendees of the NESCent workshop did discuss the potential overlap between Pan Am Evo-Devo and DEDB at SICB, but felt that, more than anything, a society that entirely reflected Evo-Devo, met only every 2 years, and was offset from SICB by 6 months (meetings are to be held in the summer) would fulfill the current needs of a broad spectrum of evolutionary and developmental biologists. In looking through the minutes of the discussions held at the NESCent workshop, it is interesting to note that in every way people held the SICB model of meetings to be the gold standard. Thus there is clearly a strong feeling that this new society will foster new interest in Evo-Devo, and in so doing will, in the long run, increase both attendance at SICB and the diversity of symposia DEDB is able to offer. The preliminary program for Pan Am Evo-Devo is now online, registration is open, and it looks to be a really great meeting! <http://www.evodevopanam.org/>



Message from the Program Officer

Louise Page, DPO.DEDB@sicb.org

It was great to see many of you at the West Palm Beach meeting in January. DEDB was pleased to support the symposium "Origins of Neurons and Parallel Evolution of Nervous Systems: The Dawn of Neuronal Organization" organized by Leonid Moroz. Several other symposia also included presentations of interest to DEDB folks, including "Integrative Biology of Crocodylia" (Valentine Lance) and "Integrative and Interactive Symposium Linking Crustaceans and Insects" (Jon Harrison & Sherry Tamone). Outside of the Symposia, the meeting featured 8 oral presentation sessions focused on DEDB themes. Many of those featured outstanding presentations by our division's graduate students. I'd like to extend a big thank you to all who capably handled the jobs of Chair and co-Chair for these sessions and kept things on time, or at least the next best thing when a fire alarm required us to temporarily clear the building. The WPB meeting also included 20 DEDB posters organized into 5 themed clusters within the afternoon poster sessions.

At the DEDB business meeting it was decided to try a new procedure for the Best Student Presentation (BSP) competition at the 2016 meeting in Portland. A committee will be selected to review the submitted abstracts from graduate students in DEDB who request consideration for the Best Student Oral Presentation competition (a graduate student must be the presenting author). Seven of these abstracts will be selected for a dedicated BSP session during the meeting and the same panel of judges will judge all of the talks in this session. Those not selected for this BSP session will be given the option of either entering the poster competition or being scheduled in one of the other DEDB oral presentation sessions that will not be judged. This format has been used for several years by some of the other SICB Divisions and it is generally well liked. A major advantage is that all presentations in the competition will receive much greater uniformity of judging than was possible in the past. It will not be necessary to submit an extended abstract to be considered for the BSP competition, as is the practice in some other divisions, but I encourage prospective competitors to make their abstracts as informative as possible. There will be no change to the procedure for the Best Student Poster Presentation competition.

Finally, I very much encourage all of you to consider organizing a symposium for the 2017 SICB meeting planned for New Orleans. This seems a long way off but the proposals need to be submitted by August 24th of this year. Decisions about successful applications will be made at the program officers meeting in late September, so that you will have sufficient time to apply for funding for your symposium. The form for [symposium proposals](#) is now available on the SICB website. Please don't hesitate to contact me (DPO.DEDB@sicb.org) if you need further instructions or have any symposium ideas you'd like to explore. Organizing a symposium is a great opportunity to bring together colleagues in your field for stimulating discussions, to exchange information about techniques, and to explore possible opportunities for collaborative research.

Message from the Student/Postdoctoral Affairs Representative

Amanda Kahn, kahn@ualberta.ca

I hope everyone who attended our recent meeting had a fantastic time. The Evo-Devo Dinner Dates were another huge success, with 17 hosts volunteering to take out 28 students. Thank you to all who volunteered to host students. I hope the meet-ups were valuable for students and hosts alike.

One of the major discussion points covered during the DEDB business meeting was the need for special symposia hosted by DEDB at the 2017 meeting in New Orleans (yes, planning starts this early) and it would be great to get postdocs and students involved. If you have an idea for a special session and want to help organize it, send an email to our Program Officer, Louise Page (dpo.dedb@sicb.org), for more details. The benefits of organizing a symposium include the opportunity to design a session about a topic that you are passionate about, potentially creating a special issue of *Integrative and Comparative Biology* with publications from your session, and adding an extra line to your CV.

Congratulations to DEDB members Katherine O'Shaughnessy and Kristen Koenig, winners of the DEDB Best Student Oral Presentation and Poster awards, respectively. For next year's meeting, DEDB has changed its process for the Best Student Oral Presentation Competition. Following the lead of some other divisions, DEDB will create a selection committee that selects a set of competitors from submitted abstracts, and then puts those speakers into a dedicated



session. Procedures for the poster competition will not change.

As always, feel free to contact me (kahn@ualberta.ca) with questions, suggestions, or comments about anything related to students, postdocs, or DEDB. Have a great and productive year!

Message from the Secretary

Greg Davis, Secretary.DEDB@sicb.org

Another fantastic meeting for our division this year! As mentioned by Sally and Louise, this success was largely driven by the outstanding efforts of the symposium organizers, and we are now very keen to see new symposium proposals for the 2017 meeting in New Orleans, so send them in! Also thanks to Amada Kahn, our Student/Postdoctoral Affairs Committee Representative, for continuing to liaison between students, postdocs and faculty and for keeping the Evo-Devo Dinner Dates alive and well.

I have just taken over as Divisional Secretary from Brad Davidson, who has done an outstanding job these last few years and not a small amount of handholding for my benefit. Thanks Brad! I am looking forward to being more involved in the Division and facilitating the important work it does. Looking forward, even though I did just officially take over, as it turns out, we need to have an election this spring for the next Divisional Secretary, who will take over in 2017. We are fortunate to have two excellent candidates for the office. Please make sure to read their statements below and cast your vote during the election in May.

[Minutes of the 2015 DEDB Business Meeting in West Palm Beach, FL.](#)

Candidates for Secretary-Elect

Julia Bowsher



Current Position: Assistant Professor of Biology, North Dakota State University, Fargo, ND.

Education: B.S., Ecology and Evolutionary Biology, Yale University (1999); M.S., Zoology, University of Canterbury, Christchurch, NZ (2000); Ph.D., Evolution, Duke University (2007).

Professional Experience: Assistant Professor, Department of Biological Sciences, North Dakota State University (2010-present); Postdoctoral Fellow, Center for Insect Science, University of Arizona (2007-2009).

SICB Activities: Member since 2008.

Other Memberships: Society for the Study of Evolution; Pan American Society for Evolutionary Developmental Biology.

Research Interests: Developmental processes can influence evolutionary outcomes in many ways, from constraining the variation available for selection to providing plasticity under different environment conditions. Specific topics investigated in my laboratory include the evolution of novel structures in sepsid flies, and the developmental physiology of leafcutter bees and honeybees.

Goals Statement: I attended my first SICB meeting as a postdoc and was impressed by the broad range of research presented at the conference. As a faculty member, I have returned every year and brought along my students. More than any other society, SICB has been the home for evo-devo in the US because of the active role of the Division of Evolutionary Developmental Biology. Should I become elected Secretary, I will help to maintain this role for DEDB. The future of any field lies in the students and postdocs. SICB is a great meeting for students because of the financial support



and the representation from many fields. I believe that continuing and enhancing the role for students and postdocs in the activities of the DEDB will be critical in maintaining the forward-thinking atmosphere of the Division. The professional development of our students relies on the active engagement of our senior members, including faculty members of all ranks. I will work to increase the opportunities for junior members to connect with senior members through the dinner dates program and the judging of presentations and posters. I look forward to working with the other officers to achieve these goals.

Andreas Heyland



Current Position: Associate Professor, Integrative Biology, University of Guelph, Ontario, Canada.

Education: B.Sc., Zoology, University of Zurich (1997); M.Sc., Marine Biology/Zoology, University of Zurich (1998); Ph.D., Zoology/Neuroscience/Evolution/Development, University of Florida (2004).

Professional Experience: Associate Professor, Integrative Biology, University of Guelph (2014-present); Assistant Professor, Integrative Biology, University of Guelph (2008-2014); Swiss National Science Foundation Post-doctoral Fellow (2006-2008); Post-doctoral Fellow, Whitney Laboratory for Marine Biosciences (2004-2006).

SICB Activities: Member since 2001.

Other Memberships: NASCE; Endocrine Society; Pan-American Society for Evolutionary Developmental Biology; Society for Neuroscience.

Research Interests: I am broadly interested in life history theory and development. My laboratory uses novel functional genomics approaches to study the endocrine and neuroendocrine systems of aquatic invertebrates, primarily sea urchin and *Daphnia* species. Specifically we investigate the function and evolution of hormonal and neurotransmitter signaling systems in the regulation of development and metamorphosis. More recently we applied eco-toxicogenomic approaches to understand endocrine disruption in aquatic ecosystems. Specifically, we are using *Daphnia* and sea urchins as molecular multi-cellular biosensors for water quality assessment.

Goals Statement: I joined SICB as a graduate student in 2001. The yearly meetings of the Society have been a continuing inspiration for me in how interdisciplinary and integrative Biology can be accomplished. With respect to DEDB I am excited about how this division has developed and showcased many of the new developments in the field during the annual meeting. 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.

