



## Division of Ecology and Evolution

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### DEE Officers & Representatives

#### Art Woods

Chair 2011-2013

#### Michael Angilletta

Chair-Elect 2012-2013

#### Michele Nishiguchi

Past Chair 2011-2013

#### Aaron Krochmal

Secretary 2011-2013

#### Elizabeth Dahlhoff

Program Officer 2012-2014

#### Abigail Cahill

Student/Postdoc Representative  
2011-2014

#### Michael Sears

ICB Editorial Board Representative  
2012-2017

### Message from the Chair

Art Woods

The SICB meeting in Charleston was fantastic, as usual, and it was great to see many of you there. DEE provided support toward a total of seven symposia in Charleston, and they were exciting, well-attended, and thought provoking—congratulations to the symposium organizers!

I'd also like to announce a few changes among the DEE officers. Elizabeth Dahlhoff is the new DEE Program Officer. She takes over from Mike Sears (thanks Mike!). In addition, Mike Angilletta is Chair-Elect of DEE, and he will take over from me at the end of the 2013 meeting. Aaron Krochmal is our current Secretary, and he has been making heroic efforts to improve the newsletter, expand society-wide communication, and to run the DEE competitions at SICB (thanks Aaron!).

As we look forward, there are few impending changes in the way DEE operates on which I'd like your input (send it to me at [art.woods@mso.umt.edu](mailto:art.woods@mso.umt.edu)). At the business meeting in Charleston, the DEE officers and participants had substantive discussions about the future of DEE, focusing on the problem of how to ignite more and better participation in the division. Our overall conclusion was that DEE has to offer more to its members, at several levels, including:

**Symposia that are higher-profile, broader, and more integrative.** We'd like our upcoming symposia to appeal to current DEE members while also pushing toward new conceptual boundaries. Similarly, we'd like to do a better job of reaching out to microbial ecologists and plant physiologists. Folks in these groups often attend other meetings, but the integrative and organismal focus at SICB, and the outstanding support for students, may be quite attractive to a subset of them. We always welcome symposium ideas, and I encourage you to discuss ideas with us early and often.

**Better communication with members.** In an informal poll at the business meeting, most participants said they did not read the newsletter. This is disheartening because we've made some substantial improvements to the newsletter. In response, we've started a process of adding a new style of communication – our DEE email news updates, which hopefully, you've already begun receiving. These updates will involve more frequent but short emails from the DEE secretary, which contain links to news items on the DEE subpages within the SICB website. These updates will be involve some redesign and updating



of the DEE information on that page with the goal of having it turn into a dynamic hub of information about DEE issues.

**Better events at SICB meetings.** It has been some time since the DEE contributed substantial value-added content to an SICB meeting. We do support excellent symposia (obviously important) and our social is a lot of fun, but we'd also like to start a series of other events that address needs of the DEE community. Therefore, I'm asking you for ideas on other events we could run. These events could provide concrete skills on particular aspects of being a scientist—like scientific writing, using R, statistical issues generally, giving talks, and writing proposals. These practical seminars may appeal especially to students and beginning scientists. Similarly, we could hold conceptual workshops on big topics in DEE, perhaps as a way to generate interest in future symposia on the same topics. Given the diversity of people that go to SICB, the meeting could be a powerful mechanism for getting critical masses together.

## Message from the Program Officer

*Elizabeth Dahlhoff*

I am pleased to announce a call for symposium proposals for the 2104 meeting in Austin, Texas. We have seen some captivating symposia the past few years—some of the best we have ever sponsored. To capitalize on these successes, we continue to encourage our membership to submit proposals for integrative, conceptual topics of broad interest to all ecologists and evolutionary biologists. While we love symposia directed towards crunchy things, slimy things, or furry things that wiggle, there are a lot of great integrative and comparative biologists out there working on plants and bacteria, who are natural intel-

lectual partners. I think it would be great to bring some of these researchers and their ideas into the society, and DEE would be a perfect home for them. What better way to introduce them to this society than to invite them to be part of a symposium?

If you are interested in submitting a symposium proposal, I encourage you to contact me immediately and to submit proposals by the 30 June 2012; this will allow us to easily meet the mid-August society deadline. Anybody who has a symposium idea brewing out there should feel free to contact me anytime ([edahlhoff@scu.edu](mailto:edahlhoff@scu.edu)). The division is especially interested in submissions from junior members, and as always, we are looking to broaden diversity in our membership. Great symposia make a great society. Let's keep the ball rolling!

This is a great time to be associated with DEE. There is so much exciting science going on right now—climate change, habitat fragmentation, conservation, effects of environmental toxins, etc., and we are right in the middle of it. If you have not been around in awhile—come back! We have some cool symposia brewing for the next meeting, which is in the spectacularly beautiful city of San Francisco. New to DEE? Be sure to come to the meeting, and meet your colleagues, show us your work! Meetings are where we make our connections, so participation is key. One project we have in the pipeline is developing avenues for additional financial support for student participation (including undergraduates)—keep your eye out for that. Hope to see you in San Francisco!

### Best Student

It's our pleasure to announce the Best Student Talk and Best Student Poster from the 2012 meeting:

**BEST TALK:** Benjamin Sandkam, Simon Fraser University, [bsandkam@sfu.ca](mailto:bsandkam@sfu.ca) "Genomic and lighting environments influence color vi-



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sion in guppies" co-authored by C. T. Watson, J.B. Joy and F. Brede. Benjamin's abstract can be found [here](#).

Benjamin is interested in the interplay between sensory systems and sexual selection by way of mate choice. His work focuses on guppies (*Poeciliareticulata*), where females prefer more colorful males. For a female to make a mating decision, a male must first show an attractive color. Benjamin uses ecologi-

cal and evolutionary approaches to look at how the visual system impacts mating behavior by studying the opsins, transmembrane proteins which facilitate color vision in the cone cells. By building a phylogeny of the opsin genes throughout the Poeciliidae family, he has been able to correlate changes in opsin repertoire with the occurrence of color-based mating systems.



**BEST POSTER:** Jacob Peters, University of Wyoming, [jpeter50@uwyo.edu](mailto:jpeter50@uwyo.edu) "Trophic and metamorphic discrimination of hydrogen isotopes in cabbages (*Brassica oleracea*) and cabbage loopers (*Trichoplusiani*): Implications for stable isotope ecology" co-authored with N. Wolf, C.A. Stricker, T.R. Collier and C. Martinez Del Rio. Jacob's abstract can be found [here](#).

Jacob's interest lie in the rapid microevolutionary development of novel, large-scale dispersal behaviors, such as migration, and the physiological, sensorimotor and biomechanical innovations that facilitate these behaviors. As an insect species develops such dispersal behaviors, its range grows beyond

that of its historical habitat, thereby freeing it of many selective pressures that characterized its evolutionary history. Jacob is particularly fascinated by the rapid changes in life history after this release from historical selective pressures and the onset of new pressures.

Benjamin and Jacob and were the top presenters from out of a highly competitive pool of 96 excellent competitors. Congratulations to them both!

The division gratefully acknowledges the support of a dedicated pool of **volunteer judges** who made this important competition possible: Vonnie Shields, Lynn Martin, Aaron Schrey, Karen Mabry, Sarah Woodin, Daniel Speiser, Michael O'Connor, Daniel Bergman, Louise Crowley, Ryan Earley, Jeremiah Jarrett, Andrew Flies, Eric Holm, Sarah Zohdy, Michael Darnell, Alan Harvey, Lacy Chick, Yuxiang Liu, Aaron Krochmal, Philip Bergmann, Peter Zani, Sandi Connelly, Tara Essock-Burns, Ryan Martin, Diane Adams, John Hranitz, Robert Cox, Anabela Maia, Lori Tolley-Jordan, Erik Sotka, Greg Ragland, Zachary Marion, Cynthia Downs, Wendy Reed, W. Alice Boyle, Emily Kane, Michael Dillon, Marion McClary, Daniel Hahn, Christopher Oufiero, Giancarlo Lopez-Martinez, James Biardi, Kenneth Angielczyk, Elizabeth Addis, Simon Lailvaux, Nathan Putman, Ofir Levy, Robert Podolsky, Tracy Langkilde, Elizabeth Walsh, H. Art Woods, Shannon Wells, Lydia Bourouiba Robin Warne, Andrew Kerkhoff, Michael McCartney, Stephen Adolph, Michael Sears and Michael Angilletta

Considering the society's focus on furthering our student members, supporting this award is one of the most important things we do as a division, and we thus encourage other members to help support our student members by signing up to judge the 2013 competition in San Francisco.



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### Message from the Secretary

*Aaron Krochmal*

There are a lot of new developments to report in the realm of DEE communication!

You've likely already received the first of our new, quarterly email updates, our newest way of delivering the most current, relevant DEE news to our members in a quick, easy-to-read format. Keep your eyes peeled for these regular email updates. Got something to share with DEE members? Email it to [akrochmal2@washcoll.edu](mailto:akrochmal2@washcoll.edu) to include it in a forthcoming DEE email update.

The DEE officers have been busy updating and managing the DEE Researcher Database which we maintain to promote our division and the work of our members. If you've not checked out the database, go [here](#) to get a feel for the strength and breadth of our members and their work. To add your research profile to the DEE page, or to update an existing file, send text files (.doc, .docx or .txt), images (.tif, .jpg, .png, or .gif), or movies (.avi or .mpeg) to [akrochmal2@washcoll.edu](mailto:akrochmal2@washcoll.edu).

To further highlight the work of our members, the DEE has recently added a new section to our website – "Hot off the Presses" – featuring current, select publications by divisional members. If you've not already seen this new section, click [here](#). To have your recently-published work showcased in this forum, send the full citation to [akrochmal2@washcoll.edu](mailto:akrochmal2@washcoll.edu).

### Message from the Student/Postdoc Representative

*Abigail Cahill*

Hello to all of the DEE students and postdocs! It was wonderful to meet many of you at this year's meeting in Charleston, SC, and even more wonderful to spend whole week seeing all of the amazing science that SICB student/postdoc members are doing. Thanks also to all of

you who came to the Student Postdoctoral Affairs Committee (SPDAC) workshop on job interviews. We had a great turnout and I hope it was helpful for many. Please feel free to contact me ([acahill@life.bio.sunysb.edu](mailto:acahill@life.bio.sunysb.edu)) with feedback from this year's workshop, as well as suggestions for workshop topics for next year's meeting in San Francisco.

Remember that SICB has many resources for its student and postdoc members on the student section of its website (<http://www.sicb.org/students/>). You can find links to the SICB job board, general career information, and information about the SICB student grants.

I would also like to encourage you to become involved in DEE and SICB as a whole. I have found that going to business meetings, socials, etc., at the annual meetings has allowed me to meet PIs outside of my immediate field. In addition, the Educational Council is trying to build a database of teaching resources for members (<http://www.sicb.org/dl/index.php3>). This is still in its infancy, but I know that many students/postdocs are very interested in good teaching methods and may have material to contribute.

Finally, congratulations to the winners of this year's divisional student awards: Jacob Peters (Best Poster) and Ben Sandkam (Best Oral Presentation).

Good luck to everyone as the field season starts up again for many, and please don't hesitate to contact me with questions or suggestions of how DEE can better serve you. I look forward to hearing from you and serving as a liaison between you and both DEE and SICB.

### DEE Researcher in Focus

**Dr. Justin Boyles.** Justin's interests lie at the intersection of ecology, physiology, and conservation, with two current research foci: thermoregulation in endotherms and white-nose syndrome (WNS) in bats. His research on thermo-



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regulation, which started during a postdoc at the University of Pretoria in South Africa, examines the ecological and evolutionary factors that drive variation in body temperature in mammals and birds. In South Africa, Justin worked with elephant shrews, mole-rats, and freckled nightjars (a nocturnal bird) to test theoretical predictions about how morphological

and environmental factors affect thermoregulation in endotherms from homeotherms to heterotherms. Justin's future research in this area will focus on how this "adaptive thermoregulation" will affect species-specific responses to stressors such as climate change and habitat alteration.

White-nose syndrome is an emerging epizootic causing catastrophic declines in hibernating bat populations in eastern North America. Justin is investigating how the fungus causing the disease alters the physiology and behavior of bats, and he is also involved with research on the thermal physiology of the fungus itself. His work on WNS has led to a number of high profile publications, including papers in *Nature*, *Science*, and *Frontiers in Ecology and the Environment*.

**Minutes from the Division of Ecology and Evolution Business Meeting  
Wednesday 4 January 2012**

[Click here for PDF file on SICB.org](#)

### Candidates for Elections

#### It's election time

The DEE is currently holding elections for Program Officer and Secretary.

#### Candidates for Program Officer

##### Donald B. Miles

**Current Position:** Professor, Department of Biological Sciences, Ohio University

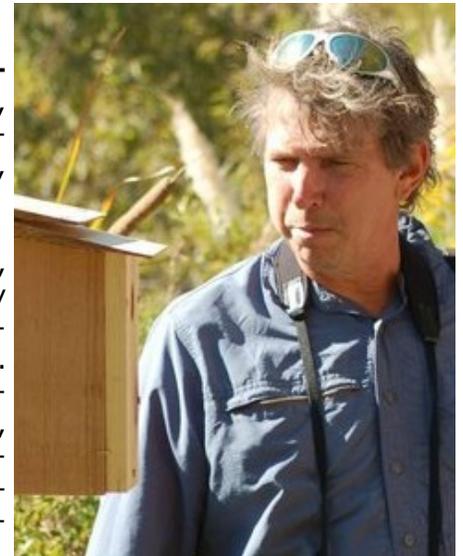
**Educational Background:** B.A., Zoology, University of California, Berkeley, 1978; M.Phil. Biometry, Cambridge University, 1979; Ph.D., Population Biology, University of Pennsylvania, 1985

**Professional Experience:** Lecturer, Cabrini College 1985; Assistant Professor of Zoology, Ohio University, 1985 - 1991; Associate Professor of Biological Sciences, 1991 - 2004; Visiting Associate Professor, University of Washington, 1994-1995; Professor of Biological Sciences, 2005 - present, Ohio University; Visiting Scholar, Museum für Naturkunde, 2008-2009; Visiting Professor, Université Paul Sabatier, Toulouse, France, 2008 - 2010; Visiting Researcher, Station d'Ecologie Experimental du CNRS à Moulis, 2007 - 2012.

**SICB Activities:** Symposium organizer (1992)

**Other Memberships:** American Society of Naturalists, Ecological Society of America, Society for the Study of Evolution

**Research Interests:** The research in my lab covers two themes. First, I am involved in a project focused on predicting organismal





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responses to climate change and anthropogenic stressors. This aspect of my research integrates thermal biology, reproductive mode, and behavior in lizards to generate models predicting extinction risk. Second, I am interested in the ecological and evolutionary consequences of variation in physiological performance with an emphasis on locomotion systems in lizards.

**Statement of Goals:** One of my early professional meetings was the American Zoologist Meeting at Philadelphia. I recall the high quality talks given at each session, but more importantly I was struck by the amount of interaction among the participants. I am excited to have the opportunity to become involved with organizing the scientific program for DEE. The Division of Ecology and Evolution has members whose research covers themes central to all other disciplines in biology. Because, the study of ecology and evolution is enhanced by collaboration with other disciplines, we should be one of the leading divisions in SICB. My primary goal is to increase member participation in DEE. One avenue for enhancing our membership is to encourage increased participation of graduate students and post-docs in DEE sponsored events. I would work towards providing opportunities for networking among new and old members of DEE, such as promoting targeted socials. A second approach is to sponsor symposia whose topics may appeal to individuals that normally do not attend SICB meetings and are unaware of the breadth of ecological and evolutionary talks. To this end I would continue working with other program officers from other divisions to support cross-cutting themes for Society-wide and Division sponsored symposia. Finally, I would solicit input from members of DEE to increase the breadth of topics and diversity of speakers.

**Peter Zani**

**Current Position:** Visiting Assistant Professor of Biology, Pomona College, Claremont, CA

**Education:** B.A. Miami University, 1991, Zoology; M.Sc. University of Oklahoma, 1995, Zoology; Ph.D. University of Oregon, 1999, Biology

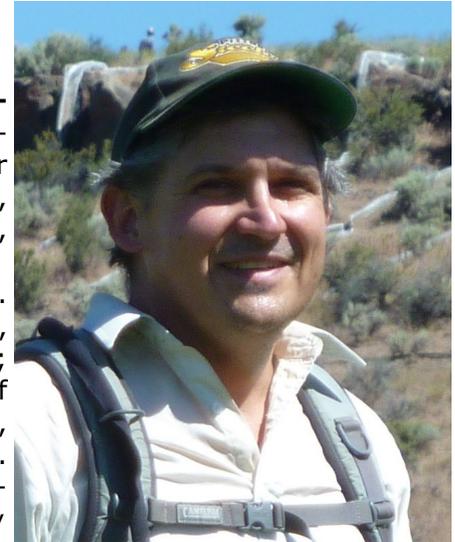
**Professional**

**Experience:** Post-doctoral fellow with Bill Bradshaw and Chris Holzapfel, University of Oregon, 1999-2002; Post-doctoral fellow with Rodger Kram, University of Colorado, 2002-2005; Visiting Assistant Professor, Central College, 2005-2006; Visiting Assistant Professor, Hamilton College, 2006-2007; Visiting Assistant Professor, Lafayette College, 2007-2009; Instructor, Gonzaga University, 2009-2010; Visiting Assistant Professor, Whitman College, 2010-2011; Visiting Assistant Professor, Pomona College, 2011-present

**SICB Activities:** DEE or DAB session Chair 2008, 2009, 2010, 2011; DEE best student presentation judge for 2007, 2008, 2009, 2010, 2011, 2012

**Other Memberships:** Sigma Xi; Ecological Society of America; Society for the Study of Evolution; Society for the Study of Amphibians and Reptiles; American Society of Ichthyologists and Herpetologists; Herpetologists' League

**Research Interests:** I am interested in how animals in seasonal environments experience fitness trade-offs in different parts of their life cycle. For example, animals must reproduce, grow, and store energy during the favorable season, but be able to survive a potentially lengthy and stressful unfavorable season. In changing climates, physio-





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logical mechanisms enabling individual survival may be of critical importance for the continued persistence of a species. Most recently, I have studied the climate-linked physiology and demography related to overwintering in side-blotched lizards, *Utastansburiana*. I test hypotheses by combining laboratory experiments into thermal tolerances, common-garden growth experiments, and semi-natural mesocosm experiments with study of natural populations of lizards in eastern Oregon. Thus, I aim to integrate across the life history of this model species to understand organism-environment interactions in a changing world.

**Goals Statement:** My goals as a life member of the Society for Integrative and Comparative Biology are to serve this society as best as I am able. As a member of the Division of Ecology and Evolution I have previously and consistently contributed in an ad hoc manner as a student judge and session chair. As program officer for DEE my goals would be to continue to make the scientific program of the annual meetings an intellectually stimulating and engaging part of SICB experience.

### Candidates for Secretary



**Michael E. Dillon**

**Current Position:** Assistant Professor, Department of Zoology and Physiology and Program in Ecology, University of Wyoming

**Education:** B.S. in Zoology from The University of Texas, Austin, 1998; Ph.D. in Biology from the University of Washington, Seattle, 2005

**Professional Experience:** 2005-2007, Postdoctoral fellow, University of Washington; 2007-2009, Postdoctoral scholar, University of California, Berkeley; 2009—present, Assistant Professor, Department of Zoology and Physiology and Program in Ecology, University of Wyoming

**SICB Activities:** Member since 2001 (DEE, DCB, DCPB); FGST recipient, 2003

**Other Memberships:** The American Society of Naturalists, The Society for Experimental Biology, The American Physiological Society

**Research Interests:** My lab combines field and laboratory experiments with theory and meta-analyses to address diverse questions at the interface of ecology, physiology, and evolution. Currently, major research directions include: thermoregulation and flight at high altitude; metabolic impacts of climate warming; physiological explanations for body size clines, and the role of changing climate in driving phenological mismatch between native bees and plants.

**Statement of Goals:** I've enjoyed the benefits of SICB membership since my first annual meeting as a graduate student over 10 years ago. More recently, seeing my own students thrive at the annual meeting has cemented my desire to give back to a society and division that has been so critical for my professional development. I believe that DEE is uniquely positioned to further the broader goals of the society while also strengthening division membership and society presence. Ecology and evolution are the disciplines that truly integrate the diverse scientific interests of SICB members and DEE can embrace that natural role through broader participation in cross-cutting initiatives (e.g. "Grand Challenges"), additional co-sponsoring of society-wide symposia, and enhanced visibility on the SICB website. Augmenting the existing student presentation awards with a prestigious annual re-



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search award would both further the development of DEE students and elevate society-wide visibility of DEE. Finally, I'd like to work on making DEE socials "the place to be", because so many ideas and collaborations develop in these informal settings. My affiliations with other divisions are a reflection of my diverse interests and will be a strong asset in accomplishing my goals as DEE secretary—I am excited to reach out to colleagues across SICB in my efforts to make DEE the one division to rule the world.

turtles; Ecology and natural history of herpetiles in disturbed and urban habitats.

**Statement of Goals:** The unique nature of the broad disciplines of evolution and ecology makes these disciplines, and thus, our division, central to SICB. This central position makes the DEE poised to be a leader within the society, promoting new collaborations among divisions for research, legislation and outreach, spearheading the development and implementation of new programming, and advancing the overall aims of the society.



### Aaron R. Krochmal

**Current Position:** Assistant Professor, Department of Biology, Washington College, Chestertown, MD

**Education:** B.S., Union College (Schenectady, NY), 1996; M.S., New York University (1998), Ph.D., Indiana State University 2003

**Professional Experience:** Visiting Assistant Professor, Whitman College (Walla Walla, WA) 2003-2004; Assistant Professor, University of Houston - Downtown

(Houston, TX), 2004- 2008; Assistant Professor, Washington College (Chestertown, MD) 2008-present.

**SICB Activities:** Member since 2001; Secretary, Division of Ecology and Evolution, 2011-present; Session Chair, Division of Ecology and Evolution 2008, 2009, 2010; Judge for Best Student Paper Committee, Division of Ecology and Evolution, 2007, 2011.

**Other Memberships:** American Society of Ichthyologists and Herpetologists, Society for the Study of Amphibians and Reptiles

**Research Interests:** Sensory biology of reptiles, particularly infrared vision in snakes; ecological, physiological and neurological aspects of overland movements in

As the secretary of the DEE, I have made strides to enhance communication and the dissemination of information among members of the division. To this end, I have added two new features to the biannual newsletters - "DEE Researchers in Focus," which gives an in-depth look at life and work of focal DEE members, and "Hot off the Presses," which highlights recent publications by members of the DEE. I have also implemented DEE quarterly email updates which delivers the most current, relevant DEE news to our members in a quick, easy-to-read format. Finally, I have assisted in updating and managing the DEE Researcher Database, which, with final revisions, will soon be searchable.

If reelected, I will continue be vested in societal and divisional aims, engaged in promoting these aims, and proactive in developing new and progressive goals. To this end I will continue to promote and enhance communication both within our division and among all societal divisions, provide insight into novel programming, and expand recruitment efforts by marketing the society through education and outreach. By doing so, I will continue to further and foster both the society itself and interaction and collaboration among its members.