



Division of Ecology & Evolution

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DEE Officers & Representatives

Robert Cox
Chair 2017-2019

Cameron Ghalambor
Chair-Elect 2017-2019

Michael Sears
Past Chair 2017-2019

Michael Dillon
Secretary 2015-2019

Christopher Tracy
Program Officer 2016-2018

Michele Nishigushi
Program Officer-Elect 2017-2018

Ariel Kahrl
*Student/Postdoc Representative
2017-2020*

Message from the Chair

Robert Cox, chair.dee@sicb.org

Hi everyone,

Thanks for another great meeting in New Orleans! As incoming DEE Chair, I'd like to make a few quick announcements and then turn your attention to San Francisco (2018) and beyond.

On behalf of the entire division, I would like to thank Mike Sears for his exceptional service as DEE Chair over the past few years. Under Mike's leadership, we've seen continued strengthening of DEE's position as an integrative hub for many of the society's other divisions. In particular, Mike has played a key role in shaping two events that have become perennial highlights of the meeting – the Huey Award for best student presentation (now a 5-year tradition), and the Beer & Brains mixer for DEE students and faculty (now a 4-year tradition). Please join me in thanking Mike for all of his contributions to DEE!

Speaking of the Huey Award, I hope that many of you were able to check out the great talks and posters featured in this year's sessions. For me, these have quickly become must-see events due to the high quality of the science and presentations by DEE students. Congratulations to this year's winners, Eric Riddell (Clemson University) for best talk and Sara McClelland (Duquesne University) for best poster. You can learn more about their research below. Also, a big round of thanks to all of the DEE members who served as judges for the abstracts, talks, and posters in this year's competition. And students – it's never too early to begin planning for next year's competition in San Francisco! Advisors – encourage your students to submit an abstract!

This year's Beer & Brains mixer was held at The Maison in the French Quarter and was, by all accounts, another huge success. Over 60 students and faculty met up in a casual venue to talk science and discuss issues related to careers in science and academia, with DEE picking up the tab on food and drinks. We've received a lot of positive feedback on this event since its inception in Austin four years ago, and we plan to continue the tradition in San Francisco next year! If you would like to join the organizing committee for Beer & Brains 2018, please drop me a line, and remember that all students selected as finalists for the Huey Award are guaranteed a spot at the event. Also, special thanks go to Eric Riddell for helping to coordinate this year's event.

Finally, two things to consider for future meetings:

First, DEE is supporting some great symposia at the 2018 meeting in San Francisco, and now is the time to begin planning for 2019 in Tampa. Chris Tracy provides a detailed summary below, but



the basics are simple: think of an exciting topic in ecology and evolution, (2) draft up a diverse “dream team” of potential speakers, (3) run your idea by the DEE program officer, and (4) submit your proposal by August 24. For junior investigators, this is a great way to network while impacting your field, plus it will make a lasting contribution as a special volume of *Integrative & Comparative Biology*. And remember that DEE officers are always happy to discuss symposium ideas with you. Just drop us a line!

Second, we’re considering ways to maximize the benefits of DEE membership while building a culture of increased participation and identity within the division. Beer & Brains is one example of a recent success along those lines. Recently, we’ve discussed potential changes to the format of the joint DEE social and the DEE business meeting, as well as the possibility of collecting nominal dues from divisional members at the faculty level. Stay tuned for a survey gauging your opinions on these issues.

Message from the Program Officer

Christopher Tracy, dpo.dee@sicb.org

A few months have passed since the SICB meeting in New Orleans, which brought us unusually cold temps and even some ice – not typical Gulf Coast weather at all! Let’s hope that next year’s meeting in San Francisco doesn’t continue the recent trend of icy streets greeting SICB attendees.

The 2017 meeting was the largest ever, shattering the previous year’s record of 1688 abstracts by more than 250; we had 1940 abstracts and 12 symposia. Once again, the Huey Competition for Best Student oral and poster Presentations drew a sizable audience, and generated a lot of interest throughout the Society.

One of the exciting contributions the Division of Ecology and Evolution brings to the annual meeting is its support of symposia, and it is time to start thinking about potential symposium topics for upcoming meetings. The call for symposium proposals for the 2019 Annual Meeting in Tampa is now open (<http://sicb.org/meetings/2019/callsymp.php>). SICB attracts symposium topics that have broad interest among Society members, and of DEE members in particular. We would like to continue to have symposia sponsored primarily by DEE, in addition to those we sponsor jointly with other Divisions.

If you are interested in submitting a proposal, I ask that you submit them early. The deadline for proposals *reaching the society* is **24 August 2017**. I invite anyone who has an idea or topic for a potential symposium to contact me by e-mail for feedback and suggestions (dpo.dee@sicb.org). A guide to preparing a symposium proposal is available on the SICB Resources page (http://www.sicb.org/resources/SICB_Symposium_Policies_and_Guidelines_Final.pdf). In the meantime, for those of you who already have initial ideas for a symposium and would like feedback about preparing a proposal, feel free to email me for advice. Please attempt to submit preliminary proposals to me by mid-June, so I may offer suggestions to enhance support for the proposals. Proposals that emphasize emerging conceptual and integrative topics of broad interest to the members of SICB as well as our Division in particular are especially encouraged. Junior members of the division should also consider submitting proposals for a symposium or contact other members to organize a topic. DEE has been successful in sponsoring symposia that broaden participation by underrepresented groups. For a perspective on symposia from past meetings (since 2000) check out this link <http://www.sicb.org/archive/symposia.php>.

The 2018 Annual meeting will be in San Francisco (3-7 January), so be sure to mark your calendars! DEE will be sponsoring five symposia, including: (1) From small and squishy to big and armored: Genomic, ecological, and paleontological insights into the early evolution of animals, (2) Understanding the evolution of endocrine system variation through large-scale comparative analyses, (3) Story and Art in Science Communication, (4) Behavioral and Physiological Adaptation to Urban Environments, and (5) Evolution in the Dark: Unifying understanding of eye loss. All 2018 symposia are listed on the SICB website at <http://www.sicb.org/meetings/2018/symposia/index.php>. I hope this year is a productive one for all of our DEE members, and look forward to hearing all about your research in San Francisco!

Message from the Secretary

Michael E. Dillon, secretary.dee@sicb.org

We are electing a Secretary-elect this year. Please VOTE! You’ll see information on candidates at the end of this issue. If you are interested in running for office in the future or know of a great candidate, please contact any of the officers. The more people



we can GET INVOLVED in DEE, the better! The time commitment of officers is minimal, and being an officer provides a behind-the-scenes look at DEE and SICB, and gives you the opportunity to meet a whole slew of new people.

We continue to try to update the DEE Researcher Database, a nice way to promote our division and the work of our members. If you've not checked out the database, [click 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 secretary.dee@sicb.org.

If you have any ideas for ways to improve DEE, please don't hesitate to contact me (secretary.dee@sicb.org) so I can bring ideas before the officers and our members. Change comes from the support and motivation of our members.

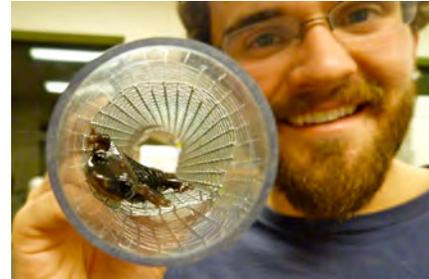
Raymond B. Huey Best Student Presentation Awards

It's our pleasure to announce the winners of the fifth annual Raymond B. Huey Best Student Presentation Awards:

BEST ORAL PRESENTATION:

Eric Riddell, Clemson University. *Potential responses to climate change are improved by physiological acclimation of water loss.*

Salamanders have inspired my deep curiosity in the mechanisms that link an organism to its environment. For my dissertation, I studied the ecological consequences of physiological plasticity in a group of terrestrial salamanders. Building on my experience in physiological ecology, my recent work has focused on using functional genomics to identify potential genetic constraints on adaptation to novel abiotic conditions. Over the longer term, I am interested in the role of physiological trade-offs in adapting to novel climates and in developing a generalizable theory to predict behavioral and physiological acclimation. Moreover, I intend to cast these questions in light of climate change to improve ecological predictions of the threat of warming to global biodiversity. I have also come to appreciate the contribution of SICB to my growth as a scientist. Each meeting reinforces the importance of integrating across disciplines and across levels of biological organization as a way to advance science - a philosophy that I will strive to live by in the future years.

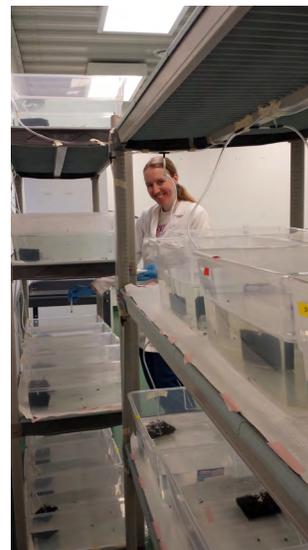


*Eric Riddell, Huey award winner with one of his favorite study organisms, the salamander *Plethodon metcalfi*.*

BEST POSTER PRESENTATION:

Sara McClelland, Duquesne University, *Pesticide-resistant zooplankton do not buffer the effects of chlorpyrifos on amphibian neurodevelopment*

I study the physiological effects of anthropogenic stressors and how different ecological factors can mitigate or compound the effects of these stressors. Over 1.1 billion pounds of pesticides used yearly to control pests can subsequently contaminate natural habitats. Many aquatic environments across the US have tested positive for contamination with pesticide concentrations that are sublethal to vertebrates. These levels are often lethal to aquatic invertebrates and can disrupt aquatic communities. I am researching the direct and indirect effects caused by sublethal pesticide exposures on amphibian anatomy, neurobiology, endocrinology, and behavior. In order to assess these questions I am using anatomical, biochemical and behavioral techniques. I am also interested in how physiological mechanisms can act to prepare animals for environmental insults. Animals from mosquitoes to humans have been shown to better tolerate future assaults when pre-exposed to sublethal levels of a toxin. However, the extent of this protection and how it might impact conservation efforts is not fully known.



Sara McClelland (Duquesne University) studies sublethal effects of pesticides on amphibians.



Congratulations to these outstanding students and to all of the finalists! It is not too early to consider applying for this prestigious award for the 2018 meeting in San Francisco. You can find the application guidelines [here](#).

Minutes from the Division of Ecology and Evolution Business Meeting, 5 January 2017, are available on the SICB website: [click here](#).

Candidates for Elections

It's election time! The Division of Ecology and Evolution is holding elections for Secretary-elect. PLEASE VOTE!

Candidates for Secretary-Elect

Zachary Cheviron



Current Position:

Assistant Professor, Division of Biological Sciences, University of Montana, Missoula, MT.

Education: B.S., University of Evansville (2000); M.S., Illinois State University (2003); Ph.D., Louisiana State University (2008).

Professional Experience:

2009-2010: Postdoctoral Fellow, University of California, Los Angeles; 2010-2012: Postdoctoral Fellow, University of Nebraska, Lincoln; 2012-2015: Assistant Professor, University of Illinois, Urbana-Champaign; 2015 – present: Assistant Professor University of Montana.

SICB Activities: Member since 2008 (DEE & DCPB); author/co-author on 16 presentations at SICB meetings, invited speaker at SICB symposium on Evolutionary Impacts of Seasonality (2017).

Other Memberships: American Ornithologists' Union; Society for the Study of Evolution; Cooper Ornithological Society.

Research Interests: Research in my lab focuses on addressing questions at the interface of integrative physiology, functional genomics and evolution-

ary biology. These questions range from mechanistic investigations of physiological adaptation and acclimatization responses to comparative analyses of the importance of environmental gradients in population divergence, speciation, and biodiversity conservation. We work primarily with birds and mammals that are distributed across broad elevational, latitudinal and salinity gradients using integrative approaches that draw on techniques from functional genomics to physiological ecology.

Statement of Goals: As DEE Secretary, I would work to continue to grow and diversify DEE membership through programs that both raise our profile and strengthen our ties to aligned divisions within SICB. The Huey Award and social events like "Beer and Brains" have been hugely successful in this regard, and I will work to develop similar programs that encourage the recruitment of new members both within and outside of SICB. In these efforts, I would work closely with DEE student/postdoc communities and the SICB Broadening Participation Committee to build on our strong tradition of fostering the development of early-career members in our division. Within the SICB, DEE occupies a unique position to build bridges across the mechanistic strengths represented in other divisions. This position offers a number of opportunities to strengthen our membership. One such opportunity is through the continued development of co-sponsored symposia, which foster new connections across divisions. I will work to strengthen our membership by promoting integrative symposia that advance research in ecology and evolution through mechanistic insights provided by our colleagues in other divisions. Recent years have seen a surge of engagement and excitement within the division; by continuing to build on this momentum, we can strengthen and diversify our membership, and this would be my primary goal.



Martha Muñoz



Current Position: Assistant Professor, Department of Biological Sciences, Virginia Tech, Blacksburg, VA.

Education: B.A., Biology, Boston University (2007); Ph.D., Organismic and Evolutionary Biology, Harvard University (2014).

Professional Experience: Assistant Professor, Virginia Tech (2017–present); Postdoctoral Researcher, Duke University (2015–2017); Postdoctoral Researcher, Australian National University (2014–2015).

SICB Activities: Member since 2009 (DEE); Raymond B. Huey Award Recipient (2014); Broadening Participation Committee Mentor (2017); Huey Award Committee (2016–2017); SICB Public Affairs Committee (2017–2020).

Other Memberships: American Society of Naturalists.

Research Interests: At the broadest level my research focuses on how microevolutionary processes shape macroevolutionary patterns. I typically approach this goal through evolutionary physiology in ectotherms, and am particularly passionate about weaving my findings into our broader understanding of how climate change will impact organismal diversity. To this end, I connect variation in environmental factors, particularly temperature and humidity, with phenotypic variation in behavior, morphology, and physiology at the population level. I then examine how such variation translates into macroevolutionary footprints at deeper phylogenetic scales. My work integrates across various disciplines, including functional ecology, evolutionary biomechanics, and animal behavior.

Statement of Goals: DEE is deeply committed to promoting cutting edge research at the nexus between ecology and evolution. It is a truly interdisciplinary division, one where comparative physiologists, biomechanists, and behavioral ecologists alike could be connected through a mutual interest in the ecology-evolution interface. In my experience, there is always some new dimension or perspective that I discover through DEE, and my work has been deeply enriched by the connections I've made in the division. I have several goals as Secretary of DEE relating to increasing our communication with members of SICB, the other divisions, and our organization's leadership. I would like to increase student participation in the Huey Award through better advertisement within SICB and through increased social media presence. I want to improve our Huey Award poster session through increased coordination and improved advertisement, hence providing a better spotlight for these excellent researchers. I would like the Huey Award symposium to become the premier session for student presentations, and would like to increase membership participation in the session through strategic session planning and better communication with the other SICB divisions. Through increased communication with the Broadening Participation Committee, I would also like to increase awareness of and participation in our Beer and Brains social event.

