



Division of Ecoimmunology and Disease Ecology

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DEDE Officers & Representatives

Carol Fassbinder-Orth
Chair 2016-2018

Travis Wilcoxon
Chair-Elect 2017-2018

James Adelman
Secretary 2017-2019

Gregory Demas
Program Officer 2017-2019

Daniel Becker
*Student/Postdoc Representative
2015-2018*

Message from the Chair

Carol Fassbinder-Orth, Chair.DEDE@sicb.org

SICB New Orleans boasted another impressive turnout with over 1900 submitted abstracts spread across 146 sessions and 11 symposia! DEDE also continues to thrive in SICB, with continued signs of growth in membership and increased participation by students and postdocs. We now have approximately 280 members, with approximately 2/3 of our members being students or postdocs. The future of our division is in their hands, and we strive to support their development in this dynamic new division.

Twenty-four students participated in the Best Student Presentation competition this year (13 oral presentation participants, 11 poster presentation participants). Sarah Knutie helped to coordinate the judging for the Best Student Presentation award this year. A big thank-you goes out to her and to all of the judges who invested their time in making the event a huge success. As we see the student involvement in this event continue to grow, we will need to have continued growth of our judging pool also. We hope all eligible DEDE members will consider judging in 2018! Student and postdoc participation in our lunch with faculty at the 2017 meeting was strong, and we hope to be able to continue to foster activities that promote networking and interaction of students and postdocs, and faculty members in the field.

To keep this division strong and at the forefront of new ideas, collaborations and directions in ecoimmunology and disease ecology, we need strong divisional officers. As Jim discusses in his section, we need to elect a Secretary-Elect and a Program Officer-Elect this spring. Please remember to vote—we have a phenomenal group of candidates!

Our next meetings will be in San Francisco (2018) and Tampa (2019). While our division is not formally sponsoring any symposia in 2018, we are currently searching for members who would be willing to be involved in organizing a DEDE-related symposium for 2019 (proposal due date is August 24, 2017). Please note that DEDE officers are willing to assist symposium applicants with idea formulation or the application process. I believe strong symposia are essential in establishing a vibrant division, so if you have any ideas for symposia, let me or another DEDE officer know. I am looking forward to seeing you all in San Francisco!



Message from the Program Officer

Greg Demas, DPO.DEDE@sicb.org

Despite the unusually blustery cold spell that hit Louisiana this past January, SICB 2017 in New Orleans was wildly successful, breaking a record as the largest conference in SICB history with 1,917 submitted abstracts and 2,240 registered attendees. DEDE also continued its strong and vibrant growth within the society by growing to nearly 300 members, which represents a remarkable 60% increase from the division's inception a few years ago. Perhaps most heartening is that two thirds of our members are students or postdoctoral fellows, which should ensure the continued infusion of new ideas, talent, and innovative research within the division in the coming years. DEDE continues to make key contributions to the general meeting as well, with five oral sessions and five poster sessions this past year. We also co-sponsored two disease ecology/ecoimmunology-related symposia: *With a little help from my friends: Microbial partners in integrative and comparative biology*, organized by Kevin Kohl and Denise Dearing, and *Integrative life history of whole-organism performance*, organized by Simon Lailvaux and Jerry Husak. A big thank-you to the organizers for developing such interesting and intellectually stimulating symposia. Finally, the "Lunch with an Ecoimmunologist" event was also a big success this year. Our sincere thanks to Daniel Becker for organizing this event, which allows trainees to interact with some of the established leaders in the field.

SICB 2018 in San Francisco is shaping up to be yet another outstanding meeting. There are 11 great symposia slated for next year, and I would like to call your attention to two that will be co-sponsored by DEDE: *Behavioral and Physiological Adaptation to Urban Environments*, organized by Jenny Ouyang & Davide Dominoni, and *Measuring Biodiversity and Extinction: Present and Past*, organized by Julia Sigwart. A full list of the 2018 SICB symposia can be found below and at <http://www.sicb.org/meetings/2018/symposia/index.php>.

To ensure that DEDE continues to grow and thrive, it is important that DEDE members continue to host ecoimmune/disease-related symposia. Please send us your symposium ideas! Even if you are not in a position to organize a symposium yourself, but think you have a good idea for one that would be relevant to the division, please let us know. Symposia are eligible for NSF funding, and symposia that have

associated complementary sessions or workshops, and invite speakers from diverse institutions across a range of career stages, are most likely to receive NSF funding. If you have a symposium idea, please start thinking now about submitting a proposal. You can contact me at DPO.DEDE@sicb.org or the SICB program officer at programofficer@sicb.org for more details.

Thank you for your ongoing participation and support DEDE events and to all those who volunteered to judge student presentations. Now on to San Francisco!

2018 San Francisco Tentative Symposium Schedule

From Small and Squishy to Big and Armored: Genomic, Ecological and Paleontological Insights into the Early Evolution of Animals (SICB wide), Organizers: Erik Sperling & Kevin Kocot; Sponsors: DEEB, DEE, DIZ, DPCB, & AMS

Spatial Scale and Structural Heterogeneity in Skeletal Muscle Performance, Organizers: David Williams & Natalie Holt; Sponsors: DCB & DVM

Evolution in the Dark: Unifying Understanding of Eye Loss, Organizers: Megan Porter & Lauren Sumner-Rooney; Sponsors: DEEB, DEE, DIZ, DNNSB, DPCB, AMS, & TCS

Story and Art in Science Communication (SICB wide), Organizers: Sara Elshafie, Stuart Sumida & Bram Lutton; Sponsors: DAB, DCB, DCE, DEEB, DEDE, DEE, DIZ, DNNSB, DVM & AMS

Sensory Feedback and Animal Locomotion: Perspectives from Biology and Biorobotics, Organizers: Brett Aiello, Jessica Fox & Gary Gillis; Sponsors: DAB, DCB, DNNSB & DVM

Understanding the Evolution of Endocrine System Variation through Large-scale Comparative Analyses, Organizers: Maren Vitousek, Jerry Husak & Michele Johnson; Sponsors: DAB, DCE, DCPB & DEE

Science in the Public Eye: Leveraging Partnerships, Organizers: Martha Merson, Nick Hristov & Louise Allen; Sponsors: DAB, DCB, DCE, DEEB, DNNSB & DVM

Integrative Biology of Sensory Hair Cells, Organizers: Duane McPherson & Billie Swalla; Sponsors: DEEB, DNNSB & AMS



Inside the Black Box: The Mitochondrial Basis of Life-history Variation and Animal Performance, Organizers: Karine Salin & Wendy Hood; Sponsors: DCE & DCPB

Behavioral and Physiological Adaptation to Urban Environments, Organizers: Jenny Ouyang & Davide Dominoni; Sponsors: DAB, DCE, DCPB, DEDE & DEE

Measuring Biodiversity and Extinction: Present and Past, Organizer: Julia Sigwart; Sponsors: DEDE, DIZ & DPCB

Message from the Secretary

Jim Adelman, Secretary.DEDE@sicb.org

Thanks so much to everyone for a great meeting in New Orleans—it was fantastic seeing so many great colleagues and presentations! I join the other officers in enthusiasm for another great showing in San Francisco next January. I'd also like to thank Travis Wilcoxon (former DEDE Secretary and now Chair-Elect) for all of his advice and for leaving me a wonderful set of tools to take over the duties of Secretary. I'll certainly endeavor to do the same when I pass the torch.

As you'll see below, we will be having elections for two positions this May: Program Officer-Elect and Secretary-Elect. Successful candidates will take on the full duties of Program Officer and Secretary immediately following the annual meeting in 2019. We're lucky to have a wonderful pool of candidates willing to serve—please read through their bios and don't forget to vote in early May!

A big shout-out to Sarah Knutie for a wonderful job coordinating the judging for the DEDE student poster and presentation competition. This year we had another strong showing, with 24 students participating. I join the other officers in congratulating Kendra Smyth (Duke University), who won Best Student Poster, and Daniel Becker (University of Georgia), who won Best Student Oral Presentation. Both will receive a \$150 cash award and a one-year subscription to *Functional Ecology*. PIs, please encourage your students to participate next year—it's a great opportunity.

Although our newsletter only appears twice a year, I want to remind everyone that we can also use the Monthly Member Updates to share information about meetings, workshops, or other opportunities for in

ecoimmunology and disease ecology. If you have announcements or information you'd like to share with DEDE members, please send that to me (Secretary.DEDE@sicb.org) no later than the 4th of any given month. I'll make sure that gets into the Monthly Member Updates.

Looking forward to seeing everyone next January and in the meantime, have a safe and productive spring!

Message from the Student/Postdoctoral Affairs Committee Representative

Daniel Becker, dbecker@uga.edu

Kudos to another excellent student and postdoc turnout at SICB 2017. Our hosted lunch meet-ups with faculty working on ecoimmunology and disease ecology went well, with attendance by four faculty and 13 students and postdocs. Interests ranged from birds and stress physiology to the microbiome of wild amphibians and primates. We'll be organizing another series of meet-ups for SICB 2018 in San Francisco; if you'd like to see a particular area of research represented, or if you'd like to volunteer as a faculty member, please email me at dbecker@uga.edu.

One topic raised at our business meeting was to garner more involvement in our social media platforms. [Our Facebook page](#) and [Twitter \(@SICBDEDE\)](#) accounts have a net 266 followers, which is almost double our following from this time last year. Our goal is to use these accounts more and more to broadcast professional development opportunities and to highlight work from our DEDE members. Feel free to tag us in announcements of papers, grants, and other news with [@SICBDEDE](#). I encourage you all to follow these two accounts if you aren't already doing so.

Thanks again for the great attendance at SICB 2017 and for the strong showing at our DEDE meet-up events. I'm looking forward to seeing everyone again in San Francisco.

DEDE Minutes of the Business Meeting ([click here](#))



2017 Officer Election Nominees

This year DEDE members will vote for a Program Officer-Elect and a Secretary-Elect. Successful candidates will become officers-elect in 2018, with the duties of Program Officer and Secretary to begin in 2019. We are thankful to have such a large pool of talented and dedicated nominees willing to serve in these positions. Please read over the nomination profiles for each candidate. Elections will take place in early May, so be on alert for an email with a link to the election ballot.

Program Officer-Elect

Cynthia J. Downs



Program Officer-Elect Candidate, Dr. Cynthia J. Downs.

Current Position:

Assistant Professor,
Hamilton College,
Clinton, NY.

Education: Ph.D.,
Ecology Evolution &
Conservation Biology,
University of Nevada,
Reno, NV; B.S., Envi-
ronmental and Forest

Biology, State University of New York, College of Environmental Science and Forestry, Syracuse, NY.

Professional Experience: 2012-2015, Postdoctoral Scholar, Natural Resources & Environmental Sciences, University of Nevada, Reno, NV; 2011-2012, Blaustein Postdoctoral Fellow, Mitrani Department of Desert Ecology, Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev, Israel.

SICB Activities: 2015-2017, Student Support Committee; 2014-2015, DEDE Student/Postdoctoral Affairs Committee representative; 2014, Symposium organizer "Methods and Mechanisms in Ecoimmunology;" 2017, Session Chair; 2014-2016, DEDE Student Presentation Judge.

Other Memberships: American Association for the Advancement of Science; American Physiological Society.

Research Interests: Energetic and nutritional regulation of immune response, allometry of immune defenses, physiological trade-offs.

Statement of Goals: I first attended a SICB meeting early in my graduate career, and SICB quickly became my home society. I was drawn to the integrative nature of the work presented and I appreciated the welcoming spirit of the members. In addition to the general program, the diverse and broad topics presented as part of the symposium series have helped shape my scientific perspective and research program. These seminars are a huge strength of our meetings because they introduce new researchers and new concepts to regular attendees of the annual meetings. In the last few years, the number of symposium proposals has declined, although the quality remains high. As Program Officer, I will actively recruit symposium organizers. I will encourage post-docs and junior faculty members to develop symposia because these seminars can be important for career development, providing an opportunity for organizers to establish a reputation as a leader. In addition, I will work with student members of the society to provide opportunities for them to network with symposium speakers.

Susannah French



Program Officer-Elect Candidate, Dr. Susannah French.

Current Position:
Associate Professor of Biology and the Ecology Center, Utah State University, Logan, UT.

Education: B.S.,
University of Illinois
(2002); Ph.D., Biol-
ogy, Arizona State University (2006).

Professional Experience: Post-doc, Biology, Arizona State University (2006-2007); Post-doc, Biology, Indiana University (2007-2009); Associate Professor, Biology, Utah State University (2009-); Associate Editor, *Proceedings of the Royal Society B*; Editorial Board, *Journal of Experimental Zoology A*; Co-editor, special issue on "Ecoimmunology" to appear in *Journal of Experimental Zoology A* (2017).

SICB Activities: Member (2003-present); Judge (DCE); Co-organizer of society wide symposia, Bridging the Gap between Ecoimmunology and Disease Ecology (2011); symposium speaker (2009, 2011, 2017, 2018).



Other Memberships: North American Society for Comparative Endocrinology; American Association for the Advancement of Science.

Research Interests: My research program focuses on how organisms regulate and maintain key life-history processes in the face of a changing environment, especially in response to anthropogenic disturbances. Of particular interest are interactions between the reproductive and immune systems, both critical for health, survival, and ultimately fitness. Our lab uses an integrative approach to examine the mechanisms by which organisms cope with costly, competing demands. Ongoing integrative research in the field and the laboratory investigates the regulation and occurrence of life history trade-offs, and how different types of perturbations, both natural and anthropogenic, contribute to complex energetic interactions.

Goals Statement: I am excited by the possibility to serve as DEDE Program Officer. For the past 14 years, SICB has been my home meeting, providing an important venue for ecoimmunology and disease ecology research. It has been rewarding to see these fields grow from just a few posters and talks to entire sessions and society-wide symposia. Serving as DEDE Program Officer, I would continue to support this growth, while also encouraging cross-divisional and society-wide symposia. SICB offers unique opportunities to bridge previously disparate fields of study and by doing so to create the foundation for new research directions. As Program Officer, I would encourage strong representation of DEDE-centered and cross-disciplinary programs, both at SICB annual meetings and in ICB special issues. Finally, student recruitment and development is at the heart of DEDE's continuing growth and success. I enthusiastically endorse any endeavors by the division to improve support and training for students in ecoimmunology, disease ecology, and interrelated fields.

Fran Sandmeier



Program Officer-Elect Candidate, Dr. Fran Sandmeier.

Current Position: Assistant Professor, Biology, Colorado State University-Pueblo, Pueblo, CO.

Education: B.A., University of California, Berkeley (2001); Ph.D., University of Nevada, Reno (2009).

Professional Experience: Assistant Professor, Colorado State University-Pueblo (2016-present); Assistant Professor, Lindenwood University-Bellefonte (2013-2016); Postdoctoral Researcher, University of Nevada, Reno (2010-2013; advisor: C. Richard Tracy).

SICB Activities: Member, DEE (2001-present), DEDE (2013-present); participated as a symposium speaker in "Mechanisms and Methods in Ecological Immunology" (2014).

Other Memberships: American Society of Ichthyologists and Herpetologists; Society for the Study of Amphibians and Reptiles; Wildlife Disease Association.

Research Interests: My research focuses on how the immune system of reptiles influences disease ecology within populations. In particular, I am interested in how trade-offs between induced and constituent immune function may be mediated by metabolism, seasonality, and temperature – and how that affects the prevalence of common pathogens in natural populations of North American tortoises.

Goal Statement: SICB was my first exposure to scientific meetings in 2003, and I consider the Society as having influenced both my decision to become a professor and my general passion for research. Having worked as an assistant professor at a small, undergraduate institute as well as at a Hispanic-serving institute (currently), I see one of my roles as encouraging under-represented students (broadly defined) to engage in research at both the undergraduate and graduate level. SICB offers terrific opportunities for



students to enter the research community early on in their academic careers, and DEDE in particular offers exciting opportunities for collaboration in a new and growing field. My goals as Program Officer include structuring symposia according to my knowledge of the field, working closely with the other Program Officers (particularly DEE), encouraging the submission of new symposia proposals, and encouraging diversity in our membership base. As a growing division, diversity in all of its forms will assure the growth of this division, foster collaborations, and encourage a diversity of thought that is so crucial to the development of nascent fields of research. I would be honored to serve DEDE, and hope to have the opportunity in this position, and in future capacities.

Laura Zimmerman



Program Officer-Elect Candidate, Dr. Laura Zimmerman.

Current position: Assistant Professor, Biology Department, Millikin University, Decatur, IL.

Education: B.S., Millikin University (2006); M.S., Illinois State University (2009); Ph.D., Illinois State University (2013).

State University (2009); Ph.D., Illinois State University (2013).

Professional Experience: Assistant Professor, Millikin University (2015-); Adjunct professor, Millikin University (2014-15); Watershed coordinator, Champaign County Soil & Water Conservation District (2014-15); Visiting Assistant Professor, Wofford College (2014).

SICB Activities: Member of SICB since 2007; DEDE Best Student paper judge, 2016.

Other Memberships: Beta Beta Beta.

Research Interests: My research interests mainly focus on B cell and antibody function in ectothermic vertebrates and factors that may affect that function, such as temperature and aging. I am also interested in developing new techniques for use in non-model systems.

Goals Statement: SICB has always represented to me an opportunity to learn from a variety of disci-

plines, develop collaborations, and share in the excitement of research with friends and colleagues. My goal as Program Officer would be to build on the work being done in DEDE to present innovative symposia that reflect the wide range of research in ecoimmunology and disease ecology. My goals also include supporting undergraduate research and education while also enhancing opportunities for professional development.

Secretary-Elect

Ken A. Field



Secretary-Elect Candidate, Dr. Ken A. Field.

Current Position: Professor of Biology, Bucknell University.

Education: B.S., University of Vermont (1990); Ph.D., Cornell University (1997).

Professional Experience: Professor, Bucknell University, Lewisburg, PA (2002-present), Postdoctoral Research, University of California, San Francisco (1997-2002).

SICB Activities: Editorial Board Member, *Integrative and Comparative Biology*; DEDE Representative (2014-2020); member of DEDE since 2014; DEDE Best Student Paper Judge 2015; session Co-chair 2016; Meet the PI Lunch Mentor 2016.

Other Memberships: American Association of Immunologists (since 1996).

Research Interests: I have a background in "classical" immunology, where I have used a model organism to study immune cell signaling, cytokine function, and T-cell subset differentiation. For the last seven years, my research has focused on a non-model system (bats) and the study of how immune responses are involved in white-nose syndrome and zoonotic disease transmission. I use next-generation sequencing approaches to bypass the traditional limitations of working with non-model organisms. Using this approach, I have found that, during hibernation, bats with white-nose syndrome can mount a partial immune response to the fungus that causes white-nose syndrome.



Goals Statement: I will be happy to serve as Secretary for DEDE because I think that this division of SICB represents a critical home for ecoimmunology and disease ecology. This field of study is rapidly changing with the application of high-throughput sequencing methods. My experience with these methods and my background in classical immunology will allow me to support my colleagues in this division. I am a strong supporter of the involvement of undergraduate students in research and I will continue to promote student involvement within DEDE. I am also an active advocate for inclusion and I will continue to support mentorship opportunities to extend the inclusiveness of our organization.

Laura D. Mydlarz



Secretary-Elect Candidate, Dr. Laura D. Mydlarz.

Current position: Associate Professor and Associate Chair, Department of Biology, University of Texas Arlington.

Education: B.S., Florida Atlantic University (1996); M.S., Florida Atlantic University (1998); Ph.D., University of California Santa Barbara (2004).

Professional Experience: Associate Professor (since 2013) and Associate Chair (since 2015), Department of Biology, UT-Arlington, Arlington, TX; Assistant Professor, Department of Biology, UT-Arlington, Arlington, TX (2007-2013); Post-doctoral Associate, Cornell University, Ithaca, NY (2004-2006).

SICB Activities: Meeting attendee since 2005; member of DIZ and DEDE; faculty sponsor/mentor for graduate student presentations; invited speaker in Ecological Immunology: Recent Advances and Applications for Conservation and Public Health Symposium, Orlando, FL, 2005.

Other Memberships: I am an active member of the International Society for Reef Studies.

Research Interests: I am a coral reef researcher specializing in coral immunology and eco-immunology. The focus of my lab is to integrate coral immunity in an ecological framework. This work seeks to understand the variability in immunity between species, populations and individuals, and how life history and the environment have shaped these differences.

Goals Statement: I am thrilled with the shape of the relatively new SICB Division of Ecoimmunology and Disease Ecology. I look forward to continuing the hard work of existing DEDE leadership to continue the growth of the division by increasing membership and retention, broadening participation to groups underrepresented in science, and engaging graduate students and post-docs. As an officer in DEDE I will continue advocating for the education and study of Ecoimmunology and Disease Ecology to keep these studies and the division moving forward and continuing to grow. I will work hard as Secretary to promote, organize and disseminate information to the division and its community of scientists and foster communication through the newsletter, social media and websites. The DEDE division plays an important role in uniting the many disease and ecoimmunity communities doing relevant research, from marine to terrestrial systems, from invertebrates to vertebrate models. Attending SICB conferences is typically the highlight of mine and my students' travel schedule, so I look forward to being involved in continuing the successes of DEDE. I look forward to this next chapter in service to the ecoimmunity and disease ecology community and colleagues around the country.

