



Division of Neurobiology, Neuroethology, and Sensory Biology

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DNNSB Officers & Representatives

Michael Baltzley
Chair 2018-2021

Lisa Mangiamele
Secretary 2016-2019

Jeff Riffell
Program Officer 2017-2020

Alexandra Kingston
Student/Postdoc Representative 2016-2019

Message from the Chair

Mike Baltzley (chair.dnnsb@sicb.org)

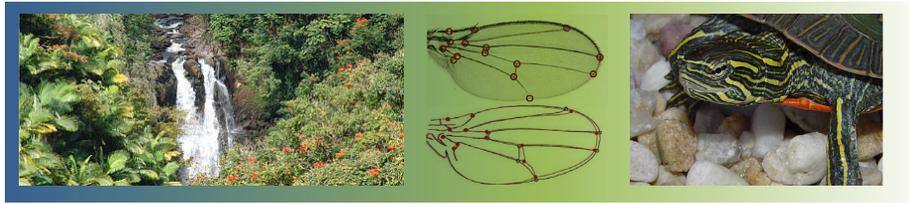
I enjoyed seeing many of you at the SICB annual conference in San Francisco. Once again, our division was well represented with a full schedule of fantastic talks and posters! Thanks to the division members who presented their research, and to our Program Officer, Jeff Riffell, for all his work to make the meeting successful for our division. I also would like to thank our outgoing Chair, Paul Moore, for his leadership over the past 3 years. With the help of the other executive committee members, Paul led the division through substantive changes including a reorganization of our Best Student Presentation Oral Competition and a divisional name change. As I take over for Paul, I hope to help our division continue to grow and maintain a strong and vital role in SICB.

We had great oral and poster competitions for the Best Student Presentation (BSP) awards. I was impressed at the depth of talent in our student membership. The selection process for the eight spots in the BSP oral session was itself competitive. The winner of the best oral presentation competition was Diana Li (Stanford University), with Julie Butler (Louisiana State University) receiving honorable mention. Teisha King (Louisiana State University) won the BSP poster presentation competition. The competition is only possible because of all the divisional members who volunteer to judge talks and posters — thank you for your help!

At our DNNSB business meeting, we discussed modifying the BSP judging process. In the coming months, I will send a judging rubric to division members in order to solicit feedback. After getting membership feedback, the DNNSB executive committee will refine the rubric and send it back out to division members for approval. My goal is to have the rubric posted to the SICB website prior to abstract submission for the 2019 annual meeting so students can see the criteria that we use for judging while preparing their presentations.

In this year's election we will be voting for a new divisional Secretary. Please take a moment to vote! Additionally, the division executive committee will be nominating a new DNNSB Student/Postdoctoral Affairs Committee representative to take over for Alex Kingston at the end of the 2019 annual meeting. If you are interested in serving as our Student/Postdoc rep, please let me know. We also have a new division representative on the editorial board for SICB's journal *Integrative and Comparative Biology* — Petra Lenz is taking over for Rich Satterlie. Thanks to Lisa Mangiamele, Alex, Petra, and Rich for all their hard work on behalf of our division!

Lastly, an ongoing conversation we have been having within the division is how to make connections with other scientific societies. I will be in touch with some ideas, and we will continue the conversation at the 2019 annual meeting in Tampa, FL, but please feel free to send me your input throughout the year. You can contact me at Chair.DNNSB@sicb.org.



Message from the Program Officer

Jeff Riffell (dpo.dnnsb@sicb.org)

The 2018 meeting in San Francisco was a resounding success

The numbers of posters and oral presentations have been steadily increasing year after year, and the number of submitted abstracts for the best student presentation in our division more than doubled when compared to last year. DNNSB co-sponsored 4 of the 11 symposia, including "Integrative Biology of Sensory Hair Cells," organized by Billie Swalla and Duane McPherson (our division's past Program Officer!) and "Evolution in the Dark: Unifying Understanding of Eye Loss," organized by Megan Porter. There were several other great symposia that we co-sponsored, including "Sensory Feedback and Animal Locomotion," organized by Jessica Fox, Brett Aiello, and Gary Gillis.

Symposia for the 2019 Meeting in Tampa

For the 2019 Meeting in Tampa, DNNSB will co-sponsor 6 of the 12 symposia, including "Chemical responses to the biotic environment" organized by Paul Long, Laura Mydlarz, and Beth Okamura, and "The world is not flat: Accounting for the dynamic nature of the environment", organized by Timothy Greives and Rachel Bowden. Additional details about the 2019 symposia are available online: www.sicb.org/meetings/2019/symposia/index.php.

Call for Proposals for Symposia at the 2020 Meeting in Austin

Proposals for symposia for the 2020 meeting in Austin are due August 24th, 2018. If you have a great idea for a symposium, I urge you to submit a proposal. Moreover, please contact me if you want feedback on your ideas. There were many great symposia ideas being bandied around at the business meeting and DNNSB social (e.g., "Jellyfish nervous systems"), so don't be surprised if you receive an email from me encouraging a proposal! The call for symposium proposals can be found at sicb.org/meetings/2020/callsymp.php, and guidelines for the process of developing proposals can be found here: sicb.org/resources/SICB%20Symposium%20Policies%20and%20Guidelines%20Final.pdf.

Message from the Secretary

Lisa Mangiamele (secretary.dnnsb@sicb.org)

We've joined Twitter! Please follow us at @SICB_DNNSB. I would especially like to use this platform to advertise the excellent research of our divisional members, so please tweet me at @SICB_DNNSB or email me if you would like your work highlighted in DNNSB's Twitter feed. I will also keep our account updated with the latest news from our division and will occasionally tweet science news items that are relevant to our members.

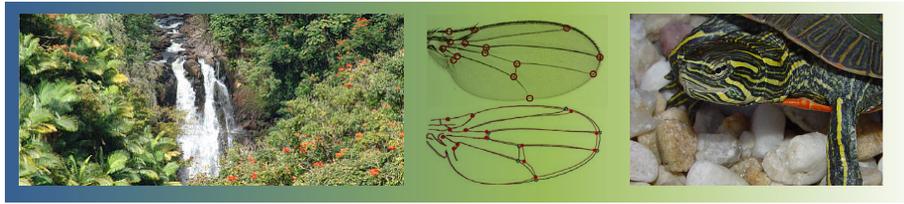
An important reminder about elections: our division is electing a new Secretary this year, so please see below for more information on the candidates and don't forget to vote in May! Look for the election reminder email from SICB Headquarters in your inbox in a few weeks.

Please see the feature below highlighting the research interests of our Best Student Presentation competition winners. We had some excellent entries this year, as Mike mentioned above, and the two women who won the best oral presentation and poster prizes are doing fascinating research.

Finally, I am always looking for ways to keep members better informed about research going on within the Division. If you would like your work to be featured in the fall newsletter, or would like to nominate a colleague's or student's work to be featured, please email me at secretary.dnb@sicb.org.

Message from the Student/Postdoctoral Affairs Committee Representative

Did you know that there is a committee dedicated to serving students and postdocs? The SICB Student/Postdoctoral Affairs Committee is designed to help students and postdocs navigate meetings, offer advice on applying for jobs, and provides a comprehensive list of grant and fellowship opportunities. Have questions? Send them along! You can find the committee information here: sicb.org/resources/studentpostdoc.php3. On the bottom of the committee page, you can find helpful documents. Keep a look out for more information from the committee in the society-wide newsletter, as well. Also, don't forget to renew your membership to access member-only information on the SICB website.



Best Student Paper Awards

Best Oral Presentation: Diana Li, Stanford University

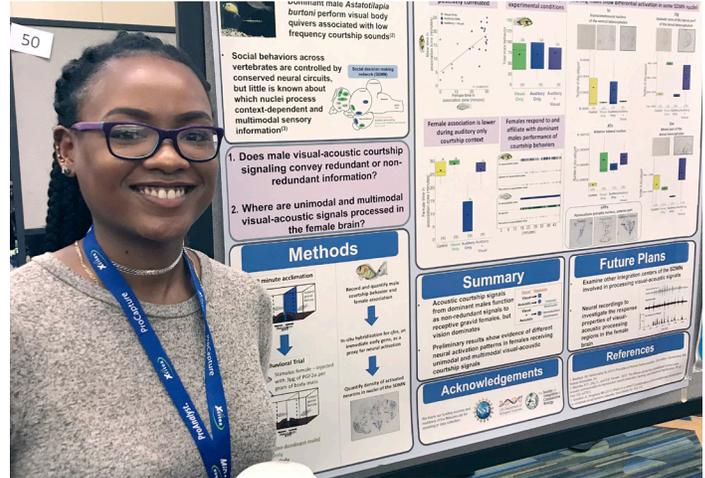
Diana studies how squid swim and the ways that the physical environment influences their swimming. As highly active animals, squid swim to find food and mates, migrate, and escape threats. The success of these behaviors shapes their abundance and distribution in the oceans, but their locomotion is, in turn, impacted by changes in the environment (e.g., temperature, oxygen availability, and fluid dynamic interactions between their bodies and the water as they swim through the ocean). Diana's research focuses on the neurophysiology and biomechanics of squid locomotion using a variety of techniques, including *in vivo* neural recordings and particle image or particle tracking velocimetry, to address the following questions:

- How does low oxygen availability impact adult squid swimming and the underlying neural mechanisms? To what extent can individuals recover after exposure to low oxygen?
- What roles do each of the two parallel neural pathways in adult squid play in determining jet wake-structure and thrust generation during jetting?
- How do vortex rings found in the wake structure of jets from squid hatchlings contribute to thrust generation?

In exploring these areas, Diana aims to offer a more comprehensive view of squid locomotion and provide a foundation for future comparative studies with other swimmers — for example, crayfish and teleost fishes, whose neural mechanisms are well understood.



Best Poster Presentation: Teisha King, Louisiana State University



Teisha's research interests include animal behavior, sensory biology, and bioinformatics. The work she presented at the 2018 SICB conference focuses on investigating the neural basis of multimodal courtship signals. Teisha uses the cichlid fish, *Astatotilapia burtoni*, as a model because males of this species produce visual courtship displays in conjunction with low frequency sounds. Her ultimate goal is to determine if visual-acoustic multimodal signaling conveys redundant or non-redundant information and to identify where these signals are processed in the female brain.

Divisional Candidates for Secretary



Candidate: Shaun D. Cain

Current Position: Eastern Oregon University

Education: B.S. Marine Biology, Florida Atlantic University; M.S. Biology, University of North Carolina at Wilmington; Ph.D. Biology, University of North Carolina at Chapel Hill; Post-Doctoral Fellow, University of Washington Friday Harbor Labs

Professional Experience: I have been a Professor of Biology at Eastern Oregon University for 12 years; one year was spent at Whitman College as a visiting professor for Animal Physiology and Marine Biology. I also serve as Summer Teaching Faculty at



The Friday Harbor Labs, where I co-teach a marine-invertebrate neuroethology course.

SICB Activities: I have been attending SICB since the 1997 meeting. I have presented as a Graduate Student, Post-Doctoral Fellow, and a Faculty member. I have mentored two students who received best-poster awards. I have also served as a judge for best undergraduate presenters when I have attended the meeting as a Faculty member.

Other memberships: AAAS; International Society for Neuroethology; Society for Neuroscience; Sigma Xi

Research Interests: The main goal of my research is to understand the neural mechanisms that underlie orientation and navigation behavior. I am particularly interested in how animals detect and orient to magnetic fields. I focus primarily on nudibranchs due to the amenability of these animals to neuroethological investigations. I use electrophysiological, immunohistochemistry, electron microscopy, and behavioral techniques to investigate these mechanisms.

Goals Statement: My goals as an officer in Division of Neurobiology, Neuroethology, and Sensory Biology are two-fold: 1) to provide service to the scientific society that has guided my career from an early graduate student at UNC-Chapel Hill through attainment of Full Professor at EOU, and 2) continue the expansion and reach of DNNSB through my interactions with ICN, The Marine Biological Laboratory in Woods Hole, The Friday Harbor Labs, and other centers focused on neuroethological research. I would like to see SICB become a destination for more neurobiological researchers that focus on a diverse organisms, especially those that are now asking evolutionary questions about nervous system structure and function.



Candidate: Lisa Mangiamele

Current Position: Assistant Professor, Smith College

Education: B.A. Neuroscience, Colgate University, 2001; Ph.D., Biology, University of North Carolina at Chapel Hill, 2010

Professional Experience: Postdoctoral Fellow, Bowdoin College, 2010-2013. Lecturer. SUNY Plattsburgh, 2013-2014.

SICB Activities: Member since 2006; Divisional Secretary since 2012; DNNSB and DAB divisional affiliations

Other memberships: Society for Neuroscience; International Society for Neuroethology; J.B. Johnston Club for Evolutionary Neuroscience; Sigma Xi

Research Interests: I am a behavioral neurobiologist interested in the mechanisms underlying animal communication. Current work in my lab focuses on how sensory systems integrate communication signals to guide social behaviors, and how those sensory processes are modified by hormones, such as estradiol, on rapid time scales. I am also interested in the evolution of multimodal communication signals and the neural and physiological adaptations that underlie them.

Goals Statement: I enjoy attending the SICB meeting because it allows me the opportunity to communicate with scientists both inside and outside of my discipline, which often helps me to see my own work in a different context. My main goal as Secretary has been to promote ways for members to connect via the semiannual newsletter, particularly by working to feature undergraduate and graduate student research. I also started the LinkedIn and Twitter accounts for our division.