



## Division of Neurobiology, Neuroethology, and Sensory Biology

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### DNNSB Officers & Representatives

Paul Moore  
*Chair 2015-2018*

Lisa Mangiamele  
*Secretary 2016-2019*

Jeff Riffell  
*Program Officer 2017-2020*

Alexandra Kingston  
*Student/Postdoc Representative  
2016-2019*

### Message from the Chair

Paul Moore, [chair.dnnsb@sicb.org](mailto:chair.dnnsb@sicb.org)

Before I get into the heart of the newsletter, I want to extend a very heartfelt thanks to Chuck Derby for serving as our Divisional Program Officer. Chuck did an excellent job of helping people develop timely and interesting symposia, as well as helping connect our division with other divisions. Program Officer is never an easy job, although Chuck made it look quite easy.

In the same vein, I would like to welcome Jeff Riffell on board as the new Program Officer. I fully believe that Jeff will continue the excellent work that Chuck has done while putting his own unique touch on the program.

Finally, I would like to thank Alex Kingston for filling in for Lisa Mangiamele while she was out for maternity leave. Lisa and her newborn son are doing well and she is already back at her SICB duties!

It was a great pleasure to see all of you in New Orleans and especially in attendance at our business meeting and Best Student Presentation session. I am continually impressed with the science and presentation abilities of our graduate students, so it is quite the honor to chair that session. This year's session reflected our division's recent name change in that there were a number of sensory biology and sensory ecology talks. Thanks again to all of the researchers who provided judging help on both the posters and oral presentations. I think we have that aspect of the meeting dialed in. Getting the scores and making final decisions went particularly well this year.

In this year's election cycle, we are voting for a new Chair of the division. This position serves as our voice among the leadership of SICB as well as interacting with other divisions and even organizations outside of SICB. As I mentioned at the meeting, I would like to see some new blood in this position, as I have served three terms over the last two decades. On a more personal note, I am on sabbatical next year and am planning on spending a good portion of the time abroad, so my attendance in San Francisco is not assured (although all of my students will make their usual appearance). Although I will also stand for election, I welcome additional candidates.

As a final note, I would like our division to think about developing a scholarship or grant that would supply our graduate students with some funds for research. Other divisions have some granting opportunities and I think this helps promote the growth of our students. I would welcome input and thoughts on this as the year continues. Contact me at [Chair.DNNSB@sicb.org](mailto:Chair.DNNSB@sicb.org).



### Message from the Program Officer

Jeff Riffell, [dpo.dnnsb@sicb.org](mailto:dpo.dnnsb@sicb.org)

#### The 2017 Meeting in New Orleans: Mind on My Mardi Gras and SICB on My Mind

The fantastic city of New Orleans was similarly reflected in the great science in DNNSB-related sessions at SICB 2017. DNNSB co-sponsored seven symposia. We were the primary sponsor for "Low Spatial Resolution Vision - Function and Evolution," organized by Anders Garm from the University of Copenhagen. This was a great symposium that well represented SICB's diversity in scales (molecules to circuits to whole organisms) and study species. We again had a great turn out for DNNSB's Best Student Presentations. Congratulations to Arianna Tamvacakis for receiving the best oral presentation award, and Janelle Ortega for receiving the best poster presentation award. Next year we're hoping to increase the number of students participating in this opportunity so please encourage your students to apply. And of course, students, postdocs and faculty presented their work throughout the meeting – thanks to all for participating and sharing your work!

#### Symposia for the 2018 Meeting in San Francisco

DNNSB will co-sponsor 4 of the 11 symposia at the 2018 meeting in San Francisco. One symposium to keep an eye (or ear) on is "Integrative Biology of Sensory Hair Cells" organized by Billie Swalla and Duane McPherson (our division's past Program Officer!). We're also the primary sponsor of another great symposium, "Evolution in the Dark: Unifying Understanding of Eye Loss," organized by Megan Porter. There are several other symposia that we will co-sponsor, including "Sensory Feedback and Animal Locomotion," so San Francisco will be a fun and rich meeting with DNNSB-related talks. Details about all the 2018 symposia are available at <http://www.sicb.org/meetings/2018/symposia/index.php>.

#### Submit Proposals for Symposia at the 2019 Meeting in Tampa

Proposals for symposia for the 2019 meeting in Tampa are due August 24th, 2017. If you have a great idea for a symposium, I urge you to submit a proposal. Moreover, please contact me if you want feedback about your ideas. The call for proposals can be found at <http://sicb.org/meetings/2019/callsymp.php>, and new guidelines for the process of developing proposals can be found at <http://sicb.org/resources/SICB%20Symposium%20Policies%20and%20Guidelines%20Final.pdf>.

### Looking into the Future

At the 2017 meeting we had a great discussion on ways to increase DNNSB membership, mechanisms to advertise SICB as a great meeting to present DNNSB-related research, and ways to continue to have forward-looking and interdisciplinary symposia. Please contact me if you have any ideas about DNNSB-related activities at our annual meeting.

### Message from the Secretary

Lisa Mangiamele, [secretary.dnnsb@sicb.org](mailto:secretary.dnnsb@sicb.org)

First, and most importantly, we are electing a new divisional Chair this year, so please see below for more information on both excellent candidates, and **don't forget to vote in May!**

Second, keep checking your email inbox for the society-wide news and announcements via a Monthly Member Update email. On the occasion that there is something to report, divisional news will also be included in that email. If you have anything that you would like to be communicated to DNNSB members, or to all SICB members, please contact me and I will have it added to the update.

Finally, please see the feature below highlighting the research interests of our Best Student Presentation competition winners. 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.dnnsb@sicb.org](mailto:secretary.dnnsb@sicb.org).

**The minutes of the 2017 DNNSB Business Meeting** are posted on the SICB website: <http://sicb.org/divisions/DNB/DNNSBMeetingMinutes2017.pdf>

### News for Students and Postdocs:

Alexandra Kingston, DNNSB Student/Postdoctoral Affairs Committee Representative, [acnahm@gmail.com](mailto:acnahm@gmail.com)

Hello students and postdocs! For those of you who attended SICB New Orleans, congratulations on wonderful posters and oral presentations, and thanks for participating! If we missed you, we hope to see you in San Francisco next year. The SICB website maintains several helpful resources that you can utilize throughout the year. For members (you must log in), SICB has a very nicely organized webpage for external funding: <http://www.sicb.org/grants/external-grants.php>. Also see the "Jobs and Fellowships" link



if you are preparing for the job market: <http://www.sicb.org/jobs.php3>. Finally, you can search and view articles published in *Integrative and Comparative Biology* via <http://www.sicb.org/publications/icb.php3>.

**Focus On DNNSB: Best Student Presentation Winners:** Congratulations to the winners of the 2017 Best Student Presentation competition!

### Best Student Oral Presentation

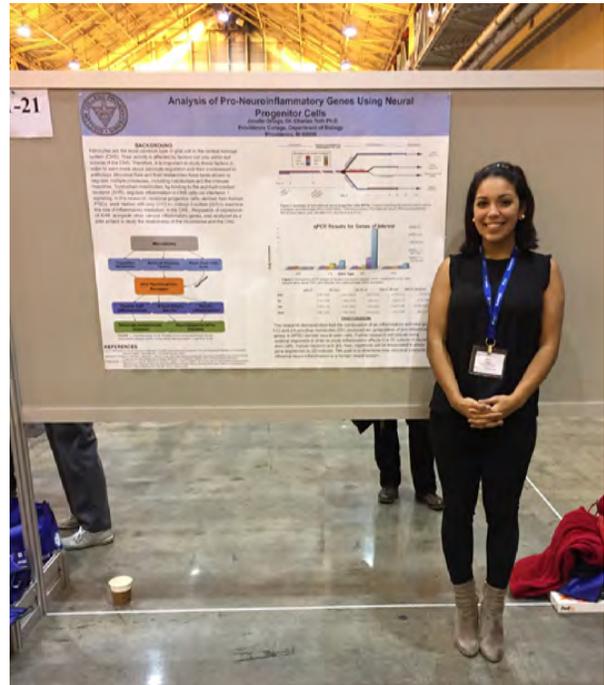
**Arianna Tamvacakis**, Georgia State University  
Talk title: "Differential expression of serotonin receptor genes in homologous neurons underlies species-typical swimming behaviors in Nudipleura sea slugs."



Arianna is a graduate student in Neuroscience. Arianna describes her research interests as follows: "In many invertebrate species, behaviors are controlled by only a few identifiable neurons. What's more, homologues of these neurons can be found across species. I am interested in comparing genetic differences in homologous single neurons, with the aim of understanding how mRNA expression relates to species-specific behaviors. To this end, my dissertation has compared gene expression in single homologous neurons, called C2 neurons, which control species-specific, serotonin-mediated swimming behaviors that independently evolved in Nudipleura sea slugs (Mollusca; Gastropoda). I found species-specific differences in serotonin receptor gene expression in C2 homologues that correlated with species-specific swimming behaviors. Most recently, I have begun developing RNA-seq methods to compare transcriptomic differences across single cells."

### Best Student Poster Presentation

**Janelle Ortega**, Providence College  
Poster title: "Analysis of neuroinflammatory genes using human cerebral organoids."



Janelle is an undergraduate in Biology at Providence College, Class of 2017. Janelle describes her research interests as follows: "My major scientific interests include neurobiology/neuropathology, stem cell research, integrated biomedical research, and oncology. My work this past January at the SICB conference focused on a simple analysis of pro-neuro-inflammatory genes derived from neural progenitor cells. Currently, I am taking this work one step further. I am using cerebral organoids, grown from neural stem cells, to study inflammatory effects in a 3D culture. Our goal is to study how microbial products can influence neuro-inflammation in the human neural system."

### SICB Division of Neurobiology, Neuroethology and Sensory Biology Facebook and LinkedIn Groups:

- To join the Facebook group, go to: <http://www.facebook.com/groups/42744755545/>
- To join the LinkedIn group, search for "SICB Division of Neurobiology" using the **Search Groups box**.



### Divisional Officer Elections

This year we are electing a Divisional Chair for a 3-year term. See below for the candidates' statements.

### Candidates for DNNSB Chair

#### Michael Baltzley



**Current Position:** Associate Professor, Western Oregon University.

**Education:** B.S., Biology, Pennsylvania State University, 1997; Ph.D., Biology, University of North Carolina at Chapel Hill, 2006.

**Professional Experience:** Postdoctoral Fellow, University of California, San Diego,

2006-2008; Visiting Assistant Professor, St. Mary's College of Maryland, 2008-2011; Assistant Professor, Western Oregon University, 2011-2014.

**SICB Activities:** Member since 2000; DNNSB, DIZ, and DAB Divisional affiliations; served as judge for Best Student Presentation Award for DNNSB in 2010, 2013-17.

**Other memberships:** American Microscopical Society; Phi Kappa Phi.

**Research Interests:** Working at an undergraduate institution, I maintain a broad range of research projects in an effort to include students with various interests and skills. I currently have student-driven research projects investigating locomotion in gastropods, the distribution of GABA-immunoreactive neurons in gastropods, and the orientation and navigation behavior of *Drosophila*. Additionally, I continue to study the sensory neurons, interneurons, and motor neurons that mediate reflexive behaviors in leeches, and hope to bring students back into this project in the near future.

**Goals Statement:** I have been a member of SICB and DNB/DNNSB since early in my career as a graduate student. As a graduate student and post-doc, I attended SICB intermittently, alternating between

presenting my research at SICB and at other professional meetings. Since becoming a faculty member who supervises undergraduate research, I have exclusively attended SICB because the meeting is uniquely welcoming to student participants; I now bring several undergraduates to SICB each year to present their research. Since I began attending SICB annually five years ago, I have enjoyed watching DNNSB grow and would like to help further that growth. One strategy for long-term growth is to reach out to more graduate and undergraduate students through the Best Student Presentation Awards. I plan to actively encourage student presenters to compete for these awards. I will also encourage our division to strengthen the awards process by making the judging criteria available to students before the meeting and providing feedback on student presentations after the meeting. A second strategy for growth is to begin taking advantage of the new division name by soliciting more diverse symposium proposals. By reaching out to people who felt that their research did not fit in the Division of Neurobiology, we can bring new people and new perspectives to our division.

#### Paul A. Moore



**Current Position:** Professor of Biological Sciences, Bowling Green State University, Bowling Green, OH.

**Education:** B.S., Biological Oceanography, University of Michigan, 1986; Ph.D., Marine Biology, Boston University, 1991.

**Professional Experience:** Post-doctoral Fellowship, NIH Drug Abuse Fellowship, University of Colorado Health Sciences Center, 1990-1992; Post-Doctoral Researcher, Monell Chemical Senses Center, 1992-1994.

Presenting my research at SICB and at other professional meetings. Since becoming a faculty member who supervises undergraduate research, I have exclusively attended SICB because the meeting is uniquely welcoming to student participants; I now bring several undergraduates to SICB each year to present their research. Since I began attending SICB annually five years ago, I have enjoyed watching DNNSB grow and would like to help further that growth. One strategy for long-term growth is to reach out to more graduate and undergraduate students through the Best Student Presentation Awards. I plan to actively encourage student presenters to compete for these awards. I will also encourage our division to strengthen the awards process by making the judging criteria available to students before the meeting and providing feedback on student presentations after the meeting. A second strategy for growth is to begin taking advantage of the new division name by soliciting more diverse symposium proposals. By reaching out to people who felt that their research did not fit in the Division of Neurobiology, we can bring new people and new perspectives to our division.

**SICB Activities:** Current DNNSB Divisional Chair.



## SICB Newsletter

Spring 2017 Issue

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**Other memberships:** SICB Division of Invertebrate Zoology, SICB Division of Animal Behavior.

**Research Interests:** Aquatic Chemical Ecology and Neuroethology, Orientation, Social Behavior, Sensory Ecology.

**Goals Statement:** Our division has grown considerably over the last half decade and I would like to see that growth continue. I would like to see more integration of our Division with other divisions that have overlapping interest for shared symposia and speaker series. We have made some changes that support our student culture and I would like to see those continue. An important piece that is missing is the development of funds for grants to our students. I am unsure how to proceed in this avenue, but I think collectively we can brainstorm on raising some funds that would benefit our graduate student researchers.

