



## Division of Neurobiology

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### DNB Officers & Representatives

James Murray  
*Chair 2007-2013*

Lisa Mangiamele  
*Secretary 2012-2014*

Duane McPherson  
*Program Officer 2012-2014*

Darcy Ernst  
*Student/Postdoctoral Affairs  
Committee Representative  
2010-2013*

### Message from the Chair

Jim Belanger ([Chair.DNB@sicb.org](mailto:Chair.DNB@sicb.org))

My first official task as the new Division Chair is to thank our now-former Division Chair, Jim Murray, for doing such a great job. Well done indeed, Jim. The second is to welcome our new Student/Postdoctoral Affairs Committee representative, Christine Bedore. I look forward to working with you, as well as with Lisa and Duane.

Wasn't San Francisco a blast? Beautiful weather (mostly), great restaurants, and, of course, outstanding science. As part of the largest meeting SICB has ever held, DNB presented 28 talks and 50 posters. Our division also provided support for four symposia: *When predators attack: Sensing motion in predator prey interactions*; *Vertebrate land invasions - Past, present, and future*; *Keeping time during animal evolution: Conservation and innovation of the circadian clock*; and *Integrating genomics with comparative vision research of the invertebrates*. Particular thanks to Duane McPherson, our Program Officer, for his usual grand job organizing the program, and to the ten judges of the Best Student paper and talk competitions. Twenty students competed this year, creating some very difficult choices for the judges. Look for the names of the winners in the newsletter below.

Our next duty as a division is to elect a new Divisional Program Officer and a new Secretary, as this is the last year of service for both Lisa Mangiamele and Duane McPherson. Please be sure to vote, and also consider running for one of the offices yourself!

Some of the highlights of the SICB Executive Committee meeting, which I attended, include the fact that, for the second year in a row, the annual meeting set a record for presentations: 1658 posters and talks! The society is also trying to figure out how to deal with the annoying issue of making WiFi available in the meeting halls. Because the hotels typically contract this out, it's difficult to use it as leverage when negotiating facilities for the meeting. One possibility may be to have the membership vote on including a surcharge in the registration fee to cover WiFi. Watch for more on this.

Remember that DNB, like all the divisions, has a pool of money that comes from the divisional dues. This can be used for things like student travel awards, or symposia support. If you have suggestions about how to use these funds, please pass them along to me.

The main thing I would like to accomplish in my first year is to improve DNB's presence on the SICB website. Currently there are no entries for DNB members in the **Researcher Database** (Mea culpa!). These entries typically contain a couple of flashy images, and a short description of the work that your lab does. This is an ideal way to attract potential graduate students, and to put a public face on your research. Remember that most of us are supported by public money, so it's part of our job to convince the public that we're



worth it. Once you've put your description and images together, send them to the DNB Secretary (Lisa) and she'll do the magic.

The second thing I would like us to do as a division is to make some contributions to the **SICB Digital Library**. In particular, I'd like each of us to think of any particularly successful demonstrations, labs, classroom activities, etc., that we've developed in our teaching over the years and can share with our colleagues. I'll be submitting an in-class exercise that I use to introduce the Nernst equation in my Introductory Neurobiology class, and I'm combing through my notes for some other tidbits.

Thanks in advance for all of your spectacular abstract submissions, and I'll see you in Austin!

#### Message from the Divisional Program Officer

Duane McPherson ([DPO.DNB@sicb.org](mailto:DPO.DNB@sicb.org))

Winter greetings to fellow DNB members from upstate New York, where snow is falling under a dull gray sky, but there's a sense in the air that spring might pop through any day now. Redwing blackbirds have been sighted, and also turkey vultures, which have become a harbinger of spring around here.

#### Austin, 2014

As you already know, the meeting in San Francisco was the largest ever, both in number of abstracts and number of registrants. This continues a trend of healthy growth for the society and we expect that it will continue for the 2014 meeting in Austin, Texas. Austin has a lively music scene and a pleasant locale on the edge of the Texas hill country. I look forward to seeing your abstracts in the fall and hearing your presentations next January.

#### Submit a Symposium Proposal

The time is now to plan your symposium proposal for the 2015 meeting in West Palm Beach, Florida! As you develop your ideas, please contact me ([dpo.dnb@sicb.org](mailto:dpo.dnb@sicb.org)) so that I can assist you in navigating the path for getting your proposal approved by the society-wide program committee. Although the competition was not as stiff last year as the year before, we do anticipate that there will be more good-quality symposia proposed than we will be able to program into the 2015 meeting. The deadline for these proposals is August 30, 2013.

#### Do You Teach Animal Physiology Labs?

If you teach animal physiology, as I do, you probably feel that there is a dearth of practical lab ex-

periments for undergraduates, especially at four-year colleges where the instructor is also the technician, teaching assistant, chief cook & bottle washer.

For several years I have been incubating the idea of a summer workshop at which animal physiology instructor could exchange ideas for laboratory exercises. Developmental biologists have a workshop like this each summer at the Darling Marine Station in Maine, and Linda Healy has been very encouraging about hosting a similar workshop in animal physiology.

I am thinking of scheduling a meeting of similar-minded folks on the first day of the 2014 SICB meeting (i.e., the day of the plenary address & opening reception). If there is sufficient interest, I will request funds from NSF for the workshop, which could be used to defray the cost of the additional day of lodging at the annual meeting. I will be sending out a questionnaire to the whole society about this soon, but meanwhile I would like to hear from those of you who would be interested or have other comments or suggestions.

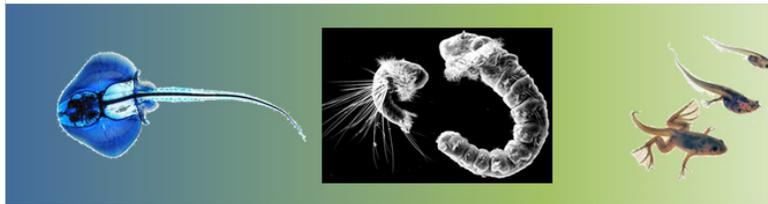
#### Message from the Secretary

Lisa Mangiamele ([Secretary.DNB@sicb.org](mailto:Secretary.DNB@sicb.org))

Hello there! A few, brief items of news:

First, I wanted to make everyone aware of some changes in the way that SICB will be communicating with its members. In an effort to reduce the number of emails sent to the membership, the society's head office will now send all society-wide news and announcements via a **Monthly Member Update** email. This email should arrive in your inbox in the middle of each month. 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 DNB members, or to all SICB members, please contact me and I will have it added to the update.

Second, be sure to check out the new-ish newsletter feature, "Focus on DNB." As with last year's spring issue, I've highlighted the work of our best student presentation winners. This feature will (hopefully) become a regular one in our newsletter, informing DNB members about some of the exciting scientific work that our colleagues are doing. If you would like your work to be featured in the newsletter, or would like to nominate a colleague's or student's work, please email me a [secretary.dnb@sicb.org](mailto:secretary.dnb@sicb.org).



And finally, as Jim mentioned above, DNB members lack representation in the society-wide **Researcher Database**. We need to fix this! Contributing to the Researcher Database is a very easy way to increase your web presence, and to advertise your research and your connection to SICB. Any member can contribute – this means students and postdocs, too. Here's how: just email me a short description of your research, along with a photo and a title, and I will add it to the database. Don't forget that photos entered in the Researcher Database will show up as the rotating image on the SICB front homepage. I have not had any volunteers, and those of us who teach know what happens when no one in the class volunteers: I'm going have to start calling on people.

#### Focus On DNB: Best Student Presentation Winners

Congratulations to the winners of the Best Student Presentation competition!



**Ivo Ros**, Harvard University  
**Best Student Talk:**  
**"Potential control inputs for aerial turning in the pigeon"**

Ivo is a Ph.D. candidate in the Department of Organismic and Evolutionary Biology at Harvard, and is interested in the neural control

of flight. Ivo describes his research interests as follows: "Compared to tractable insects, vertebrates are much harder to study in terms of control of complex behaviors. Nevertheless, I hope to confirm growing indications that during several aerial maneuvers birds and insects show surprising similarities. After having focused on the mechanics of turning, we are now addressing the integration of sensory feedback in flight control."

**Stavros Hadjisolomou**, Graduate Center of the City University of New York

**Best Student Poster: "Behavioral responses to pulses of light in the longfin inshore squid, *Doryteuthis pealeii*"**

Stavros is a Ph.D. candidate in the Biomimetic and Cognitive Robotics Laboratory at CUNY interested in the physiological and anatomical organization un-

derlying behavior and how ecology shapes nervous systems through adaptation. Ivo describes his research as follows: "I investigate how animals sense, encode, and process information from their environment. I am currently studying sensorimotor integration and information processing systems in cephalopods. More specifically, I'm investigating spatial vision, transfer function, and neuromuscular control underlying body patterning in cephalopod dynamic visual camouflage and communication."



*Longfin inshore squid (Doryteuthis pealeii)*

#### News and Announcements: Other Meetings of Interest

- o The Gordon Research Seminar on Neuroethology: Behavior, Evolution and Neurobiology will be held on August 17th and 18th, 2013 at Mount Snow Resort, Vermont. Registration and abstract submission accepted until April 17th. The Gordon Research Seminar is aimed at fostering interactions between graduate students and post-docs, and this year is focused on the interactions among sensory, integrative, and motor areas. Please check the website for information on abstract submissions, meeting registration, and travel details: <http://tinyurl.com/neuroethology>
- o The International Congress in Vertebrate Morphology is taking place in Barcelona, Spain on July 8-12, 2013. The abstract deadline has passed (March 1), but please check the website for further information if you are interested in attending in future years: <http://www.icvm2013.com/> The ICVM is especially interested in integrating a neurobiology/neuroanatomy component and is looking forward to receiving contributed papers from our division.



### SICB DNB Facebook and LinkedIn Groups

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

### DNB Business Meeting Minutes:

Below is a brief summary of the business meeting minutes from the 2012 SICB meeting in San Francisco, SC. For full details on some items of business, [click here](#).

- o Michelle Elekonich from NSF updated us on the NSF budget (estimated at 80% of last year's budget because of sequestration and no federal budget for this year). She encouraged DNB members to use the Research Coordination Networks program – a somewhat underused funding mechanism – to fund symposia. She also reminded members of a change in the policy for REU supplemental funding, which is that you can no longer request a supplement for an existing grant. All REU supplements must be built into the initial funding request.
- o Some other divisions are using a new model for running their best student presentation competition, which requires students to write an extended abstract that includes a data figure. Abstracts are judged and finalists are invited to give talks in a separate session. DNB members discussed switching to this model, but the consensus was that the cons outweighed the pros. Cons included worries about a potential negative impact on students being placed in a student-only session instead of one relevant to their field, judges placing too much emphasis on abstract data, and judging by committee instead of by independent ballot.
- o The DNB Chair is soliciting ideas for spending our discretionary budget.
- o There was some conversation about the lack of WiFi at the annual meeting. The executive committee is studying the issue of whether or not we need more WiFi access at the SICB meeting. DNB members are encouraged to express their opinions on this issue.
- o AD Instruments loaner program is still going on. Equipment can be loaned for 9 or 12 months.

See the Faculty for Undergraduate Neuroscience website for more details: [http://www.funfaculty.org/drupal/Equipment\\_Loan](http://www.funfaculty.org/drupal/Equipment_Loan)

### Divisional Officer Elections

This year we are electing a Program Officer and Secretary. Last year we voted to change the terms of office so that we do not elect more than one officer per year. To do this, we are increasing term lengths to 3 years and phasing in the new term length over the next couple of election cycles. This year we elect a Program Officer for a 3-year term and a Secretary for a 2-year term. See below for candidate statements, and don't forget to vote in May!

### Program Officer Candidate:

#### **Charles Derby**

Current Position: Regents Professor of Neuroscience and Biology, Georgia State University



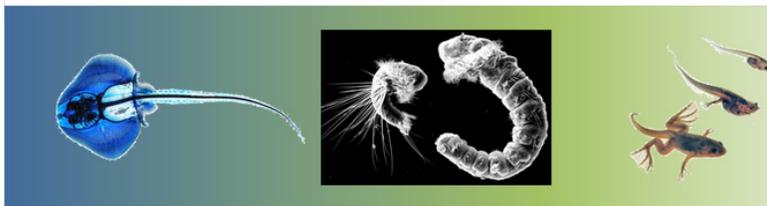
Education: B.S. University of North Carolina (Biology, 1976); Ph.D. Boston University (Biology, 1982), Post-doctoral Fellow, University of Florida (1982-1984).

Professional Experience: Faculty of Neuroscience and Biology, Georgia State University (1984-present); Associate Editor of The Biological Bulletin; Member of Advisory Board of Arthropod Structure & Development; Adjunct Faculty and Course Organizer at the Bermuda Institute of Ocean Science (1996-2004); Associate Dean of the College of Arts & Sciences (2000-present).

SICB Activities: Long-time member; Current member of DNB, DAB, DEE, and DIZ; Co-organizer of Symposium (2011); Member of Local Organizing Committee (1999).

Other Memberships: International Society for Neuroethology; Society for Neuroscience; Association for Chemoreception Sciences; The Crustacean Society.  
Research Interests: Neuroethology; Chemosensory biology; Sensory coding; Chemical defenses; Adult neurogenesis; Using marine crustaceans, molluscs, and fish as models.

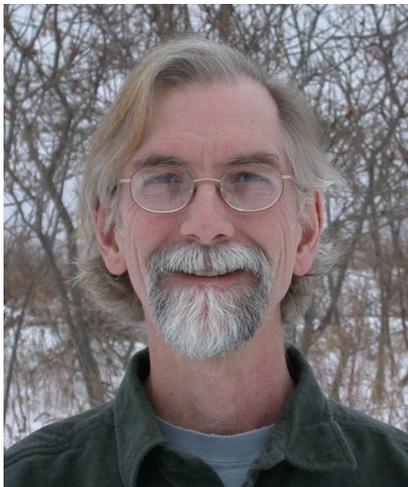
Goals Statement: I have three goals. The first is to broaden the participation of neuroscientists in SICB,



by attracting new members to our society. There is an opportunity here, as some other societies are narrowing their focus to biomedical, disease-related directions and away from more comparative, integrative, and evolutionary directions, which is the core strength of SICB. My second goal is to integrate the activities of DNB with other SICB divisions, by developing symposia with multi-disciplinary themes and links, such as neuroecology, neuroethology, developmental neurobiology, and others. My third goal is to encourage young scientists interested in neurobiology to engage in DNB and SICB, by developing new lines of financial support and new ways to participate.

**Duane R. McPherson**

Current Position: Associate Professor, Dept. of Biology, SUNY at Geneseo



Education: B.A., Biology, Brown University, 1976; M.S., Zoology, University of Georgia, 1985; Ph.D., Neuroscience, University of Texas Medical Branch at Galveston, 1990

Professional Experience: Associate Professor, Biology, SUNY at Geneseo, 2001-present; Assistant

Professor, Biology, SUNY at Geneseo, 1993- 2000; Postdoctoral Fellow, Dept. of Biology, Marquette University, 1990-1993.

SICB Activities: DNB Program Officer, 2007- present; Symposium organizer (2011); Regular participant and presenter at SICB meetings since 2000

Other memberships: Society for Neuroscience; American Physiological Society; American Microscopical Society

Research Interests: Neural control of locomotion in *Aplysia* and other gastropods; synaptic organization of the serotonergic system; serotonergic mechanisms that contribute to initiating locomotion and that modulate muscle function; identification and comparative mapping of serotonin receptors in gastropods; organization of the central pattern generator for swimming in lampreys; ethology of nest-making in turtles.

Goals Statement: I have enjoyed serving as the Pro-

gram Officer for DNB and will be happy to serve another term. If elected, I will continue to advocate for DNB within the SICB Program Committee and will work to facilitate development of neurobiology-related symposia.

**Secretary Candidate:**

**Lisa A. Mangiamele**

Current Position: Research Associate, Dept. of Psychology, Bowdoin College



Education: B.A. Colgate University (Neuroscience); Ph.D. University of North Carolina (Biology)

Professional Experience: Research Assistant, Marine Biological Laboratory, 2000,2001; Visiting Student, Smithsonian Tropical Research Institute, 2007;

Postdoctoral Research/Teaching Fellow in Neuroscience, Bowdoin College, 2010

SICB Activities: Member since 2006; DNB Secretary 2012-present

Other Memberships: Society for Neuroscience; J.B. Johnston Club for Evolutionary Neuroscience; Faculty for Undergraduate Neuroscience

Research Interests: Neuroethology, particularly the sensory and endocrine mechanisms underlying sexual communication behavior

Goals Statement: In my past term, my goal as DNB Secretary has been to create ways for members to connect, interact, and become aware of each other's research interests. Two ways that I have done this are by adding a feature to the newsletter to highlight research by DNB members and by promoting online channels for member interaction (e.g., LinkedIn, Facebook). If elected, I would be happy to serve another term so that I can continue to work on ways to better promote networking among DNB members and increased visibility within the society.