



Division of Invertebrate Zoology

Contents

Message from the Chair.....	1
Message from the Program Officer.....	2
Message from the Secretary	3
Message from Student/Postdoc	4
Message from Awards Comm Chair.....	4
Message from Libbie H. Hyman Memorial Scholarship Committee	6
DIZ 2013 Minutes.....	6
Officer Elections/Nominations.....	6

DIZ Officers & Representatives

James McClintock
Chair 2012-2015

Dianna K. Padilla
Past Chair 2012-2014

Jonathan Allen
Secretary 2013-2016

John Zardus
Program Officer 2011-2014

Kit Yu Karen Chan
Student/Postdoc Rep 2011-2014

Jennifer Burnaford
*Libbie Hyman Memorial Scholarship
Committee Chair*

Message from the Chair

James McClintock (Chair.DIZ@sicb.org)

Fellow Invertebrate
Zoologists:

Greetings! I hope you enjoyed the January SICB meeting in San Francisco. Our society once again broke the attendance record books. I was especially excited to see so many young faces at the conference. The word has gotten out that SICB is the place to be – and I thank all of you for helping make DIZ a component of this success story.

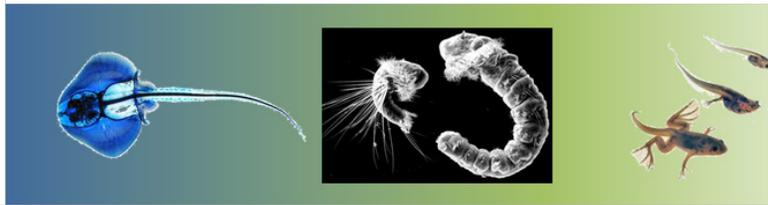


Jim McClintock conducting research via zodiac near the U.S. Palmer Station on the central western Antarctic Peninsula

John Zardus, our soon to retire Program Officer, once again did a wonderful job of facilitating a suite of six DIZ-sponsored symposia in San Francisco. Our society journal, Integrative and Comparative Biology, continues to do well and retains a high impact factor. In order to grow the journal the division Chairs have been asked to task their respective divisional editorial board member to solicit one review paper a year to complement published symposia. John has been working on lining up symposia for the 2014 meetings in Austin, Texas and the full list can be found in his report for this newsletter.

Speaking of sponsored symposia, it is already time to get a jump on the 2015 conference in West Palm Beach, Florida. Who can afford to miss out on Florida in January? Please let John Zardus know your ideas for symposia, and don't be shy about nudging that faculty member in your department that has the "right stuff" to organize and lead a timely symposium. In keeping with our history of success, we want symposia that are forward looking and include representatives that span gender and stage of career. Our symposium organizers have an excellent track record of securing NSF funds to support their efforts.

Beth Davis-Berg did another outstanding job of organizing the judging of our Best Student Paper Presentation Awards. It is great that we share the wealth by recognizing the runner-ups as well as the winners. I am pleased to thank Beth for her service to DIZ, and to welcome Anne Boettger who will be replacing Beth at the 2014 meeting in Austin. You can read more about our student winners in Austin when Anne continues our practice of having a poster board featuring the student winners from the previous year. I wish to thank all those that helped with judging presentations and posters. Your service to our students is priceless.



The Libbie Hyman auction was a resounding success in San Francisco! The donations included such items as books, clothing, stuffed marine invertebrates, clay model larvae, glass art, and assorted weekends at lovely homes on the coast. Remarkably, a bidding war erupted over the four sets of Libbie Hyman volumes, adding greatly to the total auction proceeds of \$5,677! Too many people helped to begin to thank everyone here, but a special thank you is due Billie Swalla our animated auctioneer, Rich Mooi who allowed folks to ship items to him ahead of time, and the wonderful folks from Burk Associates, Inc. that handled the money. The proceeds will be added to the principal of the Libbie H. Hyman Memorial Scholarship fund.

On another monetary note, the DIZ membership approved the use of our annual discretionary funds to assist in costs associated with scanning the historical DIZ records so that the hard copies need no longer be shipped from Chair to Chair. As agreed in 2012, any discretionary funds left over will go towards the principal of the Libbie H. Hyman Memorial Scholarship fund.

We applauded Erika Iyengar for her three stellar years of service as our Secretary at the DIZ business meeting in San Francisco. And we welcomed Jon Allen in as our new Secretary. This coming year John Zardus will complete his productive tenure as Program Officer. Accordingly, I appointed Amy Moran and Bob Thacker to serve as a nominating committee. The committee has identified two outstanding candidates for Program Officer – Sarah Berke and Bruno Pernet. So please don't forget to vote when the ballots come out in May!

Karen Chan once again did a great job as our DIZ representative to the Student/Postdoctoral Affairs Committee. Bravo!

Last but not least, the current and seventeen past SICB presidents drafted a letter to President Barack Obama asking him to consider the growing biological implications of global climate change and ocean acidification. The letter touched on a number of key issues including the Keystone Pipeline. The final draft letter was approved by the SICB Executive Committee and can be found on the SICB web site under Resources > Resolutions and Positions (<http://www.sicb.org/resources/SICB%20Letter%20to%20Obama2013.pdf>).

Message from the Program Officer

John Zardus (DPO.DIZ@sicb.org)

Dear Division of Invertebrate Zoology,

The San Francisco meeting in January was a grand event! A very busy meeting with fifteen concurrent sessions, it had the largest participation to date. I want to thank all those who helped make it a success, both at the planning and execution level as well as those who participated as presenters and symposium organizers. I found it a very stimulating and inspiring five days.



On location in Australia for "Turtle Barnacle: Terror of the Reef"

The program was built around eleven symposia and their complementary sessions of which DIZ co-sponsored the following six: Phenotypic Plasticity and the Evolution of Gender Roles, organized by Janet Leonard; Keeping Time During Animal Evolution: Conservation and Innovation of the Circadian Clock, organized by Adam Reitzel and Ann Tarrant; Physiological Responses to Simultaneous Shifts in Multiple Environmental Stressors: Relevance in a Changing World, organized by Anne Todgham; Understanding First Order Phenotypes: Transcriptomics for Emerging Model Systems, organized by Suzy Renn; Integrating Genomics with Comparative Vision Research of the Invertebrates, organized by: Jeanne Serb and Todd Oakley; and Assembling the Poriferan Tree of Life, organized by Robert Thacker.

Other noteworthy happenings included the tri-annual DIZ auction which was a successful fundraiser for the Libbie Hyman fund, as reported by Jim in the President's message, as well as an outstanding social event.

Now it is time to set our sights on Austin, Texas in 2014 and beyond to West Palm Beach, Florida in 2015. Ten symposia will form the core of the meeting in Austin, of which DIZ will be sponsoring the following four: The Cell's View of Animal Body Plan Evolution, organized by Deirdre Lyons, Mansi Srivastava and Mark Martindale; Epigenetics: Molecular Mechanisms through Organismal Influences, organized by Warren Burggren; Shaking, Dripping and



Drinking: Surface-tension Phenomena in Organismal Biology, organized by David Hu, Rachel Levy, and Lydia Bourouiba; Parasitic Manipulation of Host Phenotype, or How to Make a Zombie, organized by Kelly Weinersmith and Zen Faulkes. Once I return from the Program Officer's meeting in September I will be able to tell you more about what the meeting and venue hold in store.

As always, I would love to hear about your good ideas for symposia. The deadline for submitting symposium proposals for West Palm Beach will be early August. Whether you have merely an idea of a topic that somebody could pursue or you want to organize something on your own, please contact me with your ideas. I will be happy to give you feedback, guide you through the process, and provide field-tested advice. Remember, a full symposium has ten or eleven participants.

Until I greet you again in the fall, may your time be full of pleasant invertebrate dreams and adventures on the frontiers of science.

Message from the Secretary

Jon Allen (Secretary.DIZ@sicb.org)

Greetings DIZ! It's my pleasure to begin serving my term as DIZ Secretary. In my first official newsletter, I want to extend a huge thank you to outgoing Secretary Erika Iyengar. Erika has done an incredible job with the newsletter and her other duties as divisional secretary over the past three years. I know that all the members of DIZ are grateful for her service.

The annual meeting in San Francisco was another record-setting affair, as both Jim and John have outlined above. The Society is thriving, and by



Our Student-Postdoctoral Affairs representative Karen Chan leads an outing of some of the DIZ to have authentic Chinese food. Even President Obama got his take out from this restaurant. Invertebrate zoologists do have great taste!

all accounts, DIZ is as well. It's great to see that not only is DIZ a strong supporter of the symposia, but also that we're creative fundraisers and fans of invertebrate memorabilia as well!

On the business end of the division, I'll echo Jim's note that we are holding an election this year for a new Divisional Program Officer. The candidate biographies appear at the end of this newsletter. We will announce the outcome of the election in the fall newsletter. Speaking of elections, if you know of dedicated invertebrate biologists who you would like to see play a larger role in our division in the future, please let us know. We're always eager to increase the pool of folks who can contribute to the success of our society, and we're especially looking for folks to join the Libbie H. Hyman Memorial Scholarship Committee.

There are other ways that you can contribute to SICB outside of the annual meeting, and one that I'd like to highlight here is the SICB digital library. Thanks to Bob Podolsky and the Educational Council, DIZ has a home now on the SICB website and that material is rapidly beginning to expand (see Karen Chan's message below for the latest example). Working with Bob and Jan Pechenik, I've had the opportunity to submit some of my best students' work to this site (<http://sicb.org/dl/invertebrates.php>) and it's a great way to motivate students to get engaged in the science that we do.

Finally, I will make a plea for folks to send me contributions (photos, research blurbs etc.) for future newsletter content. Erika made great strides in improving the readability and visibility of the newsletter and I'm eager to continue her momentum. I'd especially like to include a small box with a featured researcher (preferably a graduate student, post-doc or very early career faculty member) in each newsletter as a way of promoting some of the exciting work you all do. Feel free to email me to suggest someone you know for this feature, or to nominate yourself! These boxes will, hopefully, be in the format of some of the short descriptions that already appear in the researchers' database (<http://sicb.org/divisions/DIZ/researchers.php3>). Speaking of which, if you'd like to be added to the database, please let me know!



Message from the Student-Postdoctoral Affairs Committee Representative

Kit Yu Karen Chan (Karen Chan)

Dear Members of DIZ,

Thank you and congratulations for making the Annual Meeting at San Francisco a great success. Let me take this opportunity to give a shout out to the winners of the Best Student Presentation Awards: Christina Vasquez (University of Florida, Gainesville) and Amberle McKee (California State University, Long Beach). This year was the first time I sat on the other end of the table and helped judge student presentations. Therefore, in addition to thanking all the presenters for making this such an enjoyable experience, I have to salute Beth Davis-Berg for her organization and all the judges for their contributions.

Thank you to all of you who have contributed towards the Libby Hyman Auction. The auction was held to raise fund for the Libby Hyman Fund that sponsors students' first significant field station experience. On that note, don't forget that SICB does provide research support to students members. Details of the applications could be found here: <http://www.sicb.org/students/awards.php3#gjar>.

The Student/Postdoctoral Affairs Committee (SPDAC) set up its first booth in the exhibition hall in San Francisco, in addition to organizing the workshop on "Elevator Talk." I hope you have had a chance to stop by and chat with the panel members on discussion topics, e.g., how to locate a postdoc/PhD position and how to negotiate your start up. Many of you also obtained feedback on your curriculum vitae (CVs). We owe Peggy Biga a big thank you for her work as the chair of SPDAC for the past three years. Let's also welcome Sean Lema who now carries the torch. SPDAC currently plans to host another booth and explore the topic of internet presence as scientists in the upcoming workshop in Austin. If you have any ideas for workshop topic or resources that you would like to see made available (maybe a list of small grants-in-aid of research that you can apply to as students?), please don't hesitate to contact me or other members of SPDAC.



Karen has started a postdoctoral scholarship at the Woods Hole Oceanographic Institution in Oct. She now has the pleasure of working on completely frozen rocky intertidal.

Allow me to also use this space to make a request for submission of materials for the Invertebrate Zoology Section in the Digital Library. Working with our amazing website developer Ruediger Birenheide and Bob Podolsky from the Education Council, I am developing a place for you to share your clicker questions to assess your students learning. You can check it out at <http://sicb.org/dl/submit/invertebrateclickerinstructions.php>. There, you can enter questions or upload PowerPoint slides at the site. If you have other resources, e.g., images, illustrations, videos, activities, lesson plans, that you would like to share with the group, please send me an email at kchan@whoi.edu. I look forward to working with a lot of you to make this a valuable resource for the community.

Happy New Year and I wish you all the best with your work.

Message from the Best Student Presentation Awards Committee Chair

Beth Davis-Berg

Thanks to everyone who came to San Francisco this year, it was a great meeting with excellent student presentations. A special thank you to all the students who presented! I would like to thank the 43 volunteer judges for their time and commitment to the students. In order for students to compete in our division they need to be a member of DIZ. This year 59 students competed for best student paper! And the winners are:



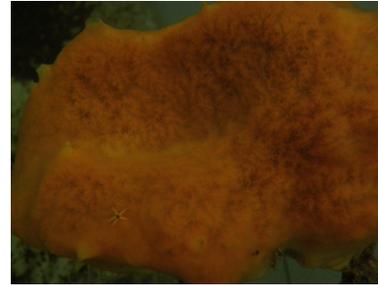
Best oral presentation

Winner

Christina Vasquez: "Multiple stressor interactions delay horseshoe crab embryo development"



Christina Vasquez on holding a female horseshoe crab in Delaware: "This was my first time in Delaware and I was amazed at how much larger the horseshoe crabs are here than they are in Florida."



The demosponge Suberites sp. makes a lovely home for this juvenile brittle star.

Best Poster presentation

Winner

Amberle McKee: "Substrate attributes determine gait in a terrestrial gastropod"

Runner up

Kenan Matterson: "Reduced Irradiance Alters Cyanobacterial Symbiont Abundance and Growth Rate of three Tropical Sponges"

Andrian M Wenner Strong Inference Award

Winner

Christina Vasquez: "Multiple stressor interactions delay horseshoe crab embryo development"

Runner up

Amberle McKee: "Substrate attributes determine gait in a terrestrial gastropod"

Please join me in congratulating these outstanding students. I look forward to seeing you all at the next meeting in Austin, TX!



Flagged horseshoe crab mating pair. Christina places flags around the mating pair to mark where the nest of fertilized eggs are so she can go back when the tide has receded to collect the eggs.>



Amberlee McKee draws the mucus trail behind one a loping snail.

Runner up

Danielle Ludeman: "Testing passive flow and oxygen consumption in three temperate demsponges"



Danielle Ludeman kayaking around Barkley Sound, Bamfield, British Columbia, Canada.



Getting up close and personal with invertebrate mucus!



Kenan Matterson cleaning canopies for his experiment

and their endosymbiotic algae. We congratulate Emily, and thank everyone for applying.

The Libbie H. Hyman Award provides funding to support the first significant field station experience for advanced undergraduates or early graduate students pursuing coursework or research on invertebrates. This first field station experience is typically a transformative period in the career and life of a student. One of our continuing goals is to increase the number of awards to two per year. We deeply appreciate the donations which move us toward that goal. We always need contributions to the Scholarship Fund! To contribute, click on Donate to SICB on the SICB home page (www.sicb.org) or send a check to:

SICB Business Office
Libbie H. Hyman Memorial Scholarship Fund
1313 Dolley Madison Blvd., Suite 402
McLean, VA 22101

Checks should be made payable to SICB and marked as a "Contribution to the Libbie H. Hyman Memorial Scholarship Fund." All contributions are tax deductible. Thanks for your help!

Minutes of the DIZ Business Meeting 2013

Click [here](#).

Candidates for Elections Candidates for Program Officer

Candidate Biography for Sarah Berke



Sarah Berke enjoying some time in the intertidal.

Current position:
Assistant Professor, Dept. of Biology, Siena College, Loudonville NY
Education: BA University of Chicago (2000); PhD University of South Carolina, advisor Sally Woodin (2007); Marine Science Network

Postdoctoral Fellow, Smithsonian Environmental Research Center (2008-2009); Postdoctoral Scholar, University of Chicago, (2009-2012).

Professional Experience: Assistant Professor, Dept. of Biology, Siena College, Loudonville NY 2012-2013

SICB Activities: Symposium organizer, Marine Ecosystem Engineers in a Changing World, 2010 meet-

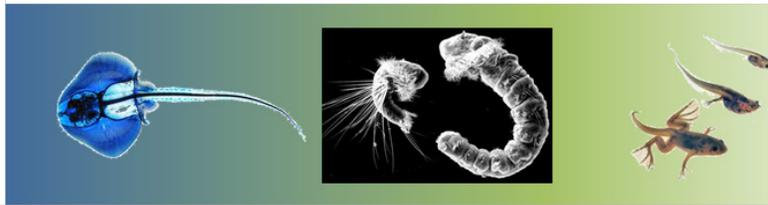


Kenan's study site on a sponge reef surrounding Bocas Del Toro, Panama. How many invertebrate phyla can you count?

Message from the Libbie H. Hyman Memorial Scholarship Selection Committee

Jennifer Burnaford, Committee Chair

Applications for the 2013 Libbie Hyman Memorial Scholarship were due on 15 February 2013. After reviewing the 10 strong applications, we (myself, Will Jaekle, and John Zardus) are pleased to announce that the 2013 scholarship will be awarded to Emily Weiss (Department of Zoology, Oregon State University). Emily will use the funds -- \$1500 this year -- to support a four-week stay at the Bocas del Toro Biological Field Station in Panama. Emily will participate in a course on Coral Reef Ecology and conduct field studies comparing disturbed and stable populations of the anemone *Aiptasia*. For her Ph.D. work, Emily works on the co-evolutionary genetics of cnidarians



ing, sponsored by DIZ, DEE, AMS, NSF; Student and Postdoctoral Affairs Committee, representative for DEE, 2009-2011; Judge for DIZ and DEE, 2008, 2009, 2011

Other Memberships: Ecological Society of America, Sigma Xi, Society for the Study of Evolution, Coastal & Estuarine Research Federation, regular attendee of the Benthic Ecology Meetings

Research Interests: Ecology of marine ecosystem engineers, especially polychaete worms; Global patterns in functional diversity, especially in the bivalvia. Statement of Goals: DIZ is among the most active and well-organized divisions of SICB, and as program officer I would continue to advance that legacy. SICB has been my professional home throughout my career, and I would welcome the opportunity to give back to the society. Symposia are at the heart of the meeting, and one of my goals would be to encourage more early-career scientists, especially students and postdocs, to become involved in symposia. My own experience as a symposium organizer would help me to guide proposals from inception through funding and execution. I would also like to increase the extent to which education scholarship is represented in the program, building on recent momentum reflected in the Moore lectures, the M. Patricia Morse Award, and the Educational Council's excellent work. Finally, supporting undergraduate research at SICB is an important component of recruiting future members, and is also an important way to enhance the public understanding of science, as undergraduates take their SICB experience with them even if they do not stay in science. Thus, I would work to continue increasing the representation of undergraduates and faculty at primarily undergraduate institutions.

Candidate Biography for Bruno Pernet

Bruno later learned that hot tubs actually have better uses than as sorting tables

Current Position: Associate Professor, Department of Biological Sciences, California State University, Long Beach.

Education: B.S. University of California Santa Cruz (1991); Ph.D. University of Washington (1998).



Professional Experience: Postdoctoral researcher, Smithsonian Marine Station at Fort Pierce (1999-2000); Visiting Instructor, University of Oregon and Oregon Institute of Marine Biology (2000-01); Resident scientist/instructor, Friday Harbor Laboratories (2001-2004); Assistant Professor, Department of Biological Science, CSU Long Beach (2004-2010). Editor of the journal *Invertebrate Biology* (2005-2009); Editor-in-Chief of *Invertebrate Biology* (2010-present).

SICB Activities: SICB member (DIZ and DEE) and presenter at SICB annual meetings since 1994. Judge for DIZ Best Student Presentation since 1999. Member of Libbie Hyman Memorial Scholarship Committee (2007-2008); Chair of Libbie Hyman Committee (2008-2010).

Other Memberships: American Microscopical Society (1995-present). Western Society of Naturalists (~1995-present); in 2009-2011, served as a member of the Secretariat of WSN.

Research Interests: My main interests lie in the development, functional morphology, and evolution of the larvae of marine invertebrates. Current work in my lab focuses on comparative studies of feeding performance of larvae that use different particle capture mechanisms, and on the evolution of per-offspring provisioning in spiralian.

Statement of Goals: I have benefited enormously (both scientifically and career-wise) from being an active member of DIZ for nearly 20 years, and would be delighted to be of service to the division and society as a start on paying some of that back. One of my primary goals as Program Officer would be to keep the division on its current track of organizing lots of great symposia for each annual meeting; I would do this by actively encourage members to organize symposia, and by facilitating the process however possible. DIZ has long served a very important role in nurturing the scientific development of undergraduate and graduate students, and I would also work with other division officers and members to increase our effectiveness in this regard.