

Volume Spring 2006

Division of Systematic and Evolutionary Biology (DSEB): 2006 Spring Newsletter

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Message from the Chair

Don Swiderski

This year's meeting at Mickey's doorstep was a big success; in this Olympic year we could even say 'the best ever.' A big part of the success of this year's meeting was due to the fine job Jackie Webb and Thomas Schilling did putting on the symposium *Zebrafish in Comparative Context*, sponsored in part by DSEB. And as always our division was well represented by fine student presentations, including the winners of the division's best student presentation awards: Sarah Boyer, (Harvard University) *Vicariance in the harvestman family Pettalidae (Arachnida, Opioliones, Cyphophthalmi) during the breakup of Gondwana*, and L. Nicole Cox (Auburn University) *Phylogeography of* Sterechinus neumayeri *from South American and Antarctic waters using the 16S mtDNA marker*.

At the conclusion of this year's meeting, Ken Halanych stepped down as chair of DSEB. We owe Ken thanks for his fine service these past two years; especially, for guiding us through a major overhaul of the division bylaws. Pat Reynolds also deserves thanks for doing much of the actual work of putting together the revision, and for volunteering to put in an extra year's service as secretary to ensure the correct stagger of terms. The changes in the bylaws bring us in line with the other divisions and help insure that we have some institutional memory. So, Pat and Ken, thanks for the memory.

Finally, while memories of the last meeting are fresh, it is a good time to consider what might make next year's meeting even better. We particularly need program ideas for future symposia and for the Phylogenetics for Dummies workshop. Please send your ideas to any of the officers; we'll make sure they get the attention they deserve.

Message from the Program Officer

Michele Nishiguchi

This year's SICB meetings in Orlando were quite refreshing for me as the DPO. I really enjoyed seeing so many great student talks and posters, and it was a difficult job for us to choose the winners of this year's best student oral and poster presentations (see Don's message for the winners!). The DSEB division continues to help promote and encourage students to participate in meetings, and this award recognizes those young scholars who have demonstrated excellence in their research.

I am still anxious to received proposals for symposia (none yet so far!) that may be sponsored or co-sponsored for the 2008 SICB meetings in San Antonio, TX. If you have any ideas, or would like to get feedback, please do not hesitate to contact me. Our next program officers' meeting is already set for September 29th–October 1st, 2006, so there is still time to think about symposia that have some type of systematics/evolutionary biology theme. This includes new ideas for the Phylogenetics for Dummies workshop. DSEB is interested in expanding this workshop to include comparative methods, or even focus on topics such as phylogeography. Again, ideas are welcome to any of the DSEB officers.

Message from the Secretary

Pat Reynolds

Greetings to all. I do not have too much to report except to extend my thanks to several people: to our candidates, Anne Maglia, Kenneth D. Angielczyk, Audrey Aronowsky, and Nerida G. Wilson, for agreeing to run for divisional office, and to the nominating committee, especially Ken Halanych and Don Swiderski, for building our slate.

Congratulations also to Ken Halanych for his work as chair for the last couple of years. While I attended the Orlando meetings, I was unable to be at the DSEB business meeting, and am very grateful to Michele Nishiguchi for taking the minutes in my absence!

We are still hoping to enhance the DSEB webpage on the SICB web site, and all ideas are welcome. One of the easiest ways to do this is to post research-related illustrations, so perhaps if you have some summary figures (characters mapped on trees, for example) you might consider them appropriate and submit them with a short legend to me or to any of the officers.

Minutes of the 2006 DSEB Business Meeting, 7 Jan. 2006, Orlando

Chair Ken Halanych opened the meeting and introduced new incoming Chair, Don Swiderski, Program Officer Michele Nishiguchi, incoming Program Officer-elect Rachel Collin, incoming Secretary-elect, Marta deMaintenon, and Student Representative Rena Bryan.

Ken reported on a proposal submitted for a new division of comparative biomechanics (submitted by Robert Full). The executive committee wanted feedback from all of the divisions, but Ken noted this theme does not really affect DSEB.

Rachel Collin asked if there was a need for the addition of more divisions; Ken noted that the cellular division folded, and there has been interest in the new Division of Evolutionary Developmental Biology.

Rachel also raised the issue of the intent of the officers and members of DSEB, i.e., in which direction do the members want the division to move. Some discussion ensued.

Total meeting attendance for the 2006 meeting was 1266. The 2007 meeting will be in Phoenix, AZ, and the 2008 meeting in San Antonio in 2008.

Ken also mentioned the changes in the SICB journal, Integrative and Comparative Biology, which is now paired with Oxford for online publications and submissions. Symposium papers should be published more quickly once edited and proofed.

Ken reported that there was also discussion about SICB meeting with the European Experimental Biology meetings (every 3 years).

Ken discussed the DSEB budget; it is normally 3K, but we requested 4K this year to pay for a combined business meeting and social (for the 2007 meetings), which should draw more attendance to the division meetings.

Program Officer Michele Nishiguchi reported that the student awards/judging went well and that the talks/posters were excellent at this meeting. She also made an announcement requesting symposium proposals for 2008.

Ken and Don called for ideas to revamp the web page for the division, particularly with new images. Any material for the web page can be sent to them or to the Secretary, Pat Reynolds.

Student Representative Rena Bryan reported on the idea of holding a student workshop on publishing at the Phoenix meeting. It would contain topics such as what editors expect, what manuscripts need to get published, and to what types of journals to submit. She wanted to know if editors from various journals would be willing to participate in such a panel. Rena also raised the possibility of having a student/postdoc luncheon to get advice on this issue at the meeting, or perhaps combine the workshop with a lunch.

Don discussed the possibility of running the social as a co-social with other divisions to promote systematics.

Don also led discussion on possible improvements for the Phylogenetics for Dummies workshop. Suggestions included having a Phylogenetics and Comparative Methods for Dummies workshop, which would cover a broader array of topics, such as designing comparative methods for meaningful data.

Ken questioned how broad did we want to make systematics, and whether it would include topics such as phylogeography. He suggested talking to other divisional program officers regarding new ideas, and to try to link the workshop to symposia at the meetings. For example, what areas are needed in this workshop? What are the new/hot topics that may be presented?

Finally, Ken called for anyone interested in helping out the division, such as in running for office or otherwise, to contact himself or any of the officers.

Rachel Collin moved that the meeting be adjourned, Don Swiderski seconded, and the meeting was adjourned.

Upcoming Meetings of Interest to the Division

Evolution 2006, the joint annual meeting of the Society for the Study of Evolution (SSE), the Society of Systematic Biologists (SSB), and the American Society of Naturalists (ASN), June 23–27, 2006, hosted by Department of Ecology and Evolution, Stony Brook University, NY. More info: <u>http://life.bio.sunysb.edu/ee/sse2006/</u>

The Society for Molecular Biology and Evolution Annual Meeting : "Genomes, Evolution, and Bioinformatics," May 24–28, 2006 hosted by Arizona State University, Tempe, AZ. More info: http://www.smbe.org/geb/

Elections: Biographies of Candidates for Divisional Offices

Elections: Candidates for Chair-elect

Anne M. Maglia

Current Position: Assistant Professor, University of Missouri-Rolla (since 2002)

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Education: B.S., Zoology, Ohio University, 1992; M.S., Biological Sciences, East Tennessee State University, 1994; Ph.D., Ecology and Evolutionary Biology, University of Kansas, 2000.

Professional Experience: Postdoctoral Associate, 2000-2002, Natural History Museum and Biodiversity Research Center and Division of Biological Sciences, University of Kansas.

SICB Activities: Co-organizer and presenter (with D. Swiderski) of DSEB workshops "Phylogenetics for Dummies: Picking a Tree from the Forest" and "Phylogenetics for Dummies: Optimizing Characters on Existing Hypotheses of Relationships"; Chair for DSEB paper sessions; Judge for DSEB Student Paper Competitions; DSEB Program Officer 2000–2001.

Other Memberships: Society for the Study of Amphibians and Reptiles, International Society for Computational Biology, American Society of Ichthyologists and Herpetologists, The Herpetologists League, Midsouth Computational Biology and Bioinformatics Society, Phi Sigma, Sigma Xi

Research Interests: My research focuses on the evolution of amphibians, with specific interests in phylogenetic relationships within and among groups, the role of development in generating anatomical diversity, and the evolution of life history traits. In addition, much of my research also focuses on the development of computational methods for visualizing and analyzing biological data, including the application of data mining techniques to understanding character non-independence, the development of a web-accessible library of 3D visualizations of anatomy, and the use of distributed databases and genetic algorithms to monitor and model biodiversity.

Goals Statement: My main goal as an officer in DSEB is to continue to enhance the reputation and visibility of our division both within SICB and among the scientific community. Because accurate phylogenies based on sound methodologies are crucial to all facets of integrative and comparative biology, DSEB is unique in that we characterize the foundation for much of the research in other SICB divisions. Our membership may seem small, but DSEB is a secondary affiliation for many SICB members, and we represent a significant part of much of the research in the society. With this role comes the responsibility of demonstrating the importance and utility of systematic methodologies to strengthening comparative research. I would support our divisional efforts to develop symposia and workshops that attract (and partner with) participants, sponsorship, and audiences from other SICB divisions and scientific societies, and I would focus on promoting the success and participation of the student members of our division.

Patrick D. Reynolds

Current Position: Professor, Biology Department, Hamilton College (2005-)

Education: B.Sc. (Hons.), Zoology, University College Galway (1983); Ph.D., Biology, University of Victoria (1992).

Professional Experience: Associate (1998–2005), Assistant (1992–98) Professor, Biology Department, Hamilton College; Research Fellow/ Visiting Post–doctoral Researcher (1990–92), Institute of Marine Sciences, UC Santa Cruz; Lecturer (1990–91): East/West Marine Biology Program, Department of Integrative Biology, UC Berkeley.

SICB Activities: Member (1987–); numerous presentations; DSEB Secretary (2004–2007), DSEB (2006) and DIZ (1998, 1999) Best Student Paper Award Panels; DSEB (2004, 2005) and DIZ (2005) nominating committees; Editor/Editor–in–Chief (2003–), Co–Editor (1997–2003) of *Invertebrate Biology*, journal of the American Microscopical Society and DIZ.

Other Memberships: AAAS, American Malacological Society, American Microscopical Society, Malacological Society of London, Society for the Study of Evolution, Society of Systematic Biologists, Willi Hennig Society

Research Interests: Functional morphology and evolution of invertebrates, particularly the smaller molluscan classes and especially the Scaphopoda; comparative studies addressing the evolution of organ systems and clades using morphological and molecular systematics.

Goals Statement: DSEB no doubt has special place in SICB, being a division with which many members claim affiliation, but often a secondary one. This is reflected in some of our activities having much support–sponsoring symposia, running the "Phylogenetics for Dummies" workshops, strong student paper competitions–while other activities struggle, such as our business meetings where attendance is small. So, we need to consider how to increase and keep active members to continue our strong contributions to the society. Recently, increasing interest in running for office, revised bylaws to allow student representative elections, plans for a social, and ideas to broaden the Phylogenetics for Dummies workshop are steps in this direction. Encouraging and serving our early–career members should help strengthen our active membership.

Candidates for Student Representative

Kenneth D. Angielczyk

Current Position: Royal Society USA/Canada Research Fellow, Department of Earth Sciences, University of Bristol

Education: Ph.D., Department of Integrative Biology, University of California, Berkeley, 2003;

B.S., with distinction, Biology/Geology, University of Michigan, Ann Arbor, 1998

Professional Experience: Royal Society USA/Canada Research Fellow, University of Bristol, 11/2005 to present; NSF Postdoctoral Fellow in Interdisciplinary Informatics, California Academy of Sciences, 9/2003 to 8/2005; Graduate Student Instructor, nine semesters between 1/1999 and 8/2003, University of California, Berkeley; Curatorial Assistant, one year in total between 8/1998 and 7/2001, University of California Museum of Paleontology; Assistant Fossil Preparator, 9/1995 to 6/1998, University of Michigan Museum of Paleontology

SICB Services: Judge, best student presentation, Division of Ecology and Evolution, 2006 Annual Meeting; Judge, best student presentation, Division of Systematics and Evolutionary Biology, 2005 Annual Meeting

Other Memberships: Geological Society of America, International Society for Phylogenetic Nomenclature, Palaeontological Society of Southern Africa, Paleontological Society, Society of Systematic Biologists, Society of Vertebrate Paleontology

Research Interests: Paleobiology of anomodont therapsids; end–Permian mass extinction in the terrestrial realm; evolution of herbivory in terrestrial vertebrates; the role of stratigraphic data in phylogeny reconstruction; geometric morphometrics; morphology of the turtle shell; phylogenetic nomenclature.

Goals Statement: My goals as the student/postdoc representative for the division would be simple. First, I would like to ensure that the division and the society are a valuable resource for student and postdocs. We're all in the process of laying the foundations for our academic and scientific careers, and any help we receive is greatly appreciated. Second, I hope to be an accessible, effective link between student members of the division and the administration of the division and the society.

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Audrey Aronowsky

Current Position: Postdoctoral Researcher, Louisiana State University, Baton Rouge

Education: Ph.D. in Integrative Biology, University of California, Berkeley, 2003; B.S. in Geology, Bryn Mawr College, 1995

Professional Experience: Postdoctoral Researcher, Louisiana State University, Baton Rouge, Fall 2003–present; Graduate Student Instructor, University of California, Berkeley, Fall 1998–Spring 2003

SICB Services: Judge, best student presentation, Division of Ecology and Evolution, 2005 and 2006 Annual Meetings; Session Chair, Division of Systematics and Evolutionary Biology, 2006 Annual Meeting; Session Chair, Division of Invertebrate Zoology, 2004 Annual Meeting

Other Memberships: Paleontological Society, American Malacological Society, Western Society of Malacologists, Baton Rouge Geological Society

Research Interests: Phylogeny of corbulid bivalves with the goal of understanding the modern and fossil record of ecosystem invasion within the clade; growth and shape change of corbulid bivalves using geometric morphometrics; phylogeny reconstruction of naticid gastropods with the goal of understanding the multiple losses of stereotyped drilling predation within the clade; naticid gastropod reproductive and feeding biology.

Goals Statement: Students and postdocs are the future of any scientific society and they need a representative with practical ideas to help them get the most out of the annual meetings and other services the society offers. As student/postdoc representative for DSEB, I will continue the tradition of society–wide student/postdoc workshops on topics critical to future success such as funding, customizing your CV, cover letters, and networking at meetings. Simple things, such as organizing the job announcement board at the annual meeting (by field and posting date) will help fellow students and postdocs to locate positions of interest. Finally, if I am elected, I will have the satisfaction of beating my husband and fellow candidate, Ken, without having to physically harm him (which is illegal) or engage in a nasty smear campaign (which, while legal, may shorten our marriage).

Nerida G. Wilson

Current Position: Feb 2005-present, Postdoctoral Researcher, Auburn University, AL.

Education: 1998 Bachelor of Science, University of Melbourne, Australia; 1999 BSc (Honors), University of Queensland, Australia; 2004 PhD, Marine Science, University of Queensland, Australia.

Professional Experience: May 04-present, Visiting Research Fellow, University of Adelaide; May-Dec 2004, Research Associate, South Australian Museum, Adelaide, Australia; June-Oct 2002, Marine Invertebrate Scientist, Operation Wallacea, Sulawesi, Indonesia.

SICB Activities: Member since 2005; presentation at 2005 Annual meeting, Orlando.

Other Memberships: Society of Australian Systematic Biologists, Australian Marine Sciences Association, Malacological Society of Australasia.

Research Interests: Molecular phylogeny and phylogeography of marine invertebrates; systematics of opisthobranch mollusks; color evolution and mimicry; invertebrate life history, behavior and symbioses; sperm competition and mating systems

Goals Statement: I believe that great scientific potential lies in many pre-graduate and graduate students. Much of this potential is diverted away from science for various reasons. I hope to encourage students to remain in science by making career pathways more accessible and visible, especially to women, international and minority groups. I believe that SICB does much to support this, and my goal is to help maintain this vision.