The Society for Integrative & Comparative Biology

# SICB Newsletter









Volume Spring 2008

## Division of Systematic and Evolutionary Biology (DSEB): 2008 Spring Newsletter

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#### Message from the Chair

Anne Maglia

The San Antonio meeting was a great success, with many excellent talks and posters, including (as usual) several outstanding presentations by our divisional students.

Congratulations to this year's DSEB best student presentation award winners:

Best Student Paper (tie): Ka Yan Ma, Chinese University of Hong Kong: Molecular phylogeny of Dendrobranchiata inferred from two nuclear markers; Annie R. Lindgren, Ohio State University: Evolution of recent squids (Cephalopoda: Decapodiformes) inferred from molecular data.

Honorable mention goes to Elizabeth Borda, for her talk (co-authored with Mark Siddall): Systematics and diversity of Arhynchobdellida (Oligochaeta: Hirudinida), with a focus on the evolutionary history of bloodfeeding terrestrial leeches.

Best Student Poster: Johanna T. Cannon, Auburn University: Hemichordate relationships and insights into ancestors.

We owe many thanks to Don Swiderski who stepped down as chair of DSEB at the conclusion of this year's meeting. Don represented us on the executive committee through the arduous process of overhauling the society and divisional budgets. Thanks Don, we appreciate all of your hard work!

It is not too early to start thinking about upcoming meetings! If you have ideas for symposia or topics for the Phylogenetics for Dummies series, please contact one of the divisional officers.

## Message from the Program Officer

Rachel Collin

This year's SICB meeting in San Antonio was a great success with excellent dining opportunities offered by the river walk and a compact venue. As usual there were 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 Anne's message for the winners!). The DSEB division continues to promote and encourage students to participate in the meetings, and this award recognizes those young scholars who have demonstrated excellence in their research.

It's hard to believe, but it's time to start thinking about the 2009 meeting in Boston (January 3-9). DSEB sponsored symposia on "Decapod Phylogenetics" and "Teaching Evolution" at San Antonio, both of which were well attended. We can sponsor several symposia next year, so please feel free to lobby me for your favorites. The Phylogenetics for Dummies workshop is still in the planning phase. There is a current call for late-breaking symposium for 2009. Please contact the SICB Program Officer Eduardo Rosa-Molinar (ed@hpcf.upr.edu) with any ideas. Please have ready a title and a list of 7 speakers for 30 minute presentations in the AM or 4-5 speakers for 30 minute presentations in the PM. Shorter presentation slots are also possible.

The deadline for receipt of symposium proposals for the 2010 meeting is in August. The divisions will discuss and decide on funding at the program officers meeting in September, so please start developing your ideas and talking with your colleagues and program officers of your divisions. I have already heard one interesting idea for a symposium; DSEB has the funds to sponsor more than one symposium as well as Phylogenetics for Dummies. DSEB is interested in expanding this workshop to include comparative methods, or even focus on topics such as phylogeography. Again, ideas are welcomed by all the DSEB officers.

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#### Marta deMaintenon

Aloha! It was good to see everybody in San Antonio! As usual, the presentations were excellent, and San Antonio provided a really nice venue in terms of dining and shopping options.

The primary issue I need to mention, as in previous years, has to do with the DSEB web site; it has changed a great deal, and Lou Burnett (SICB Secretary) and Ruedi Birenheide (SICB Webmaster) would like input on the structure, pictures from the divisions, and a researchers' database. Please do send in any input you have to make our web site more interesting and informative! And please send me a photo of some aspect of your research along with a paragraph explaining it.

And finally, please note we do have an election this spring and by-laws amendments this fall to vote on, so don't forget to put in your two cents on those. Thank you!

#### **Upcoming Meetings of Interest to the Division**

Evolution 2008, 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), will be held June 20-24, 2008, hosted by the University of Minnesota, The Bell Museum of Natural History and its College of Biological Sciences. More info: <a href="http://www.cce.umn.edu/conferences/evolution/">http://www.cce.umn.edu/conferences/evolution/</a>

SMBE 2008, the annual meeting of the Society for Molecular Biology and Evolution (SMBE) will be held June 5-8, 2008 in Barcelona, Spain, hosted by the Universitat de Barcelona. More info: https://smbe2008.com/

Hennig XXVI, the Annual Meeting of the Willi Hennig Society, will be held October 28-31, 2008, at Hotel Sol San Javier, Tucuman, Argentina. More info: http://www.cladistics.org/meetings.html

### Proposed Change to DSEB By-Laws - Division Chair's Term

A proposal was made to adjust the term length of the Divisional Chair to be consistent with lengths of terms of our other officers and officers in other divisions.

The current by-laws read, in Article III section 1:

"The Chair-Elect shall be elected before one annual meeting and serve for a term of one year, and shall then successively and automatically become Chair for a term of two years and then successively and automatically become Past Chair for two years."

It is proposed that this sentence be changed to:

"The Chair-Elect shall be elected before one annual meeting and serve for a term of one year, and shall then successively and automatically become Chair for a term of <a href="https://example.com/three-years">https://example.com/three-years</a> and then successively and automatically become Past Chair for two years."

This proposal and others to change the divisional bylaws will be published in the fall newsletter along with an accompanying ballot.

Minutes of the January 2008 Business Meeting

**Elections: Candidate for Chair-elect** 



#### Patrick M. O'Connor

**Current Position:** Assistant Professor, Ohio University (since 2003)

Education: B.S., Anthropology, Michigan State University; M.S., Health Sciences, Stony Brook University, 1999; M.Phil., Anatomical Sciences, Stony Brook University, 1999; Ph.D., Anatomical Sciences, Stony Brook University, 2003

Professional Experience: Instructor, Ohio University, 2001-2003; Research Associate, Natural History Division, Michigan State University Museum, 2003 - present

SICB Activities: Judge for DEE Student Paper competition

Other Memberships: Society of Systematic Biology, Society of Vertebrate Paleontology, Paleontology Society, International Congress of Vertebrate Morphology, American Association of Clinical Anatomy

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Research Interests: Vertebrate Paleontology, Comparative and Functional Morphology, Systematics, Paleobiogeography. My research broadly addresses topics in archosaurian (birds, crocodyliforms, dinosaurs, pterosaurs) evolutionary morphology through laboratory and field studies. I use living and extinct archosaurs to examine a variety of issues related to functional inference, character evolution, the development of integrated anatomical systems, and the anatomical basis underlying trends in body size evolution.

Goals Statement: My initial goals as an officer in DSEB fall within two main areas. Goal #1: Continue efforts initiated by our current officers in raising awareness of DSEB within SICB, particularly among student and junior faculty members. One way of achieving this goal would take the form of a new series of symposia revisiting the topic of phylogenetically-informed functional morphology and physiology, emphasizing the importance for critically evaluating the first step of this process (i.e., phylogeny reconstruction). New and revised comparative approaches continue to be a major area of growth in biology, as reflected in the many recently developed techniques for examining character evolution under different evolutionary models. However, many of these new approaches are computationally complex (even at the entry level) and often remain of limited utility to those unfamiliar. A symposium series such as this could serve to bridge this gap, providing reciprocal illumination on the process of phylogeny reconstructing and different ways of using those phylogenies once hypothesized. Goal #2: Continue efforts to inform and engage Division and Society members about initiatives for public science education. For those of you who attended the recent (2008) annual meeting in San Antonio, the symposium entitled a Evolution vs.

Creationism in the Classroom: Evolving Student Attitudes' represented a good starting point for this initiative. Not only does science education remain an important topic on the domestic scene, it will become more important globally as information access continues to become easier (e.g., with the advent of open access journals). DSEB, as one of three SICB divisions with Evolution as part of its name, has a responsibility to play a role in this ever present and unfortunately still lingering 'debate.' Working with Society-level outreach efforts, DSEB members are acutely situated to convey topics related to evolutionary biology, whether in the form of Society Resolutions, as part of seminar series aim

**Elections: Candidates for Secretary** 



#### Todd H. Oakley

Current Position: Assistant Professor, University of California-Santa Barbara (Since 2003)

Education: BS (1993) and MS (1996), Biology, University of Wisconsin-Milwaukee; PhD, Biology Duke University (2001)

Professional Experience: Postdoctoral Fellow, Ecology and Evolution, (2001-2003) University of Chicago. Associate Editor Systematic Biology (2005-present)

SICB Experience: Member (2000-present); Symposium Co-Organizer (2003); Best Student Paper Committee, DSEB (2005, 2008)

Other Memberships: Society of Systematic Biologists, Sigma Xi, NERE (Network for Experimental Research in Evolution)

Research Interests: My research involves comparisons of independent evolutionary transitions such as convergence, parallelism, duplication, and homoplasy. Such transitions provide an element of replicability within the singular history of life, and can yield insight into the most general evolutionary questions. For example, when and why do the same molecular or developmental changes underlie similar - though independent - evolutionary changes? What are the fates of duplicated genes, and what causes them to diversify or retain old functions? How can we even determine what is an independent evolutionary event? These questions have driven my research on diverse subjects in evolution. Current topics include the evolution of complex traits, like eyes and nervous systems, and the phylogeny and evolution of ostracod crustaceans.

Goals Statement: My goals as a DSEB officer would be to help maintain the strengths of DSEB, including the systematics for dummies workshop. In addition, I would strive to help DSEB grow by promoting visibility of SICB to other organizations, like the Society of Systematic Biologists. Especially by targeting early-career systematists, and spreading the word that SICB is a student-friendly meeting, I envision strengthening DSEB even further.

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## C. Tristan Stayton

Current Position: Assistant Professor, Bucknell University (since 2005)

Education: B.S., Solid Earth Sciences, Purdue University University, 1999; Ph.D., Evolutionary Biology, The University of Chicago, 2005

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

SICB Activities: Chair for paper sessions; Judge for DSEB (and DVM) Student Paper and Poster Competitions

Other Memberships: Society for the Study of Evolution; American Society of Ichthyologists and Herpetologists

Research Interests: My research focuses on the joint evolution of morphology, function, mechanics, behavior, and ecology in the feeding systems of reptiles, formerly lizards and currently turtles. I am also interested in the mechanical properties of turtle shells, as regards a number of different functions. Finally, I am interested in developing methods to study convergence within and among multivariate traits. I am also involved in a project investigating the population genetics and morphology of vernal pool amphibians (Ambystoma maculatum, A. jeffersonianum, and Rana sylvatica). My students have worked on projects involving turtle swimming, turtle tail function, salamander ecology in vernal pools, and navigational learning in Eastern painted turtles (Chrysemys picta picta).

Goals Statement: The Division of Systematic and Evolutionary Biology is in a unique position to serve as a central division within the Society. I would like to encourage the development of symposia and workshops in concert with other divisions, to promote the integration the systematic and evolutionary research with the wide variety of studies seen at SICB. The Phylogenetics for Dummies workshops are excellent opportunities to present such synthetic studies, but I would also encourage the development of symposia focused on the comparative study of many types of data (biomechanical, morphological, or developmental data, for example) within a phylogenetic framework. Finally, I would like to increase student participation and awareness of our division through the promotion and advertisement of graduate student awards, and through the development of activities designed to promote or support undergraduate involvement in the division.