



## Division of Comparative Physiology & Biochemistry (DCPB): 2007 Spring Newsletter

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### *Message from the Chair*

#### **Patrick J. Walsh**

Phoenix 2007 was a great meeting! The many delegates I spoke with were very happy with the venue, and the convenience of having the conference center across the street from the main conference hotel, as well as the proximity of the various session rooms to each other, allowing easy moves between sessions. (And who could miss all those Gator and Buckeye fans and band members pouring in as we departed!) As always, the talks and posters were of uniformly high quality. I for one learned a great deal and got to arrange several new collaborations. The vigor of our field was especially evident in the competition amongst the student oral and poster presentations. Don Lovett (and Dave Tapley *in absentia*) and their team of judges had their work cut out for them, judging numerous entrants for the Peter W. Hochachka awards.

For the poster competition join me in congratulating **Stephanie S bong** of the University of North Texas for her presentation:

#### **Peter W. Hochachka Best Poster Award**

**S.M. SBONG and DZIALOWSKI E.M.** Respiratory and cardiovascular interactions during internal pipping in chicken embryos.

And for the Oral Presentations, please congratulate **Clark Cotton** of the University of Wyoming for his presentation:

#### **Peter W. Hochachka Best Oral Presentation Award**

**COTTON, C.J.** Protein conservation in spontaneous and facultative hibernators: the white-tailed prairie dog (*Cynomys leucurus*) and the black-tailed prairie dog (*Cynomys ludovicianus*).

Stephanie and Clark received checks for \$100, a certificate of award, a one-year membership renewal to SICB, and a copy of a tribute to Peter Hochachka prepared by George Somero that was published in *Comparative Biochemistry and Physiology*.

I wish to extend a sincere 'thank you' to Don and Dave and the judges. *As you know, the name of the award changes every year, and the name of the award for 2008 will be the Robert C. Terwilliger award.*



#### Bartholomew Award

I also wish to thank the Bartholomew Award Committee for their work in selecting Dr. Douglas Altshuler of the University of California, Riverside as this year's recipient. Dr. Altshuler gave a fascinating presentation to an audience represented by all Divisions. (See Doug's Biography below.) For committee service I want to thank Drs. Katie Gilmour (Chair), Lynn Riddiford, Peter Wainwright, Malcolm Gordon, Martin Wikelski, and Ray Huey (*ex officio*). Notably, Dr. Wikelski will be rotating off the committee after three years of service, so a special thanks to him! Last but not least a very large thank you to John Lighton and Sabre Systems for their generous support. *The deadline for applications for the 2008 Bartholomew Award is tentatively set at September 1, 2007.*

#### Student Travel Support for ICCPB Brazil

Please see Lou Burnett's message below on the upcoming ICCPB meeting in August. By virtue of our \$5 self levy with our annual dues, we anticipate being able to give 3 to 5 travel awards of approximately \$500 each to students to help offset travel expenses to this meeting. The details of the application process for these awards will be emailed to student SICB members at a later date, but please note that submission of an abstract by the April 15 deadline is required for these awards.

#### Division Officers Old and New

For the annual 'changing of the guard', one office changed hands at the Phoenix meeting, namely Kim Hammond's term as Program Officer ended, to be replaced by Don Mykles. Please join me in thanking Kim for her service. Note especially Don's message below regarding ideas for symposia. We were able to hold a short brain-storming session in Phoenix about possible ideas for symposia at future meetings. Also note especially the ability to submit ideas for symposia with a shorter lead time in some cases. Also welcome Joe Williams to the post of DCPB Chair Elect. I will pass him the gavel following the 2008 meeting.

#### Spring Elections

We have one important post on the ballot for the Spring elections, namely secretary as Jonathon (Papa) Stillman's term will also end after the 2008 meeting. Please see the candidates' bios and statements below, and please vote (it is so easy to do online).

Have a fantastic Spring and Summer!

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#### Message from the Program Officer

Don Mykles

#### Upcoming SICB meetings

**Boston 2009.** The meeting is January 2-6, 2009 at the Westin Waterfront Hotel. I encourage members to start thinking about symposia for the meeting. The deadline for proposals is August 17<sup>th</sup>. Go to <http://www.sicb.org/meetings/2009/index.php3> for more information on the process. Please contact me ([Donald.Mykles@ColoState.edu](mailto:Donald.Mykles@ColoState.edu)) to discuss your ideas.

**San Antonio 2008.** Our next meeting is at the San Antonio Marriott Rivercenter Hotel, January 2-6, 2008. DCPB is cosponsoring the symposium "PharmEcology: integrating ecological systems and pharmacology", organized by **J. Sorensen & W. Folley**. Please contact me ([Donald.Mykles@ColoState.edu](mailto:Donald.Mykles@ColoState.edu)) if you are interested in organizing a late-breaking mini-symposium consisting of up to 7 speakers.

Phoenix Meeting (January 3-7, 2007)

The new Phoenix Convention Center and adjacent Hyatt Hotel was an excellent venue for the near-record number of participants.

Bartholomew Award lecture was by **Douglas Altshuler** (UC Riverside): "The aerodynamic and neurophysiological mechanisms of animal flight through the lens of evolution". The Bern Lecture was by **Nancy Sherwood** (University of Victoria): "The endocrine system just before the backbone: genomics of the spineless."

This year's symposia were very successful. The society wide symposia were:

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- "Evolutionary & functional genomics of sperm, sperm storage, & fertilization", organized by **Tim Karr** and **Scott Pitnick**
- "Frontiers in learning & teaching integrative & comparative biology: The SICB digital library", organized by **Patricia Morse** and **Sara Hiebert**

Other upcoming meetings of interest

- Washington, DC 2007. Experimental Biology, April 28 - May 7, 2007. The web site: <http://www.the-aps.org/meetings/eb07/index.htm>
- Brazil 2007. 7th International Congress of Comparative Physiology & Biochemistry (ICCPB): Integrative Physiology Meets Biodiversity, August 12-16, 2007 at Salvador, Bahia, Brazil. The web site: <http://www.ib.usp.br/iccpb-brazil/>
- Chile 2007. Mid-Year Meeting of The Crustacean Society, October 14-17, 2007, at La Serena - Coquimbo, Chile. The web site: <http://www.bedim.cl/tcs2007/index.htm>
- Kenya 2008. 4th International Conference in Africa for Comparative Physiology & Biochemistry, July 19-25, 2008 at the Maasai Mara National Reserve, Kenya. The web site: <http://www.natural-events.com/mara/default-follow.asp>



Scenes from SICB 2007 Poster Sessions

Student awards

On behalf of DCPB, I congratulate the winners of the 2007 Best Student Paper Awards (see above) and Grants-in-Aid of Research, which were awarded to the following individuals:

- **Molly Dickens**, Tufts University. "Investigating the "stress" of translocation."
- **Edwin Price**, University of Western Ontario. "Migration-related changes to avian muscle phospholipid composition."
- **Heather Elizabeth Mostman-Liwanag**, University of California, Santa Cruz. "Thermal limitations of northern fur seals (*Callorhinus ursinus*): A comparative study with California sea lions (*Zalophus californianus*)."

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### Message from ICCPB executive committee DCPB representative

*Lou Burnett*

#### Brazil 2007 - 7<sup>th</sup> International Congress of Comparative Physiology and Biochemistry

##### "Integrative Physiology Meets Biodiversity"

August 12-16, 2007 in Salvador, Bahia, Brazil

This ICCPB meeting occurs every four years and is the premier international meeting for comparative physiologists and biochemists throughout the world. Please review the background material for ICCPB below (Roots of the ICCPB). A web site for this meeting is now available at <http://www.ib.usp.br/iccpb-brazil/index.html>. The program will consist of 40 symposia (32 are presently confirmed) and 5 plenary lectures. Chris Wood of McMaster University will present the opening Knut-Schmidt Nielsen lecture. Other plenary speakers include Nora Terwilliger, a past DCPB chair, Francisco Bozinovic of Chile, Steven Chown of South Africa, and Tristram Wyatt of the United Kingdom. The SICB will be well represented with a strong group of symposia including the following.

- **Nitrogen Metabolism and Excretion in the Face of Environmental Nitrogen Loading (SICB & CSZ)**, organized by Pat Walsh and Chris Wood.
- **Aromatases**, organized by Alan Conley.
- **New Models of Ammonium Transport**, organized by David Towle.
- **Behavioral And Digestive Modulation of Environmental Physiology of Aquatic Animals**, organized by Iain McGaw and Steve Morris.
- **Genetic and Phenotypic Responses to Hypoxia in the Individual**, organized by Karen Burnett, Kim Hammond, Nora Terwilliger and Guido Van den Thillart.

Many more symposia on exciting comparative topics are listed on the ICCPB web site. There will be opportunities for travel support so stay tuned. Plan now to attend this important meeting in the late summer of 2007! Abstract deadline is April 30.

#### Roots of the ICCPB

The meetings of the International Congress of Comparative Physiology and Biochemistry sprung out of a desire on the part of the leadership of a number of "comparative" groups to hold international meetings.

The formal structure surrounding the group is a Section of Comparative Physiology and Biochemistry of the International Union of Biological Sciences. This section is currently a group of 12 societies organized for the promotion of international co-operation in the areas of comparative physiology and biochemistry through symposia, conferences, workshops and any other means. DCPB along with the Canadian Society of Zoologists were the founding members.

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The main activity of this section is an international congress held approximately every four years and sponsored by one of the member societies. The first such meeting was held in Liege, Belgium in 1984. Subsequent meetings and planned meetings are listed below.

1988 - Baton Rouge, Louisiana, USA  
1991 - Tokyo, Japan  
1995 - Birmingham, England  
1999 - Calgary, Alberta, Canada  
2003 - Mt. Buller, Australia  
2007 - Salvador, Bahia, Brazil  
2011 - Kyoto, Japan

The current list of society members includes the following in alphabetical order.

- American Physiological Society, Comparative Section
  - Australia & New Zealand Society of CPB
  - Canadian Society of Zoologists
  - European Society of CPB
  - German Zoological Society
  - Japanese Society for CPB
  - Russian Physiological Society, Section of Comparative Biochemistry
  - Society de Physiologists
  - Society for Experimental Biology
  - SICB, DCPB
  - South African Society for Zoology
  - South American Society for CPB
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### Message from the Secretary

*Jonathon H. Stillman*

Firstly, I am proud to be serving DCPB and SICB in this capacity. I am considering ways improve the newsletter or other aspects of recording and communicating DCPB activities. Both the DCPB and SICB executives have discussed the need to make our online interfaces both more informative and more interactive; and any suggestions are welcomed! Please do not hesitate to contact me: [stillmaj@sfsu.edu](mailto:stillmaj@sfsu.edu).

### Minutes of the DCPB BUSINESS MEETING, JAN 4, 2007, Phoenix.

Pat Walsh (Chair) called the meeting to order by introducing the DCPB Executive Committee plus Nora Terwilliger and Lou Burnett, mentioning that Joanna Joyner Matos was not in attendance since she was at home taking care of her new baby (congrats Joanna!). Pat then presented the minutes from the DCPB Business meeting in Orlando, January 2006. The minutes were approved unanimously. Following this, the fact that a new Secretary will be elected for 2008-2009 was discussed, and the nominating committee for that election is headed by Donna Wolcott and two other people. Candidates for the Secretary position are presented below.

SICB society officers Sally Woodin, Bret Burke, Ron Dimock, Linda Walters and John Pearse stopped by to relate the following information and give the DCPB members an opportunity to ask questions.

1. SICB has initiated a new endowment fund to support foreign speakers, which hopefully will overcome difficulty in getting federal funding to support non-USA participants in meetings. Names for this fund are currently being accepted; one offered at the meeting was STIRR (Symposium Talks Inspire Research Revolution). [This Secretary thinks that SICB and DCPB members should be able to invent a more dynamic name.] Donations to the endowment fund are gladly accepted, and currently the fund is just over \$100K and earning 8% interest. Ideally, this endowment would be used to support 2-4 international speakers at the annual SICB meeting.
2. The SICB Journal Integrative and Comparative Biology is all caught up in publishing backlogged manuscripts (why we had such a thick issue at the end of the year). During 2007, the plan is to publish print versions in July through December to finish 2007 symposium papers in December.
3. Membership database analyses suggest that the retention of student and postdoc members is good. Although many people do not pay membership dues in successive years, over a seven year running average, those people remain in the membership database, suggesting that those members may pay dues and attend meetings intermittently. From the past 7 year period, three datasets have been generated: those individuals who have been members once, those individuals who were members for 2+ years but are not currently members, and those individuals who were members for 2+ years and are current members. Overall, membership is increasing, but analysis of long-term members is complicated by graduate students. Importantly for DCPB, membership status appearing on SICB website is currently undergoing some "construction" to fix some bugs.

Next, Bill Zamer from NSF stopped by the meeting to give DCPB some information about current things going on at NSF that would be relevant to DCPB members. Firstly, Bill said that he wants a better budget - currently things aren't looking good and as of the meeting, they did not have a final budget. Secondly, Bill announced organizational changes at IOB that are pending final clearance. (N.B., by the time that you read this newsletter, the below changes should have already been implemented at NSF) In February 2007, IOB will change to IOS (Integrative Organismal Systems) and there will be a new cluster: PSS (Physiological and Structural Systems). No panels for PSS have been developed yet, but panels will be established based on proposals received and this will be done with as much flexibility as required. These changes at NSF are new, so there are no real data on how this will impact proposal submission and/or review. For January 2007 submissions, clusters will be as they have previously been, but proposals will be reviewed in newly developed panels. Finally, Bill announced that Jim Collins (Assistant Director For Biological Sciences at NSF) will talk later in the evening about NSF BIO Directorate directions and changes, and on Saturday at Noon, Bill and others will talk about changes at NSF and funding opportunities that DCPB members are under-targeting. Jim's talk can be seen here: <http://www.sicb.org/meetings/2007/jcollins/>

The 2007 Bartholomew Award Winner was then announced: Dr. Douglas Altshuler. Congrats Doug! If you missed Doug's presentation, you missed a great integration across physiology and behavior and a great educational opportunity to learn about work-force loops. Nominations for the 2008 Bartholomew Award are due late in the summer (see below).

Lou Burnett then gave his report as the representative for the International Congress for Comparative Physiology and Biochemistry (ICCPB) and the International Union of Physiological Sciences (IUPS). Lou's message is above, so I won't repeat what he has written here. The next ICCPB is in Salvador Bahia Brazil, August 12-16 2007. The meeting website and registration information is just starting to come online, but is not yet fully functional. E-mail notification will occur when the website is fully functional. As the 2006 DCPB Spring Newsletter included a comprehensive list of DCPB sponsored events, I will not repeat those here, but please see that newsletter for information (LINK). Malcolm Gordon is the APS representative to the ICCPB, and DCPB will likely have a small amount of financial support available to defray costs of attending the ICCPB in Brazil. **Of great importance**, Lou is ready to find his successor as ICCPB representative. This individual would be required to travel to the next IUPS congress in Kyoto Japan (see below) where the next ICCPB will be planned. If you are interested in succeeding Lou, please contact Pat Walsh or any other member of the DCPB Executive Committee.

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Malcolm Gordon then presented as the APS representative to the 36<sup>th</sup> IUPS congress to be held in Kyoto, Japan in August 2009. This is not to be confused with the next ICCPB to be held also in Kyoto, Japan in August 2011. (So, you have two chances to go to Kyoto!). The second brochure for the IUPS meeting has just come out and there is still time to prepare symposia for the meeting. Go to <http://www.iups2009.com> for information and copies of the brochure for the meeting. Planning for the next ICCPB (2011) will happen at the 2009 IUPS meeting

Kim Hammonds then reported on DCPB symposia planned for the 2008 SICB meeting in San Antonio. Sadly, there aren't any. However, there is a PharmEcology symposium planned for the meeting that is DCPB related. There is a need for greater DCPB participation in planning symposia, and our new program director, Don Mykles is eager to hear from you if you have ideas for symposia. Funding is a real issue for getting participants for symposia. SICB can offer about ~\$500/symposium, but other sources of funding (e.g., NSF, industry, foundations) should be considered. Wear your ingenuity cap!

Although any chance for submitting a symposium for San Antonio has passed, Don Mykles suggested that DCPB could organize contributed paper sessions that focus on a particular common theme. This could increase visibility of the contributed paper session giving it a symposium-esque quality. Pat Walsh also discussed how symposium planning has a long lead time - historically this has been so that funding to support the symposium could be obtained. However, a long lead time can diminish the immediate nature of some work (i.e., what is hot right now), and SICB is working to develop a quick mini-symposium format that would involve submission of proposals in July and organization for that year's meeting during the fall Program Officer's meeting. Start thinking about what symposia you'd like to plan for Boston 2009!

Last year, DCPB members voted to approve by-law changes to assess a \$5 dues fee (recall, 1 Disney) to help commit funds to international meetings, especially for un- or under-funded students and postdocs to get to those conferences. About \$2,000-\$2,500 will be collected each year. The DCPB Executive Committee would decide on year-to-year use of the funds at the annual SICB meeting. Funds may be rolled over to the next year and accumulated if upcoming meetings (e.g., ICCPB or IUPS) would warrant saving up the funds.

A special thanks to Dave Tapley for organizing the judging of student presentations and to Don Lovett for providing forms and on-site logistics at the meeting. This year's "in memorium" award will be the "Peter Hochachka" award, which comes with a \$100 cash prize and a 1 year SICB membership, as well as a copy of the obituary of Peter written by George Somero. Next year's award will be in memorium of Bob Terwilliger.

Finally, Jon Harrison announced that the 2007 APS Experimental Biology meeting in Washington DC (late April) will have a "Physiology InFocus" section on experimental evolution (<http://www.the-aps.org/meetings/eb07/abs/pif-rose.htm>). Early career scientists are encouraged to apply for awards (<http://www.the-aps.org/meetings/eb07/awards/comparative.htm>) if they present at the meeting. To date, only one application has been received for both the research and young faculty awards!

### Editorial Reports:

*Comparative Biochemistry and Physiology:* Pat Walsh

The January 2007 issue has a list of referees. The new Editorial Express MS online tracking system is fully functional and has streamlined the MS Flow process greatly. CBP is now fully electronic. Special issues are in the works, and Göran Nilsson is the new editor of special issues and review articles. There will be 9 new editorial board members (7 of which are female) invited for 2007. The new part D has four issues in 2006, and will be listed in ISI for citation tracking after 2007 (2 years of data are required for calculation of impact factor). After the mandatory 1-year waiting period, it will be listed in Pubmed beginning in 2007. CBP has second pickings for SICB symposia (after ICB).

Here are official statistics for CBP:

CBP's impact factor is steady at approximately 1.5 for Parts A, B, and C.

CBP (parts A-D) received 1148 manuscripts received in 2006. 119 of these were rejected after review, 260 were desk-rejected, 11 were withdrawn, 348 are pending, and 418 are already accepted. Conservatively assuming that about 30% of pending manuscripts are going to be rejected, this would put another 104 manuscripts into the 'rejected column' and make the total rejected 494 for a total rejection rate of: 43% (acceptance rate 57%).

Between July 2005 and June 2006 we had 1296 willing reviewers who supplied a total of 2955 reports (an average of 2.28 reports per manuscript).

*Physiological and Biochemical Zoology:* Jim Hicks

Jim presented a nice powerpoint of the evolution of PBZ covers. The biggest change is that PBZ now has photographs of animals in their natural setting on the cover. Got a great animal pic from your latest field trip? Send it in and see it in print (high-quality photos required, so no cell phone pics, please).

In 2006, 182 manuscripts were submitted required 116 editorial decisions. 60% of those manuscripts were from international authors. 159 research papers. 70% rejection rate currently, but about 60% is generally expected. 60% of the rejections are without review. The average # of days to reach a final decision is 70, and an online review system is upcoming.

PBZs impact factor in 2005 is ~2.2. This increase in impact factor is directly related to an increase in the number of papers submitted.

A new section, "PBZ in the news" has been launched, where the Univ. of Chicago press will publicize both the journal and media-appealing scientific content to media outlets (e.g., NPR, National Geographic news, Science, Nature). As a consequence of increased press attention, the Univ. of Chicago press has decided to redesign the PBZ website, and changes are forthcoming.

2007 marks the 80<sup>th</sup> anniversary of PBZ, and to commemorate this, the top 80 most cited papers of all 80 years of the journal will be made available online during 2007. A special issue during 2007 will be on experimental evolution. Open access may reach PBZ, and if that happens costs of \$2-3K will be passed along to authors, a cost that many of us do not wish to bear, but that would be necessary if subscription revenues disappear.

The meeting convened at 5:16 PM and adjourned at 6:13 PM.

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### Message from the Graduate Student/Postdoc Representative

*Joanna Joyner-Matos*

Hello to all DCPB graduate students and postdocs. I hope you enjoyed the meeting in Phoenix!

As graduate student representative for DCPB, I am also a member of SICB's Student/ Postdoctoral Affairs Committee (SPDAC). SPDAC organized a number of activities at the Phoenix meeting. I would appreciate any feedback regarding these activities:

- 1<sup>st</sup> Timers Orientation on the first day of the meeting, during which we discussed, "**How to get the most out of your SICB meeting.**"
- A workshop on the last evening of the meeting, "**What editors want.**"

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SPDAC is in the process of planning the activities for the 2008 meeting in San Antonio. We will continue our tradition of the 1<sup>st</sup> Timers Orientation and are currently discussing possible workshop topics. If you would like one of the past workshops repeated, or have a new idea, please let me know!

If you are looking for funding opportunities during this semester, you may want to consider the Sigma Xi Grants-in-Aid of Research. The spring grant deadline is March 15<sup>th</sup>. You can find additional information at [www.sigmaxi.org](http://www.sigmaxi.org).

If you have questions or ideas regarding SPDAC's plans for the San Antonio meeting, or other questions for me, please feel free to contact me at [jimatos@ufl.edu](mailto:jimatos@ufl.edu). Good luck with the semester!

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### Candidates for Secretary:

**Allen Gibbs and Steven Secor**

#### Allen G. Gibbs, Personal Statement

**Current Position:** Assistant Professor, University of Nevada, Las Vegas

**Education:** 1981, B.A., Chemistry, University of Chicago; 1989, Ph.D., Marine Biology, Scripps Institution of Oceanography; 1989-1992, Post-doctoral Researcher, UC, Davis; 1992-1999

**Professional Experience:** 1992-1999, Lecturer and Assistant Professor, UC, Irvine; 1999-2004, Associate Research Scientist, University of Arizona; 2005-present, Assistant Professor, UNLV

**SICB Activities:** Member since 1988; have attended most of the annual meetings since then; co-organized a symposium with E. Lisa Crockett in 1996; have judged student presentations 5 times for DCPB and twice for DEE; chaired DCPB student paper competition in 1992

**Other memberships:** American Association for the Advancement of Science, American Physiological Society, Entomological Society of America, Sigma Xi, Society for the Study of Evolution

**Research Interests:** I am an environmental physiologist who has worked in a number of systems, ranging from deep-sea fish to *Drosophila*. My main interest at the moment is insect water balance and energetics, but the work my lab does includes experimental evolution, developmental physiology and functional genomics.

**Goals Statement:** When I joined ASZ, it contained only five or six divisions. We now have eleven, raising the danger of losing the "integrative" nature of the society. I have seen this happen in multiple academic departments, and it is not what SICB wants. One of my main jobs as secretary will be to prevent balkanization by ensuring excellent communication between DCPB and other divisions. We also need to communicate with the outside world. This includes other scientific societies and society as a whole. As one who spent five years on soft money, I am acutely aware of how hard it is to get funding these days. SICB needs to work with other organizations to educate the public and the politicians about the importance of basic research.

#### Stephen M. Secor, Personal Statement

**Current Position:** Associate Professor, University of Alabama

**Education:** B.S., SUNY College of Environmental Science and Forestry (1980); M.S., Department of Zoology, University of Oklahoma (1985); Ph.D., Department of Biology, UCLA (1992); Postdoctoral Researcher, Department of Physiology, UCLA School of Medicine (1992-1998).

**Professional Experience:** Instructor, Department of Biology, UCLA (1992); Assistant Professor, Department of Biology, University of Mississippi (1999-2001); Assistant Professor, Department of Biological Sciences, University of Alabama (2001-2006).

**SICB Activities:** Since 1989, 15 oral presentations (co-author on 10 other talks) and 6 poster presentations (co-author on 7 others). In 1996, awarded the George A. Bartholomew Distinguished Young Investigator Award. In 2004, presented in the symposium "Integrative Biology: A Symposium Honoring George A. Bartholomew". For the past few years I have served as a judge of student posters and oral presentations. I have published 1 paper in Integrative and Comparative Biology, 4 papers in Physiological and Biochemical Zoology, and 5 papers in Comparative Biochemistry and Physiology. I am currently serving on the Editorial Board of Physiological and Biochemical Zoology.

**Other Memberships:** American Physiological Society, American Society of Ichthyologists and Herpetologists.

**Research Interests:** While I consider myself foremost a naturalist, I have become enthralled with the study of digestive physiology. This interest has developed into two main research programs. The first investigates the adaptive interplay between feeding habits and digestive physiology. By taking a comparative approach and working with all forms of amphibians and reptiles, my aim is to evaluate the adaptive match between feeding frequencies and the magnitude by which the digestive system regulates performance between fasting and digesting. The second explores the underlying mechanisms involved in the regulation of physiological performance associated with digestion. For this, I developed the Burmese python as a model to study the magnitude by which gastrointestinal and cardiovascular performance can be regulated, and to identify the signaling and cellular mechanisms responsible for altering tissue form and function with fasting and feeding.

**Goals Statement:** I would be honored to serve as Secretary for the DCPB of SICB. I have been attending ASZ/SICB meetings since I was a graduate student and each year I am overly impressed with the quality of science presented and the attention the society places on student participation and training. I would be extremely pleased to be able to serve the division in this position and continue the effort to improve the communication of SICB and DCPB activities to its members.

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### The George A. Bartholomew Award Competition

The George A. Bartholomew Award was established in 1992 by the SICB Division of Comparative Physiology and Biochemistry to commemorate the research contributions and mentoring work of Professor Bartholomew (1919-2006) by recognizing an outstanding young investigator whose research follows in the path that Professor Bartholomew blazed. Professor Bartholomew left two outstanding legacies during his long and storied academic career. First, Professor Bartholomew was inspiring as a teacher and mentor at the undergraduate, graduate and postdoctoral levels, and as a result the academic lineages of nearly 1200 individuals spanning 6 academic generations (and counting) can be traced back to him. Second, his body of scientific work was unusually integrative in nature, combining laboratory and field approaches to address questions at the interface of physiology, behaviour and ecology. He also pioneered a philosophical approach that has profoundly influenced how environmental physiologists view the organism as the unit of selection (not an isolated trait), how organisms should be considered adequately, but not perfectly adapted, and how studies of physiology and behavior should be placed in an environmental context. The Bartholomew Award recognizes and continues this tradition of Professor Bartholomew's contributions. In



assessing candidates for the Bartholomew Award, the selection committee has striven to identify outstanding young scientists with a similarly integrative approach. To continue this tradition, the selection committee will be accepting applications for the 2008 Bartholomew Award until Friday, August 24<sup>th</sup>, 2007 - if you know of an exceptional young scientist, please send in a nomination!

### 2007 Bartholomew Award Winner:

#### Dr. Douglas Altshuler:



Dr. Doug Altshuler, the 2007 Bartholomew Awardee, has integrated environmental physiology and behavior beautifully, in the tradition of Dr. Bartholomew. As his presentation on *The Aerodynamic and Neurophysiological Mechanisms of Animal Flight through the Lens of Evolution* at the Phoenix meeting so amply illustrated, Dr. Altshuler employs both laboratory and field studies, and techniques ranging from kinematics and neurobiology to molecular phylogeny, to address questions about the foraging behaviour, flight energetics, eco-physiology and phylogeny of hummingbirds.

Doug Altshuler began his academic career at University of California, Santa Cruz where he studied the history of religion with a special focus on the Indian subcontinent. He spent his junior year abroad at the University of Delhi learning about Vedanta philosophy, Sufi poetry, and early Buddhism.

Upon returning to California, Doug took the first opportunity to again study abroad, which turned out to be a field course on tropical biology and Mayan anthropology in Guatemala and Belize. Although the Mayan component was his original motivation for taking this course, Doug soon realized that although biology poses simpler questions than religion, it also provides more tractable answers. Continuing his quest for fieldwork and travel, Doug added biology into the mix and completed master's research on the interactions between plants and animals on Barro Colorado Island (BCI) in the Panama Canal. This work was supervised by Rick Howard at Purdue University, where Doug was awarded a M.Sc. in biology in 1996. While on BCI, Doug met Robert Dudley who became his Ph.D. supervisor at the University of Texas. His doctoral research concerned how hummingbird flight performance changes across elevations and related effects on foraging behavior. This project involved laboratory studies in Austin as well as fieldwork in the Peruvian Andes and the Colorado Rockies. Upon graduation in 2001, Doug joined Michael Dickinson's group for his postdoc, where he settled down into the lab and worked on the aerodynamics and neuromuscular control of flight in hummingbirds, zebra finches, and honeybees. In 2006, Doug started a faculty position at University of California, Riverside, joining an energetic group of comparative and evolutionary physiologists.

Doug's current research is focused on integrative biology of animal flight, including mechanics and neural control, evolutionary diversification, and how flight performance influences ecological interactions. He examines these topics using experimental and comparative approaches in both the laboratory and the field. For more about Doug, see his website: <http://www.biology.ucr.edu/people/faculty/Altshuler.html>

### Nominations for the 2008 Bartholomew Award:

The Division of Comparative Physiology and Biochemistry solicits applications and nominations for the 2008 George A. Bartholomew Award-an annual prize given to a young investigator for distinguished contributions to comparative physiology and biochemistry or to related fields of functional and integrative biology. Eligible candidates are those who have completed their doctorate within the past seven (7) years. Additional information about the award is available on the SICB website (<http://www.sicb.org/grants/bartholomew.php3>). Candidates may apply directly or be nominated: both types of candidates will be evaluated equivalently. Applicants should submit a short description of their work, three (3) reprints, and a curriculum vita and also request three letters of recommendation. Nominators must arrange for these same materials (except that only two additional letters of recommendation are required) to be submitted to the Committee. All materials should be submitted electronically in .pdf format to the Chair of the Selection Committee, Dr. Katie Gilmour, Department of Biology, University of Ottawa (email address: [katie.gilmour@science.uottawa.ca](mailto:katie.gilmour@science.uottawa.ca)). Deadline for receipt of all materials is Friday, August 24, 2007. The winner will present a Plenary Lecture at the 2008 Annual Meeting in San Antonio.