



Division of Comparative Physiology & Biochemistry

Contents

Message from the Chair	1
Message from the Chair-Elect	1
PBZ Editor Search	2
George Bartholomew Award	2
Program Officer Message	3
Student/Postdoctoral Affairs	6
Message from the Secretary	7
Judges Needed	7

DCPB Officers & Representatives

Donald Mykles
Chair 2012-2014

Stephen Secor
Chair-Elect 2013-2014

James Hicks
Past Chair 2012-2014

Richard Lyle Londraville
Secretary 2012-2014

Jonathon Stillman
Program Officer 2013-2015

Christopher Slay
*Student/Postdoc Representative
2011-2014*

Message from the Chair



Don Mykles

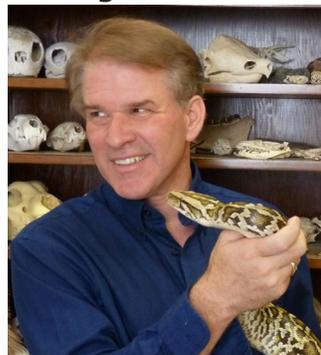
Don Mykles, Chair.DCPB@sicb.org

We are looking forward to an exciting meeting in Austin. DCPB will be well represented with about 250 presentations. The Division is sponsoring or co-sponsoring 3 society-wide and 3 regular symposia. Jonathon Stillman provides the details in the Program Officer's report. There are 52 entrants in the DCPB Best Student Paper competition. Let Harry Itagaki (itagaki@kenyou.edu) know if you can serve as a judge – he'll need a lot of help!

The APS Intersociety Meeting in Comparative Biology is next October in San Diego. Many of the symposia organizers and speakers are DCPB members, and the Division is helping support 2 or 3 symposia, using the income from the \$5 "surcharge" from the annual membership dues. The DCPB Executive Committee will decide on the distribution of funds at the Austin meeting.

My term ends at the end of the 2014 meeting and I thank the members for the opportunity to serve SICB in this way. Stephen Secor takes over as Chair after the 2014 meeting. Deborah Lutterschmidt starts her term as secretary at Austin. I thank Rich Londraville for the outstanding job he's done as DCPB secretary the last 2 years. I encourage you to attend the DCPB business meeting on Jan. 4th at 5:15 pm, just before the Bartholomew Lecture. It is open to all members.

Message from the Chair-Elect



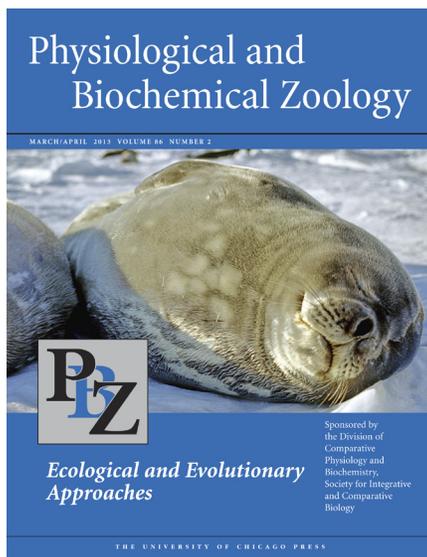
Stephen Secor

Stephen Secor,
ChairElect.DCPB@sib.org

I look forward to taking over the reins from Don Mykles and working to serve DCPB for the next two years. My aim is to continue developing exciting programs at the SICB meetings and supporting our symposiums, the Bartholomew lecture, and our journals. Within SICB, I will promote student attendance and participation at meetings, pursue our efforts in science education and public awareness, and advocate for better interactions among divisions and other societies. I thank the membership again for this opportunity.



PBZ New Editor Search - Request for Proposals



After five years, Kathleen Gilmour and Patricia Schulte will be stepping down June 30, 2014 as editors of Physiological and Biochemical Zoology. The University of Chicago Press is extraordinarily grateful to Professors Gilmour and Schulte and the editorial team for their years of dedication and service to the

Physiological and Biochemical Zoology

journal. The SICB Division of Comparative Physiology and Biochemistry and the University of Chicago Press are now soliciting proposals from leading scholars in the field to assume the editorial helm of PBZ in 2014. A team of co-editors, or an Editor-in-Chief and Editors will also be considered.

The DCPB Executive Committee will carefully review all proposals in consultation with the current editors and associate editors, select an editor, and submit its recommendation to the University of Chicago Press. The term of the Editor's appointment is five years, with reappointment possible. The journal office, including a Managing Editor, will be arranged by the University of Chicago Press.

Proposals from prospective editors should be submitted by February 14, 2014 and include the following:

1. Statement of Editorial Policy. Considering the research published in PBZ in the past, describe the editorial scope and policies to be pursued under your editorship. This should be a reflective statement that serves to show acquaintance with the important issues confronting the field and how PBZ will continue to serve the discipline. A statement of no more than five pages is requested. If co-editorship is proposed, please include relevant rationale.

2. Statement of Editorial Board Responsibilities. Explain how the editorial board will function. Currently, members of the editorial board advise the editor and associate editors with regard to potential reviewers of submitted manuscripts and, on occasion, review manuscripts themselves. The editorial board also makes suggestions for Invited Perspectives articles and offers advice to the editor on policy issues, as the need arises.

3. Curriculum vitae. Please enclose a current CV. If you are proposing to edit PBZ with a co-editor or several co-editors as a team, please enclose a CV for each prospective editor.

The five-year renewable term will begin July 1, 2014, with time set aside for an overlap of duties with the outgoing editors to ensure a smooth transition. For more information about PBZ and its editorship, please consult the New Editor Search documents posted at the PBZ website at <http://www.journals.uchicago.edu/PBZ>. You are also invited to contact current editors Kathleen Gilmour Kathleen.Gilmour@uot-tawa.ca and/or Patricia Schulte pschulte@zoology.ubc.ca with direct inquiries.

Send questions and proposals to:
Jennifer Ringblom, Publisher
The University of Chicago Press
Journals Division
1427 E. 60th Street
Chicago, IL 60637
Ph: 773-702-7363
E-mail: ringblom@uchicago.edu

George Bartholomew Award



Dan Warner

Dr. Dan Warner, University of Alabama Birmingham, was selected and will give the Bartholomew Lecture on January 4, 2014 at 6 pm, followed by a social hosted by DCPB. I thank the selection committee, consisting of Art Woods (Chair), Adam Summers, Sheila Patek, Jonathon Stillman, and Marty Martin. Sheila Patek will take over as chair next year.
-Don Mykles, DCPB Chair

Dr. Warner holds a B.S. degree in Animal Ecology from Iowa State University (1998) and a M.S. degree in Biology from Virginia Tech (2001). After receiving



his Ph.D. from the University of Sydney (2007), he returned to Iowa State University as a postdoctoral researcher in the Department of Ecology, Evolution and Organismal Biology. Starting in fall 2012, he is currently an Assistant Professor in the Department of Biology at the University of Alabama at Birmingham. Dr. Warner's research seeks to understand the ecological and evolutionary processes that shape organismal responses to their environments across different life-history stages (from embryo to adult). His research uses lab and field experimental approaches and integrates aspects of ecology, physiology, genetics and behavior to empirically test theoretical predictions of adaptive evolution. His primary areas of interest are environmental sex determination, developmental plasticity, and maternal effects. His research uses reptiles as models to address these topics.

Message from the Program Officer



Jonathon Stillman,
DPO.DCPB@sicb.org

UPCOMING MEETING HIGHLIGHTS - JANUARY 3-7, 2014 IN AUSTIN, TX

The SICB Program Committee recently met to finalize the program for our upcoming Annual Meeting, to be held January 3-7 in Austin, TX. Based on the number of abstracts submitted, we expect this to be our second largest meeting ever!

The meeting will be held in the Hilton Austin, located downtown right next to the 6th Street entertainment and restaurant district (which I can tell you from recent personal experience offers something for just about everyone). SICB has a block of hotel rooms reserved at a great rate, so you may want to book soon. A large selection of dining options at all price ranges can be found near the hotel. In addition, there will be childcare available at the meeting again this year.

SYMPOSIA

Comparative Physiology and Biochemistry will have a strong presence at the meeting, including the following contributed session presence:

- 99 oral presentations in 15 physiology-themed sessions
- 97 posters in physiologically-themed poster sub-sessions
- 54 presentations in other sessions by authors with DCPB primary affiliation
- 52 entrants in DCPB Best Student Paper competitions (oral and poster)

In addition, DCPB has co-sponsored 3 society-wide and 3 regular symposia:

Society-wide

- **[The cell's view of animal body plan evolution](#)**
Organizers: Deirdre Lyons, Mansi Srivastava and Mark Martindale
- **[Epigenetics: molecular mechanisms through organismal influences](#)**
Organizer: Warren Burggren
- **[A new organismal systems biology: how animals walk the tightrope between stability and change \(a "grand challenges" symposium\)](#)**
Organizers: Dianna K. Padilla, Billie Swalla, Brian Tsukimura

DCPB sponsored (or co-sponsored)

- **[Stress, condition and ornamentation](#)**
Organizer: Geoffrey Hill
- **[The micro and macro of nutrient effects in animal physiology and ecology](#)**
Organizer: Robin Warne, Dan Hahn
- **[Methods and mechanisms in ecoimmunology](#)**
Organizers: Cynthia Downs, Jim Adelman; Greg

While at the meeting, don't forget to attend the DCPB business meeting just before the Bartholomew Award lecture on Saturday, January 4 at 5:15pm, followed by the Bartholomew Award lecture from 6:00-7:30pm and the DCPB sponsored Bartholomew Award social following the lecture until about 9 pm. There will be food and a cash bar at the social, but just to forewarn, the high-prices of hotel food and drink might leave you wanting to go out for a real dinner in Austin following the social.



Future Symposia – January 3-7, 2015 in West Palm Beach, Florida, 2016 in Portland, and 2017 in somewhere cool in the middle of North America (location TBD).

Looking further ahead, we have an exciting slate of symposia for the 2014 meeting in West Palm Beach, of which DCPB will co-sponsor several society-wide and divisional symposia. You'll be hearing about those symposia in the Spring DCPB newsletter. Meanwhile, I encourage you to start thinking about proposals for symposia for the Portland meeting in 2016 and beyond. If you are working in a field that has made recent advances, is integrating approaches in new ways, or has matured to the point where a "new synthesis" is ready, a SICB symposium is a terrific way to solidify that effort. Proposals for Portland 2016 will be due in August 2014 – feel free to talk to me (or any other program officer) about your ideas in Austin.

OTHER DCPB/SICB SUPPORTED MEETINGS

The next quadrennial APS Intersociety meeting in comparative physiology will be October 5-8, 2014 at the Town and Country Resort Hotel and Convention Center in sunny San Diego, California. This meeting will draw comparative and evolutionary physiologists from around the world to present and discuss recent advances in animal physiology. The three and a half day meeting will feature 15 symposia, 2 plenary lectures, 2 workshops, and multiple sessions for contributed abstracts as oral or poster presentations. This meeting will include the 2014 Scholander Award competition for young comparative physiologists, plus other trainee awards and activities. What fun!

Currently scheduled sessions:

Plenary Lectures

- Steven L. Chown, Monash University, Clayton, Australia
- Patricia M. Schulte, University of British Columbia, Vancouver, Canada

Concurrent Symposium Track:

Concurrent Symposium Track: Physiological Responses to Extreme or Changing Environments

- Physiological adaptations to extremes: providing novel animal models for investigating health and disease (Hicks and Wang; organizers)
- Cardiorespiratory physiology of vertebrate extremophiles (Meir and Scott; organizers)

- Overcoming a major physiological barrier: adaptation from saline to freshwater habitats (Charmantier and Lee; organizers)
- Responses to global change: Acclimatize, adapt or die (Hofmann, Kelly, Evans; organizers)
- Molecular and physiological features of animal diapause (Hand; organizer)

Concurrent Symposium Track: Evolutionary and Developmental Physiology

- Genomics in integrative and comparative physiology (Crawford; organizer)
- Diverse approaches in evolutionary physiology (Garland; organizer)
- Challenges from the very beginning: developmental physiology, epigenetics, and critical windows (Eme and Mueller; organizers)
- Evolution and developmental origins of endothermy (Owerkowicz and Dzialowski; organizers)
- New perspectives on the ecology and evolution of homeostasis (Martin and Woods; organizers)

Concurrent Symposium Track: Transport, Digestion, and Locomotion

- Frontiers in insect homeostasis – advantages and exploitation (Dow and Romero; organizers)
- Recent ideas and advances in comparative epithelial physiology (Tresguerres and Goss; organizers)
- Comparative gastrointestinal physiology: from genes to animal performance (German; organizer)
- Determinants of skeletal muscle diversity (Azizi and Hernandez; organizers)
- Linking behaviour and physiology in animal navigation and orientation (Smolka and el Jundi; organizers)

Workshops:

- Trainee workshop: Non-traditional career paths for comparative physiologists (Williams and Rees; organizers)
- The challenge of teaching physiology in a changing environment: innovations and resources (Eacy and Sweazea; organizers)



Other Activities and Events

- Scholander Award competition
- Daily poster sessions for presentations selected from abstracts
- Twelve sessions for oral presentations selected from abstracts
- Publisher and vendor exhibits
- Welcome reception
- Closing dinner and awards ceremony

Organizing Committee

Barney Rees (chair)

Greg Goss	Heidi Contreras
Holly Shiels	Scott Kirkton
Sinya Benyajati	Tobias Wang
Jon Harrison	Peter Frappell
Jonathon Stillman	Cassandra Williams

Participating Societies (partial list)

American Physiological Society
Society for Experimental Biology
Canadian Society of Zoologists
The Crustacean Society
Western Society of Naturalists
Society for Integrative and Comparative Biology
The Physiological Society
International Society for Neurochemistry
International Congress of Vertebrate Morphology
Australia and New Zealand Society for Comparative Physiology and Biochemistry

So, mark your calendars, tell your colleagues and students, and make plans to attend.

The Call for Abstracts will occur early in 2014! Watch the website [here](#) for updates.

SICB DCPB is supporting this meeting to offset conference fees, travel costs, and other items, and this meeting is very much open to SICB DCPB members. So, mark your calendars, tell your colleagues and students, and make plans to attend. Be ready to present your best work at this terrific, infrequent, international meeting for comparative and evolutionary physiology! (but of course, please also come to the annual SICB meetings...)

INTERNATIONAL MEETINGS THAT DCPB MEMBERS MAY BE INTERESTED IN:

The International Union of Physiological Sciences (IUPS) had its 2013 meeting in Birmingham England in July 2013. If you missed the meeting but would like to watch some of the keynote and plenary lectures, you can do so here: <http://www.physoc.org/gallery/media/iups-2013-lectures>. Lectures that are posted on that site include Goran Nilsson's "Respiratory and neural consequences for fish of a warmer and more carbonated future," Barbara Cannon's Schmidt-Nielsen Lecture "Brown adipose tissue: the mammalian prerogative," and Patrik Rorsman's August Krogh lecture "Role of ATP-regulated potassium channels in pancreatic alpha- and beta-cells."

The Brazilian Physiology Society will hold its first Pan American Congress of Physiological Sciences August 2-6 2014 in Iguassu Falls, Brazil (<http://panam2014.com/>). Sponsors include physiological societies from Argentina, Brazil, Canada, Chile, Cuba, Mexico, the United States, as well as the Latin American Association of Physiological Sciences.

The 5th International Symposium on the Physiology and Pharmacology of Temperature Regulation (PPTR) will bring together, in the heart of the world-famous Kruger National Park, scientists working on temperature regulation in various species across a broad range of themes. Skukuza, Kruger National Park, South Africa, 7-12 September 2014 (<https://www.wits.ac.za/conferences/pptr2014>).

So, if you are looking for a lot of travel to exotic international destinations to hear all about comparative physiology, late 2014 looks to be right up your alley. Start early at EB and end in 2015 with SICB for 8 months of physiology conference bliss...

We look forward to seeing you in Austin where your program officer will be committed to doing his part towards "keeping Austin weird!" I invite you to have some fun and do the same.



Message from the DCPB Student/Postdoctoral Affairs Committee Representative

Chris Slay



Chris Slay

SICB has a well-earned reputation as being a very trainee-friendly society, not only because a comparatively large proportion of presentations are delivered by students and postdocs each year, but because the organization actively supports students and postdocs with various sources of funding throughout the year and offers several professional development workshops during the annual meeting.

Fellowships for Graduate Student Travel and Grants In Aid of Research are offered annually. The FGST offers up to \$2,000 for travel to distant labs, research sites, and museums, with approximately 2 awards given annually. Grants In Aid of Research are offered Society-wide, with approximately \$24,000 awarded to 25 applicants seeking funding for research materials. The application deadlines will have passed by the time of this publication, but these are annual awards, so bookmark the following site for additional information and future reference: <http://sicbgrants.biology.duke.edu/home>. SICB also offers Charlotte Magnum Awards to subsidize hotel or registration fees at annual meetings and Dorothy M. Skinner Awards to support travel for women scholars.

The professional development opportunities at the SICB annual meetings are sponsored largely by the Student and Postdoctoral Affairs Committee (SPDAC). The largest and most highly-attended workshops occur on January 6 of each year at 6:30 PM. The topic of this year's workshop will likely be "Improving Your Online Presence," with discussion of how to build an effective website and use other web-based resources to maximize your hiring potential. Additionally, SPDAC will once again be hosting a professional development and networking booth in the exhibition hall. You can come by at basically any time to receive feedback on your CV, but there will also be scheduled

discussions focusing on mentorship, teaching portfolios, pedagogy, negotiation techniques, dual family hires and considerations, alternative careers, and the job application process.

And, of course, don't forget to check out the SICB Jobs Board, a valuable source of job postings for undergrads, grad students, and postdocs alike: <http://www.sicb.org/jobs.php3>

The Austin meeting also marks the end of my tenure as our division's Graduate Student and Postdoc Representative. I have a great appreciation for all the fruitful interactions I have had with so many of you, and hope my successor (Natalie Pitts) enjoys working with you as much as I have.

See you in Austin!

New DCPB Student/Postdoctoral Affairs Committee Representative is Natalie Pitts

Natalie Pitts, pittsn@rams.colostate.edu



Natalie Pitts

I received my B.S. degree in Molecular, Cellular, and Developmental Biology and Psychology in 2008 from the University of Colorado, Boulder. I am currently beginning the fourth year of my doctorate program in Cell and Molecular Biology at Colorado State University. My dissertation research is focused

on understanding the molecular mechanisms that underlie molting in decapod crustaceans. Natalie will begin her new committee duties at the end of the 2014 annual meeting in Austin.



Message from the Secretary

Rich Londraville,

Secretary.DCPB@sicb.org

This newsletter marks the last one I will prepare as my term as Secretary of the Division comes to an end. Deborah Lutterschmidt will take over as the new Secretary as of the Austin meeting. Please contact her (d.lutterschmidt@pdx.edu) with anything you would like to see in the newsletter. Thanks much for both Deborah and Wes Dowd for being willing to serve, and thanks to everyone for their help over the past two years (and for putting up with my pestering emails).



Rich Londraville

Judges Needed!



As always, there are lots of entries in the DCPB Best Student Poster/Presentation Competition, meaning we need lots of judges. If you've not indicated your interest in being a judge for DCPB when you registered for the meeting in Austin, please email me (itagaki@kenyon.edu).

See you in Austin!

Harry



Deborah Lutterschmidt

