

## Division of Comparative Physiology & Biochemistry

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### DCPB Officers & Representatives

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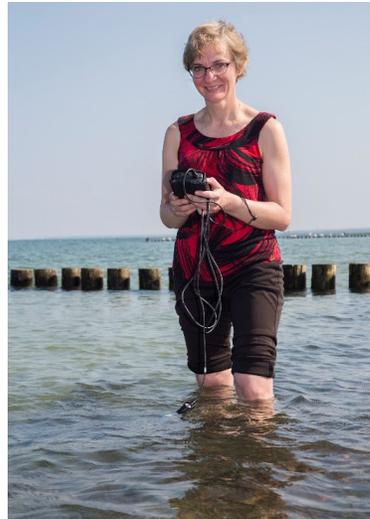
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### Message from the DCPB Chair

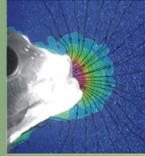
Inna Sokolova, [Chair.DCPB@sicb.org](mailto:Chair.DCPB@sicb.org)



*Inna Sokolova, University of Rostock*

Warm regards from the cool and sunny Baltic Sea coast! This winter, my way to the SICB meeting will be longer than usual as I have relocated to the University of Rostock in Germany. Despite the distance and anticipated jetlag, I am looking very much forward to the trip and to the annual SICB meeting in the fabulous New Orleans, the birthplace of jazz and a city with unique culture, cuisine and architecture. The meeting promises to be another great success for SICB. The SICB Program Committee has received a record number of submissions for the 2017 meeting with over 1900 abstracts. In September, the Program Committee met to organize the sessions and develop the schedules. DCPB continues to be an important presence in SICB as one of the largest SICB divisions and a significant contributor to the meeting's scientific program. In 2017, DCPB is sponsoring six symposia that provide focused platforms for extensive scientific discussions and networking on the topics ranging from the effects of global change, ecology of exercise, evolutionary impacts of seasonality and organism-microbiome interactions to the evolution of arthropod body plans and origins of evolutionary novelties. Jason Podrabsky will fill you in with more details on the New Orleans program in his Program Officer's report. DCPB also sponsors the society-wide George Bartholomew Award which recognizes a young investigator for distinguished contributions to comparative physiology and biochemistry or to related fields of functional and integrative biology. This year, the award goes to Michael Sheriff (Pennsylvania State University) in recognition of his highly integrative research that bridges physiology, behavior, and ecology to understand organism-environment interactions. Adam Summers, Chair of the George Bartholomew Award Committee, will provide more details on this year's award. I would like to sincerely thank Adam and the other members of the Bart Award committee for their time and effort in reviewing applications for this highly prestigious award. I cordially invite you to the George Bartholomew Award lecture which will be presented at 7 pm on Thursday, January 5.

I would like to congratulate Kim Hammond (University of California Riverside) on being elected as DCPB Chair-elect. She will take on the Chair-elect office at the SICB meeting in New Orleans and will fully



## SICB Newsletter

Fall 2016 Issue

take over the DCPB Chair reins in January 2018. My sincere congratulations also go to Wes Dowd (Loyola Marymount University) for his election as DCPB program officer, with his term beginning at the end of the New Orleans meeting. I welcome Kim and Wes aboard and look forward to working with them. I also would like to take this opportunity to thank Jason Podrabsky (Portland State University) who is nearing the end of his two-year term as DCPB Program Officer and will be stepping down at the end of the New Orleans meeting. I was very fortunate to overlap in my service with Jason and thank him for his hard work in organizing symposia and scientific sessions for DCPB. Robin Warne (Southern Illinois University) continues his service to DCPB as the Division's Secretary and Catherine Dayger (Portland State University) will continue to serve as the Division's representative to the Student/Postdoctoral Affairs Committee (SPDAC) – thank you!

Next year, Ana Jimenez (Colgate University) will be stepping down from serving as the coordinator of the judging for the DCPB Best Student oral and poster presentations, which she did with great success and distinction for the past two years. Her organizational talent, enthusiasm and commitment to promoting the best students' science has been a key to success of this highly popular DCPB competition and a personal inspiration to me. I thank Ana for her exemplary service to the Division. In 2017, the DCPB Best Student oral and poster competition finds itself in the competent hands of Valentina Di Santo (Harvard University) who kindly volunteered to serve as the competition's coordinator. I sincerely thank Valentina for taking on this important service to the Division and our young scientists, and look forward to working with her. I encourage you to contact Valentina ([vdisanto@fas.harvard.edu](mailto:vdisanto@fas.harvard.edu)) and volunteer to serve as a judge, and urge you to agree to serve when asked by Valentina. The Division traditionally has a very large number of student applicants to this competition, which will require a significant effort and time commitment on Valentina's part to organize the judging. This competition is extremely important to our students and the Division, and cannot be done without your active participation!

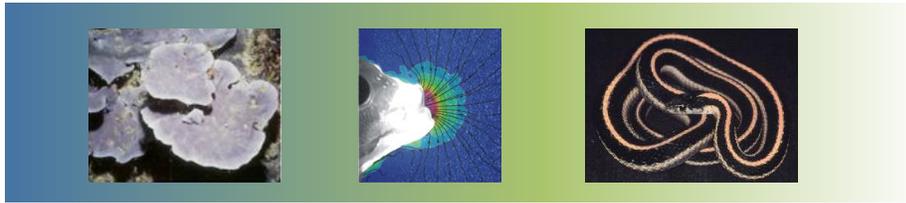
Please attend the DCPB business meeting, which will be held prior to the Bartholomew Award lecture on Thursday, January 5 (5:45-6:30 pm). This is a great opportunity for the new as well as seasoned DCPB members to learn about the ongoing activities and future plans of the DCPB, as well as to become actively engaged in the Division's activities and leadership. During the DCPB

business meeting, the Division's officers and committees will provide their reports, discuss future meeting venues and programs, and the Division's support for symposia, other meeting and journals. Editors of *Comparative Biochemistry and Physiology* and *Physiological and Biochemical Zoology* will present the annual reports for their journals, and we will also discuss the plans of SICB for developing a new open access journal, *Integrative and Comparative Biology Open*, to publish high-quality primary research papers in areas of integrative and comparative organismal biology. Please bring along your questions, concerns, as well as ideas and suggestions for improvement, to the business meeting. I am looking forward to your input. Please feel free to contact me with your ideas, suggestions, and any questions at [Chair.DCPB@sicb.org](mailto:Chair.DCPB@sicb.org). I thank you for your support of SICB and look forward to seeing y'all in New Orleans!



Michael J. Sheriff,  
2017 Bartholomew  
Award Winner

This year's George Bartholomew Award winner is Dr. Michael J. Sheriff, Assistant Professor of Mammalogy and Ecology at Penn State University. At New Orleans, he will present his Bartholomew Lecture titled "Integrating physiology, behaviour, and ecology to understand the mechanisms that regulate and limit animal populations." Dr. Sheriff completed his undergraduate degree at the University of Toronto, in Ontario, Canada. He moved west to the University of British Columbia for his Ph.D., which he received in 2010. After postdoctoral work in the frozen north at the University of Alaska Fairbanks he started his current position at Pennsylvania State University as an assistant professor. He is a past winner of the Elton Prize for the best paper by a young author from the British Ecological Society and has been an invited Fellow in Residence at the Israeli Institute for Advanced Studies at Hebrew University in Jerusalem. His current NSF funding is on maternal stress in lizards, but in true Bart style Dr. Sheriff covers a wide variety of phylogenetic and physiological ground. The main focus of his work address what limits and regulates animal



populations in their natural world, integrating physiology, behavior, and ecology.

### Message from the DCPB Program Officer

Jason Podrabsky, [DPO.DCPB@sicb.org](mailto:DPO.DCPB@sicb.org)

### Upcoming Meeting Highlights – January 4-8, 2017, in New Orleans, LA

The SICB programming committee met in late September to finalize the program for our upcoming Annual Meeting to be held January 4-8 in New Orleans, Louisiana. This is always a great place for a meeting! The meeting will be held in the New Orleans Convention Center located right on the Mississippi River. There will be childcare available at the meeting and the Audubon Aquarium and Butterfly Garden and Insectarium are close by. The meeting hotel is the Hilton New Orleans Riverside. To make reservations, please click on the appropriate link on the meeting website. There are many other hotels conveniently located that may also offer competitive pricing.

When arriving in New Orleans you may choose to take the official SICB discounted airport shuttle to the meeting venue. However, you must use the online reservation system and make the reservations 24 hr prior to your flight arrival time to get the SICB discount.

DCPB is represented by a strong contingent of abstracts this year including:

- 88 oral presentations in 15 sessions that represent a diversity of physiology topics including: energetics and metabolism, thermal physiology, water and ion homeostasis, and digestive, stress, respiratory, and reproductive physiology.
- 105 posters in physiologically-themed poster sessions
- 191 abstracts with DCPB as the primary division affiliation
- 72 entrants in the DCPB Best Student paper competition
- approximately 40% of the submitted abstracts are contributed by students

**Symposia:** DCPB has co-sponsored 4 symposia for this meeting:

[Indirect Effects of Global Change: from Physiological and Behavioral Mechanisms to Ecological Consequences \(SICB wide\)](#). Organizers: Alex Gunderson, Jonathon Stillman & Brian Tsukimura; Sponsors: DAB, DCPB, DEE, DIZ, DNB, & TCS

[The Ecology of Exercise: Mechanisms Underlying Individual Variation in Movement Behavior, Activity or Performance](#). Organizers: Tony Williams, Shaun Killen, & Ryan Calsbeek; Sponsors: DAB, DCB, DCPB, DEE, & DVM

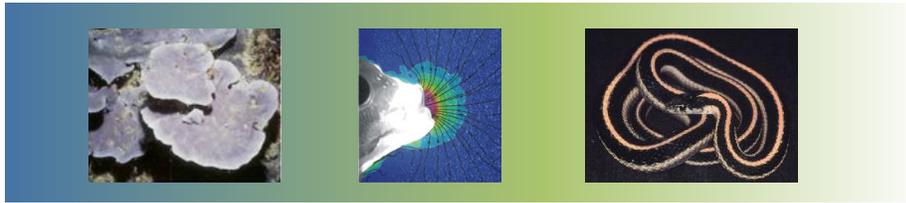
[Evolutionary Impacts of Seasonality](#). Organizers: Caroline Williams & Gregory Ragland; Sponsors: DCE, DCPB, & DIZ

[With a Little Help from My Friends: Microbial Partners in Integrative and Comparative Biology \(SICB wide\)](#). Organizers: Kevin Kohl & Denise Dearing; Sponsors: DCE, DCPB, DEDE, DEE, DIZ, DNB, & AMS

Don't forget to attend the DCPB business meeting on Thursday, January 5, 2017, at 5:45-6:30 PM, followed by the Bartholomew Award lecture at 7:00-8:00 PM and the DCPB sponsored Bartholomew Award social following the lecture and running until 9:30 PM.

**Future Symposia:** If there are topics you think would make an excellent symposium, I encourage you to contact me or Wes Dowd now to start talking about symposium proposals for Tampa in 2019! We had very few symposia proposals this year, and that must change if we are to maintain a strong and engaged membership!

I look forward to seeing you in January!



## Message from the DCPB Student/ Postdoctoral Affairs Committee Representative

Catherine Dayger, Portland State University, [cdayger@pdx.edu](mailto:cdayger@pdx.edu)



Catherine Dayger, Portland State University

A few years ago SPDAC launched a Facebook and Twitter account (see links below), to provide students a place where their voice can be heard. We would love to know how to make SICB even more valuable to students and post-docs. If you have any ideas for how we can best serve you, we'd love to hear about it. Let us know what you want from your SICB 2017 meeting experience in New

Orleans by contacting us through either Facebook or Twitter!

At the meeting in Portland, SICB funded 34 of 132 applications for the Grants in Aid of Research (GIAR) program and 4 of 19 applications for the Fellowship of Graduate Student Travel (FGST) program. If you would like to apply for either funding source next year, you can find out the details on the SICB website (see: <http://sicb.org/grants/researchgrant.php3>)

This year's SPDAC workshop was titled "Academic Transitions: Successfully Navigating from Undergraduate to Professor" and was attended by 105 people, 38 of whom were undergraduates, the largest group in recent memory. Thank you to everyone who helped out leading the focused discussions; we could not make workshops like these a success without the generous help of the SICB community.

There is an excellent list of grants and fellowships that the committee curates on the SICB website at <http://www.sicb.org/grants/externalgrants.php>. You can log in with your last name and member number and find all sorts of opportunities. There a number of applications that are due this spring so I encourage you to take a look.

Facebook page: <https://www.facebook.com/sicbspdac>  
Twitter account: @SICB\_SPDAC

SICB Student-Postdoc Awards & Grants: [www.sicb.org/students/](http://www.sicb.org/students/)

External Grants and Fellowships: [www.sicb.org/grants/externalgrants.php](http://www.sicb.org/grants/externalgrants.php)

## Message from the DCPB Secretary

Robin Warne, [Secretary.DCPB@sicb.org](mailto:Secretary.DCPB@sicb.org)

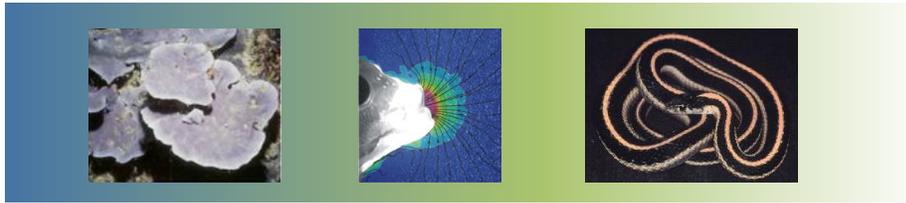


Robin Warne (and the Big Muddy Monster), Southern Illinois University

First, let me congratulate Dr. Kim Hammond for her election as DCPB Chair-elect (Chair-ship to begin January 2018), and Dr. Wes Dowd for his election to DCPB Program Officer, with his term to begin this January 2017 (at the end of the New Orleans meeting). Welcome aboard!

I would also like to welcome aboard, and give my many thanks to, Dr. Valentina Di Santo, Postdoctoral Fellow at the Museum of Comparative Zoology at Harvard University, for volunteering to serve as the DCPB Best Student Presentation Judging Coordinator. As always, there are many entries, 72(!) in the Best Student Presentation Awards competition for DCPB. This means the DCPB will need your help in judging these great presentations during the annual meeting in New Orleans. If you have not yet indicated your interest in serving as a judge for DCPB during meeting registration, please email Valentina at [vdisanto@fas.harvard.edu](mailto:vdisanto@fas.harvard.edu).

I would also like to thank Dr. Ana Jimenez for all of her great work in coordinating the DCPB student awards over the past couple of years!



I would also like to congratulate the journal of *Physiological and Biochemical Zoology* for the astounding achievement of publishing top notch articles for 90 years! PBZ will be celebrating 90 years in 2017, and in celebration will be making the 90 top-cited articles open access for the entire year. Please visit the PBZ booth at the annual meeting for further information and promotions.

Although my tenure as DCPB Secretary will continue through the 2018 meeting in San Francisco, we will be electing a new secretary this spring for the 2018-2020 term. So please be on the lookout for requests for nominations later this year. If any SICB member is interested in standing for election please contact our Divisional Chair, Inna Sokolova ([Chair.DCPB@sicb.org](mailto:Chair.DCPB@sicb.org)).

Finally, if there is anything you would like to discuss or some news you would like announced to the DCPB membership, please don't hesitate to contact me at [Secretary.DCPB@sicb.org](mailto:Secretary.DCPB@sicb.org). If you would like to see your research highlighted on the SICB website, please send me a research picture, title for the picture/research, and a brief (1-3 sentences) description of your research via email. Examples can be found [here](#).

Thanks to all of our members for your continued support of the DCPB – I look forward to seeing you all again in New Orleans!

## The 90th Anniversary of Physiological and Biochemical Zoology

Theodore Garland Jr., PBZ Editor in Chief



Announcement from Theodore Garland Jr., PBZ Editor in Chief

It is with great pleasure that I announce the 90th anniversary of *Physiological & Biochemical Zoology* in January 2017! Our first issue (of *Physiological Zoölogy*) was published in January of 1928, edited by Charles Manning Child, an American zoologist noted for his work on regeneration (especially on Coelenterates and flatworms) at the University of Chicago. The very first issue covered regeneration in marine worms and mice, cell division in sea urchins, studies involving both starfish and *Nereis* eggs, respiratory functions of crayfish, sulfate retention in dogs, and artificial insemination of rabbits (of course!).

Over the years, PBZ and PZ published more than 5,000 articles. Of these, the most popular were:

1. *The desoxyribose nucleic acid content of animal nuclei* (Swift 1950)
2. *Why not to do two-species comparative studies: limitations on inferring adaptation* (Garland and Adolph 1994)
3. *Microspectrophotometric analysis of metachromatic staining of nucleic acids* (Flax and Himes 1952)
4. *Climatic adaptation in Arctic and tropical poikilotherms* (Scholander, Flagg, Walters and Irving 1953)
5. *The misuse of ratios indices and percentages in ecophysiological research* (Packard and Boardman 1988)

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*A Quarterly Journal of Zoölogical Research*

CHARLES MANNING CHILD  
Managing Editor

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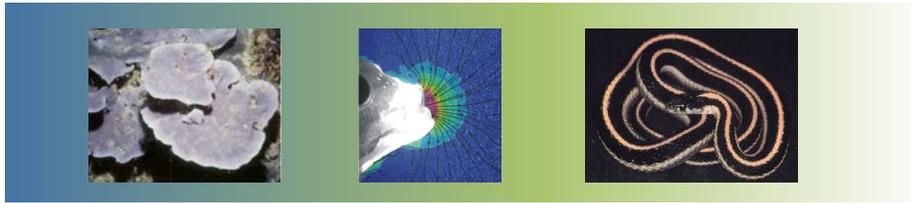
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Cover of first volume of *Physiological Zoölogy*



I'm now nearly halfway through my third year as Editor in Chief! Since fall of 2014 we've published 121 papers, including a special focused issue in Developmental Physiology, and major articles ranging in topic from *high-flow burst-swimming mortality rates in wild sockeye salmon* to *mass loss rates for ice-free polar bears*.

We're now covering new areas, including current research on morphology and behavior, conservation physiology, biomechanics in an ecological and/or evolutionary context, and behavioral endocrinology. I remind readers that *PBZ* carries the subtitle "Ecological and Evolutionary Approaches" and we will continue to publish in comparative, ecological, and evolutionary physiology, morphology, and behavior. Additionally, we've expanded our manuscript categories to offer more flexibility for authors to present their best and most timely findings. *PBZ* now publishes Brief Communications, Comments on Published Papers, Education and Outreach, Book Reviews, and Comprehensive Review Articles. As a matter of course, we continue the rigorous double-blind peer review for all article types. And we've teamed up with Dryad Data Depository, so that we can subsidize the costs of submitting and storing data *PBZ* authors would like to deposit.

The future of *PBZ* is bright! Evolving from a small-format light-blue journal named *Physiological Zoölogy* in 1928 (the same year James Spader discovered Stargate in Giza!), through the red-cover years, to the current cover featuring photographs from our skilled authors and board members, *PBZ* has remained a prestigious international publication throughout. As we forge ahead, we will be publishing more pages per year and will continue to reduce times to decisions and publication. As always, I would be more than happy to hear your ideas for future special issues or review articles.

**REMINDER! *PBZ* is your journal!**

Remember to support the SICB-DCPB and send your best work to *PBZ*!

