



## Division of Comparative Physiology and Biochemistry

### *In this newsletter*

- [Message from the Chair](#)
- [Message from the Program Officer](#)
- [Message from the Secretary](#)
- [Message from the Student/PostDoc Representative](#)
- [Minutes of the Business Meeting](#)
- [Candidates for Election](#)

### **DCPB Officers & Representatives**

**James Hicks**  
Chair 2010-2012

**Kathy Dickson**  
Program Officer 2009-2011

**Anna Ahn**  
Secretary 2010-2012

**Jennifer Ro**  
Student/Postdoc Representative  
2008-2011

**Patrick Walsh**  
ICCPB & IUPS Representative

**Charles E. Booth**  
ICB Editorial Board Representative  
2006-2011

### **Message from the Chair**

*Jim Hicks*

As the new Chair of DCPB, I would typically start off the Spring Newsletter recapping the January meeting. Unfortunately, due to some last minute issues back at my home institution, I was unable to attend the meeting in Seattle. However, the diversity of topics presented at the meeting, and in particular our Division, clearly illustrates why our annual conference is the premier gathering for comparative physiologists and biochemists.

The spring Newsletter is organized in the traditional format. Please join me in congratulating our award winners. In addition, now is the time to nominate a young scientist for the 2011 Bartholomew Award. Finally, the newsletter will highlight a variety of exciting meetings that will be taking place in 2010, and will preview our meeting in Salt Lake City in 2011.

### **2010 Bartholomew Award recipient: Roberto Nespolo**

Dr. Roberto Nespolo was the winner of the 2010 George A. Bartholomew Award. Named in honor of Professor George A. Bartholomew, this award is given annually by the Division of Comparative Physiology and Biochemistry to a young investigator for distinguished contributions to comparative physiology and biochemistry or to related fields of functional and integrative biology. Dr. Nespolo is an Associate Professor of Science at the Universidad Austral de Chile. The entire Society congratulates Dr. Nespolo for his outstanding achievements and this well-deserved recognition. Roberto's talk was entitled: "From comparative physiology to evolutionary biology through animal bioenergetics: practicing the Krogh Principle in South America."



On behalf of the DCPB, I wanted to thank the Bartholomew Award Committee, Stephen Secor (chair), Peter Wainwright, Malcolm Gordon, Lou Burnett, and Doug Altschuler.



John Lighton

Sable Systems generously sponsored the cash award of \$1000 to Roberto plus an additional \$500 toward Roberto's travel expenses. John Lighton's and Robbin Turner's continued and long-term support of the DCPB and the Society is very much appreciated.

## SICB George A. Bartholomew Award-A call for nominations 2011, Salt Lake City

*"It is the intact and functioning organism on which natural selection operates. Organisms are therefore the central element of concern to the biologist who aspires to a broad and integrated understanding of biology."* GA Bartholomew, 1987.



George Bartholomew

Each year the Division of Comparative Physiology and Biochemistry awards a prize to a young investigator for distinguished contributions to comparative physiology and biochemistry or to related fields of functional and integrative biology. The formal title for this award is "The George A. Bartholomew Award." Eligible candidates are those who have completed their doctorate within the past seven (7) years (2003 or later) and who are members of the SICB. Candidates for this award may apply themselves or they may be nominated; all candidates will be evaluated equally. Applicants should submit a short description of their work, selected reprints, and a curriculum vitae to [Dr. Stephen Secor](#), the

Chair of the Award Committee. Three letters of recommendation should be solicited from colleagues who know of the nominee's work. Nominators must arrange for these same materials to be sent to Dr. Secor, except with only two additional letters of recommendation. The person chosen as the recipient of this award will be invited to present a special address at the 2011 SICB Meeting in Salt Lake City. In addition to a cash prize, the recipient will be reimbursed for expenses incurred while attending the meeting. Please send nominations for this award to Dr. Stephen Secor, [ssecor@biology.as.ua.edu](mailto:ssecor@biology.as.ua.edu). The deadline for nominations is **27 August, 2010**.

## Oral Presentation and Poster Presentation Award Winners

This year the DCPB student awards were named in honor of Dr. Steve Morris (1956-2009). Steve received his Ph.D. in 1983 from the University of Edinburgh and his B.Sc. in 1980 from the University of London. His research interests in the areas of ecophysiology garnered much attention, winning the President's Medal from the Society for Experimental Biology. His research took him from Duesseldorf to Calgary to the University of Sydney, where he became a lecturer in 1990. He rose to Deputy Head of School in Sydney, before joining the University of Bristol, UK, as a Reader in November 1999. Steve became Professor of Biological Sciences in 2006, leading the highly successful Environmental & Evolutionary Physiology Laboratory at the Univer-



Steve Morris



sity of Bristol. Steve was tragically killed in a bicycle accident in August 2009. He will be sorely missed.

## Oral Presentation Award Winner: Cory Champagne

For 2010, DCPB selected Cory Champagne as the winner of the best oral presentation competition at the SICB meeting in Seattle. Jeff completed his B.S. and M.S. degrees at Sonoma State University, and is now working towards completion of his Ph.D. degree at the University of California Santa Cruz, with Dr.



Daniel Costa. Cory's main interests are investigating the "physiological processes in animals operating at their limits." The title of Cory's talk was, "A complete profile of carbohydrate metabolism during prolonged fasting in the northern elephant seal." If you want to send a congratulatory note to Cory, his email is [champagn@biology.ucsc.edu](mailto:champagn@biology.ucsc.edu).

## Poster Presentation Award Winner: Irina Mueller

The DCPB winner of the best poster presentation for 2010 was Irina Mueller, University of Alaska Fairbanks. Irina earned a Diplom (the German equivalent of a M.S. degree) in animal physiology at the University of Tuebingen in Germany in 2008.

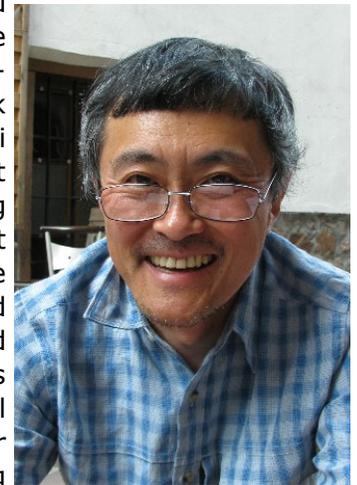


She is currently a PhD student in biochemistry and molecular biology at UAF where she is working in the laboratory of Dr. Kristin O'Brien, investigating the relationship between mitochondrial form and function in Antarctic notothenioid fishes. The title of her poster was "The Effect of Mitochondrial Ultrastructure on Function in Antarctic Notothenioid Fishes." If you want to congratulate Irina on her achievement, her email address is [iamueller@alaska.edu](mailto:iamueller@alaska.edu).

On behalf of DCPB, I wish to congratulate Cory and Irina.

## Judging posters:

Judging posters and oral presentations is a Herculean task, and I want to thank David Tapley (Salem State College) for his organization work. Like myself, David was unable to attend the meeting; however he provided the basic framework and forms. Harry Itagaki (Kenyon College) did most of the work of making sure that the judging went off without a hitch at the meeting. David and Harry, your efforts and the efforts of the judges toward providing critical feedback and rewards for excellence for our young scientists are very much appreciated.



Harry Itagaki



## Message from the Program Officer

*Kathy Dickson*

### Seattle 2010

The Seattle meeting was the second largest ever, with over 1,300 papers presented, and was packed with activities. DCPB members submitted more than 170 abstracts, including approximately 90 oral and 85 poster presentations, plus symposium and symposium-related talks. DCPB co-sponsored the society-wide symposium on **Advances in Antarctic Marine Biology**, organized by James McClintock, Charles Amsler, Amy Moran, Art Woods, and Bill Baker, and sponsored the symposium, **Metabolism, Life History, and Aging**, organized by James Harper and Anne Bronikowski. Both symposia were well received. DCPB also hosted the reception following the Bartholomew Lecture by Dr. Roberto Nespolo, on Monday, Jan. 4<sup>th</sup>. DCPB thanks Stephen Secor, chair of the Bartholomew Award Committee, and the other committee members, Peter Wainwright, Malcolm Gordon, Lou Burnett, and Doug Altshuler, for their evaluation of the large number of applicants for this year's Bartholomew award. I would also like to thank all of the members who served as session chairs.

The 2010 DCPB Best Student Paper awards were named in honor of Steve Morris. We congratulate [Cory Champagne](#), University of California Santa Cruz, winner of the best oral paper award, and [Irina Mueller](#), University of Alaska Fairbanks who won the best poster award

(<http://www.sicb.org/students/bsp2010.php3>). Sincere thanks go to Harry Itagaki and David Tapley who did an outstanding job coordinating the judging during and prior to the meeting. The division is also indebted to all the members who volunteered as judges. Thanks to all for doing a great job.

### Salt Lake City 2011

The next SICB meeting will be held January 3-7, 2011, at the Marriott Salt Lake City Downtown

(<http://www.sicb.org/meetings/future.php3>). DCPB is sponsoring two symposia: **Environmentally-Cued Hatching Across Taxa: Embryos Choose A Birthday** organized by Karen Martin, Karen Warkentin, and Richard Strathmann, and **Environment, energetics and fitness: a symposium honoring Donald W. Thomas** organized by Michal Wojciechowski, Murray Humphries, and Berry Pinshow. In addition, the following two symposia are co-sponsored by DCPB: **Synthesis of Physiologic Data from the Mammalian Feeding Apparatus using FEED, the Feeding Experiments End-User Database** organized by Susan Williams, Christopher Vinyard, Rebecca German, and Chris Wall, and a late-breaking symposium organized by Mike Sears and Michael Angilletta, **A synthetic approach to the response of organisms to climate change: the role of thermal adaptation**.

### Charleston 2012

**Call for Symposia:** I encourage you to think about proposing a symposium topic for the 2012 SICB meeting, January 3-7 in Charleston, SC. Please feel free to discuss ideas with me ([kdickson@fullerton.edu](mailto:kdickson@fullerton.edu) or 657-278-5266) or contact me about how to prepare a proposal. The deadline for submitting a proposal for a symposium is August 16, 2010.

### Other upcoming meetings:

The first three meetings are organized, in part, by the Comparative and Evolutionary Section (CEPS) of the American Physiological Society (APS), and may be of interest to the DCPB membership (thanks to Barney Rees,



Program Officer of APS CEPS, for this information):

**Experimental Biology 2010** Anaheim, CA, April 24-28, 2010

<http://experimentalbiology.org/content/default.aspx>

Events of interest to DCPB members include the August Krogh lecture by Professor William Karasov, symposia on Comparative Pulmonary Circulation and the History of Comparative Physiology, and contributed paper sessions on Physiological Biomechanics and Comparative Metabolic Physiology. There will also be over 50 posters on various topics in comparative and evolutionary physiology.

**2010 APS Intersociety Meeting** Denver, CO, August 4-7, 2010

<http://www.the-aps.org/meetings/aps/comparative/index.htm>

The meeting, entitled **Global Change and Global Science: Comparative Physiology in a Changing World**, is an intersociety meeting, hosted by the American Physiological Society and co-sponsored by the SICB and the Society for Experimental Biology. Abstracts must be submitted by **May 3, 2010**, and the deadline for early registration is June 25. The website is now open for registration.

**Experimental Biology 2011** Washington, DC, April 9-13, 2011

The CEPS program will include two symposia and two contributed paper sessions, plus posters. **Proposals for symposia or contributed paper sessions (featured topics) are being accepted NOW!** For more information about submitting proposals see <http://www.the-aps.org/meetings/eb.htm> or contact Bernard Rees at [brees@uno.edu](mailto:brees@uno.edu)

**FASEB Summer Research Conferences**

<https://secure.faseb.org/FASEB/meeting/s/summrconf/>

**8th International Congress of Comparative Physiology & Biochemistry (ICCPB)** June 1-5, 2011, Nagoya, Japan

**7<sup>th</sup> International Crustacean Congress** Qingdao, China, 20-25 June, 2010  
<http://www.crustacea.org.cn/7th/index.html>

**Society for Experimental Biology** Prague, Czech Republic, June 30 - July 3, 2010

<http://www.sebiology.org/meetings/Prague/Prague.html>

**Joint Meeting of Ichthyologists and Herpetologists** Providence, RI, July 7-12, 2010  
<http://www.dce.k-state.edu/conf/jointmeeting/>

**7<sup>th</sup> Congress of the Federation of Asian and Oceanian Physiological Societies (FAOPS)**, September 11-14, 2011, Taipei, Taiwan.

<http://conf.ncku.edu.tw/faops/>

**37<sup>th</sup> International Congress of Physiological Sciences**, Birmingham, UK, July 21-26, 2013.

<http://www.iups2013.org/>

**For other meetings, consult the web sites for SICB**

(<http://www.sicb.org/meetings/other.php3>)  
**and the American Physiological Society** (<http://www.the-aps.org/meetings/related/index.htm>)



## Message from the Secretary

Anna Ahn

Hello! Thanks for a fantastic meeting in January. We continued last year's bubble of attendees with near-record breaking numbers in Seattle. Let's hope this growth continues next year to Salt Lake City. Many thanks to Allen Gibbs for his guidance, as he passes the secretarial torch to me. There is not much more to add to the words of wisdom from my fellow divisional officers. If you, however, have any ideas for additional fun and/or informational pieces to include in the Fall Newsletter, please do not hesitate to contact me ([aahn@hmc.edu](mailto:aahn@hmc.edu)). Please, also, send me any pictures or material to add to **DCPB's Researcher's** database (<http://sicb.org/divisions/DCPB/singleresearcher.php3?resid=69>).

## Candidates for Chair-Elect and Divisional Program Officer

We have two elections for positions in DCPB. The two candidates for the first election for Chair-Elect are Don Mykles and Stephen Secor. We also have two candidates for Divisional Program Officer, Richard Londraville and Kristin O'Brien. Thank you to the nominating committee: Kathy Dickson, Pat Walsh, and Joe Williams. Good luck to the outstanding candidates. Please review their biographical sketches included below and don't forget to vote later this spring!

## Message from the Graduate Student Representative

Jenny Ro

Hello to fellow DCPB students and postdocs!  
I hope everyone enjoyed our Seattle meeting

this year.



For this year, the Student/Postdoctoral Affairs Committee hosted a workshop entitled "*Careers outside of traditional academia.*" We had good participation and interesting discussion during the workshop. The big take-home message from this workshop was "If you are interested in jobs outside of academia, be involved in volunteer work and internships." After I attended this workshop, I looked up some websites that may be useful for those of you who are planning to get non-academic jobs.

For searching for volunteer opportunities, try: <http://volunteer.gov/gov/>.

Ways to find internship positions will be highly dependent upon one's interests and future goals. Here are some of my suggestions:

- 1) USGS federal career intern programs: <http://www.usgs.gov/ohr/fcip/index.htm>
- 2) Proctor and Gamble intern opportunities: [https://pg.taleo.net/careersection/10000/moresearch.ftl?location=1223&lang=en&type=job\\_c at](https://pg.taleo.net/careersection/10000/moresearch.ftl?location=1223&lang=en&type=job_c at)
- 3) Pharmaceutical industry internships: <http://pharmafellows.rutgers.edu/documents/Pharmaceutical%20Industry%20Internships.doc>
- 4) Biotechnology jobs: <http://www.biotechcareercenter.com/index.html>
- 5) Smithsonian internship openings: <http://www.si.edu/ofg/internopp.htm>



If you have any feedback about this year's workshop, I look forward to hearing from you ([ro.25@buckeyemail.osu.edu](mailto:ro.25@buckeyemail.osu.edu)). Also please send me suggestions for next year's workshop topics.

---

## Minutes of the DCPB Business Meeting, Jan. 4, 2010, Seattle, WA

Divisional Chair Joe Williams called the meeting to order at 5:16 PM.

Joe announced the Divisional Chair-Elect Jim Hicks sends his regrets that he could not attend due to an emergency in his department.

Joe introduced Trish Schulte, who with Katie Gilmour are the new co-editors of *Physiological and Biochemical Zoology*. Trish reported that the editorial transition from Jim Hicks will not involve any major changes. All issues from 1928-2003 are now available on JSTOR. Trish and Katie's editorial goals include continuing to maintain the focus of PBZ on ecological and evolutionary physiology. Additionally, they plan to maintain or increase the impact factor from the current 2.5, which falls 3rd compared to other journals in the field. Reducing time to acceptance and reducing time between acceptance and publication also are also major goals for the coming year, because the time between acceptance of a manuscript and publication averaged 178 days since 2005. Trish and Katie hope to reduce the time between acceptance and online publication to 40 days. For 2009, PBZ accepted 12%, rejected 62%, and had 25% of the manuscripts in process, or returned to the authors for resubmission. Focused issues have contributed to the increase in impact factor over the last several years, and they are seeking suggestions for a focused issue topic for publication in 2011. Finally, if anybody is interested in serving as assistant editor, please

contact Trish ([pschulte@zoology.ubc.ca](mailto:pschulte@zoology.ubc.ca)).

Pat Walsh from *Comparative Biochemistry and Physiology* sent his regrets for not being able to attend the meeting. In Pat's place, Joe announced the journal stats for 2009, including 1247 manuscripts submitted. The time to review is 3-4 weeks and the average time from acceptance to online publication is less than 3 weeks. If anybody would like to serve on the editorial board for CBP, please contact Pat ([pwalsh@uottawa.ca](mailto:pwalsh@uottawa.ca)).

In order to show our appreciation, Joe will present a plaque to Jim Hicks and Andrea Canfield after the meeting.

Jon Harrison announced the 2010 American Physiological Society (APS) Intersociety Meeting on "Global Change and Global Science: Comparative Physiology in a Changing World" to be held in Westminster, CO, on Aug 4-7, 2010. This intersociety conference is one of the two largest international conferences in comparative physiology with six participating societies including: SICB (DCPB), APS, Society for Experimental Biology, Canadian Society of Zoologists, South American Society of CPB, and the Australian and New Zealand Society for CPB. In addition to eleven scheduled symposia, plenary lectures will be given by George Somero and Beth Brainerd. In contrast to previous meetings, students will be allowed to give oral presentations, with a special session dedicated to students held at a time without conflicting symposia talks. There are many trainee travel awards and presentation awards available, so don't forget to apply for those when you submit your abstract! Abstracts will be accepted until **May 3, 2010**. For more information, contact Jon ([j.harrison@asu.edu](mailto:j.harrison@asu.edu)) or see <http://www.the-aps.org/meetings/aps/comparative/index.htm>.

Joe mentioned the need to organize a nominating committee for the Divisional positions of Chair-elect and Program Officer-Elect. If you are interested in serving on the nominating committee or are interested in nominating a



colleague for one of these positions, please contact Jim Hicks ([jhicks@uci.edu](mailto:jhicks@uci.edu)) or Anna Ahn ([aahn@hmc.edu](mailto:aahn@hmc.edu)).

Joe welcomed the new Bartholomew Award Committee members, Drs. Christopher Guglielmo (U. Western Ontario), Art Woods (U. Montana), and Adam Summers (Friday Harbor Laboratories).

Lastly, Pat Walsh is our representative to the International Congress of Comparative Physiology and Biochemistry (ICCPB). The next meeting will be held May 31 - Jun 5, 2011 in Nagoya, Japan. The DCPB symposium will be entitled "Balancing Oxygen: A Tribute to Steve Morris (1956-2009)" and organized by Lou Burnett and Nora Terwilliger.

Mary Chamberlin announced that there is no more stimulus money at the NSF. Mary will be staying with NSF as part-time rotating program director until June 2010. If you are interested in becoming a program director at NSF, please contact NSF.

Joe adjourned the meeting at 6:08 PM.

### Candidates for Election

#### Chair-Elect

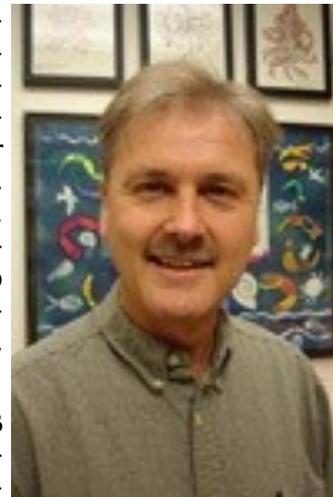
##### Don Mykles

**Current Position:** Professor and Associate Dean for Graduate Education, Department of Biology, College of Natural Sciences, Colorado State University, Fort Collins.

**Education:** B.A., Biological Sciences, UC Santa Barbara (1973); Ph.D., Zoology, UC Berkeley (1979).

**Professional Experience:** Postdoctoral Fellow (1979-1983), Research Associate (1983-1985), Oak Ridge National Laboratory; Assis-

tant (1985-1988); Associate (1988-1993), Professor (1993-present), Biology, Colorado State University Interim Chair (2002-2003), Biology, Colorado State University, Assistant Chair (2003-2004), Biology, Colorado State University; Associate Dean (2004-present), Colorado State University.



**SICB Activities:** DCPB program officer (2007-2009); nominating committees for SICB Executive Committee (2009-2010), DCPB (2001), and DCE; judge, DCPB student paper competition (annually); organizer and speaker for 2 symposia (1998, 2006) and invited speaker in 3 others (1985, 1990, 2000); selection committee, Howard A. Bern Lecture (2009); helped establish the Dorothy M. Skinner Award Fund; associate editor, Comparative Biochemistry & Physiology (2000-present); and organizing committee, APS Intersociety meeting (2010).

**Other Memberships:** AAAS, American Physiological Society, The Crustacean Society.

**Research Interests:** Hormonal control of molting and limb regeneration in crustaceans, specifically neuropeptide signaling in the molting gland and control of molt-induced claw muscle atrophy by ecdysteroids (<http://rydberg.biology.colostate.edu/mykleslab/Welcome.html>).

**Statement of Goals:** I am fortunate to have been mentored by some outstanding comparative physiologists: Howard Bern and Ralph Smith at Berkeley, Cadet Hand at Bodega Marine Lab, and Dorothy Skinner at Oak Ridge. I joined the Society as a graduate student in the mid-1970's. The Society has been central to my scientific career, as well as that of my post-docs and students. As Chair, I will be committed to efforts that involve and engage students,



postdocs, and junior faculty in SICB meetings and governance; their participation is key to the Society's future.

The DCPB is a major forum for integrative organismal biology. As Chair, I will work with the program officer to develop programs and meetings that promote the exchange of innovative ideas and application of tools across the broad spectrum of biological diversity and organization. This can be done in conjunction with other divisions within SICB, in the form of Society-wide symposia and workshops, as well as with comparative biochemistry and physiology societies in the US (e.g., APS) and abroad (e.g., SEB). DCPB should continue its relationship with the International Union of Physiological Scientists (IUPS) and the International Union of Biological Scientists (IUBS) in organizing international meetings.

### Stephen Secor



**Current Position:** Associate Professor, Department of Biological Sciences, University of Alabama, Tuscaloosa.

**Education:** B.S., Forest Biology, State University of New York College of Environmental Science and Forestry (1980); M.S., Zoology, University of Oklahoma (1985); Ph.D., Biology, University of California, Los Angeles (1992).

**Professional Experience:** Postdoctoral Fellow, Department of Physiology, UCLA School of Medicine (1992-1998); Assistant Professor of Biology, University of Mississippi

(1998-2001); Assistant Professor of Biological Sciences, University of Alabama (2001-2006), Associate Professor of Biological Sciences, University of Alabama (2006-present). Editorial boards, Physiological and Biochemical Zoology (2005-present), International Journal of Zoology (2008-present).

**SICB Activities:** Member (1989-present); Bartholomew Award Committee (member 2008-present, Chair, 2009-present); DCPB Secretary Nominating Committee (Chair, 2008-2009).

**Other Memberships:** American Physiological Society, Society for Experimental Biology.

**Research Interests:** Evolution and proximate mechanisms of integrated physiological responses; adaptive interplay between feeding habits and the regulation of gastrointestinal performance; cellular and molecular mechanisms that underlie regulation of tissue form and function; determinants of the postprandial metabolic response to meal digestion and assimilation; capacity of postprandial cardiovascular performance; source of mass-independent intraspecific variation in metabolic rate.

**Statement of Goals:** SICB is a fantastic scientific society, and as its largest division, DCPB has been instrumental in its growth, strength and diversity. I will work to continue the strong traditions of the division: foster the attendance at meetings and membership of undergraduate and graduate students and postdoctoral fellows; support the organization of talk and poster sessions and the development of techniques/teaching workshops and innovative and timely symposia, maintain an active relationship between the division and supporting journals (ICB, PBZ, and CBP); promote communication and interactions with other divisions of SICB and societies (APS, SEB, and IUPS), and keep divisional members abreast of funding opportunities and changes within



funding programs. As division chair, I will advocate for expanding the integrative and interdisciplinary breadth of the division. The recent 'Grand challenges in organismal biology' series of papers provide an excellent platform to advance the division's scope in exploring the "how's" (mechanisms) and "why's" (evolution) of physiological and biochemical design, an attention that will embrace organismal to genomic approaches.

### Program Officer

#### Richard Londraville



**Current Position:** Professor of Biology, University of Akron, Akron, OH

**Education:** B.S. Marine Biology, Long Island University, Southampton Campus (1987); M.S. Zoology, University of Maine, Orono (1989); Ph.D., University of Maine, Orono (1994).

**Professional Experience:** Postdoctoral Research Associate, Hopkins Marine Station, Stanford University

(1994-1996); Assistant Professor of Biology, Univ. Akron (1996-2002); Visiting Professor Stone Research Laboratory, Ohio State University (2005); Interim Chair of Biology, Univ. Akron (2005-2006); Visiting Scientist, Lerner Research Institute, Cleveland Clinic (2006); Associate Professor of Biology, Univ. Akron (2002-2009); Professor of Biology, Univ. Akron (2009-present).

**SICB Activities:** Member of Division of Comparative Physiology and Biochemistry since 1989, Member of Division of Comparative Endocrinology; Attended almost 20 annual SICB meetings over the years

**Other Memberships:** American Physiological Society

**Research Interests:** The big picture question that pushes my lab is how protein evolution can influence evolution of organisms. We have spent most of our effort looking at the evolution of lipid metabolism, and most of the time we work with fishes. We are particularly curious about the interaction of body temperature and lipid metabolism. Since 2000, almost all of our effort has gone toward understanding the function of leptin in vertebrates. Leptin is a small protein hormone that influences how lipid is deposited and how it is burned, as well as many other physiological axes (reproduction, bone density, etc.). Although tens of thousands of papers have been published on leptin (literally), very few focus on its influence on how organisms respond to their natural environment. My students are currently pursuing that question using zebrafish, carp, and bowhead whales.

**Statement of Goals:** In addition to soliciting ideas from our members, and working with the SICB membership to construct an excellent program, I would pursue the idea of sponsoring a student-led symposium each meeting. I grew up as a scientist in SICB, and have now been a member for over 20 years. I still see SICB as one of the most student-friendly societies for anyone who does the type of research that we do. As a program officer, I would like to enhance and nurture this traditional strength of SICB. My goal would be to recruit young scientists to the both DCBP and SICB, and in doing so help protect the future of the society.

#### Kristin O'Brien

**Current Position:** Assistant Professor of Biology, University of Alaska, Fairbanks

**Education:** B.S., Zoology, Duke Univer-



city (1990); 1999, Ph.D., Zoology, University of Maine, Orono

**Professional Experience:** N.I.H. NRSA Postdoctoral Fellow, University of Colorado, Boulder (1999-2003); Affiliate Assistant Professor of Chemistry and Biochemistry, University of Alaska, Fairbanks (2004- present); Assistant Professor of

Biology, University of Alaska, Fairbanks (2004- present).

**SICB Activities:** I regularly attend SICB meetings with my students and I was an invited speaker at the *Advances in Antarctic Marine Biology Symposium* held during the 2010 meeting.

**Other Memberships:** American Society for Biochemistry and Molecular Biology

**Research Interests:** I am interested in the physiological and biochemical basis of cold acclimation and adaptation in fishes. I currently have two major projects on-going in my laboratory. One is investigating the molecular basis of metabolic remodeling during cold acclimation in fishes. The second is investigating the unique adaptations within the hemoglobinless Channichthyidae family of Antarctic fishes, which are known commonly as icefishes. We are examining the molecular basis of changes in muscle architecture correlated with the loss of expression of hemoglobin, and determining if changes in mitochondrial structure in icefishes impact function.

**Statement of Goals:** I'd like to continue in the same vein as my predecessor, Kathryn Dickson, sponsoring symposia that appeal to a broad audience. In doing so, we

sustain the integrative nature of the society and attract new members from outside of the organization. I feel well-qualified to develop cross-cutting symposia given my own broad training in biology. I studied comparative physiology and biochemistry as a graduate student and completed postdoctoral training in a biomedical research laboratory, focused on mitochondrial biology. Additionally, I welcome the opportunity to serve as the program officer for DCPB, which played a pivotal role in my own development as a scientist.