



Division of Comparative Physiology and Biochemistry

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Message from the Chair

Don Mykles

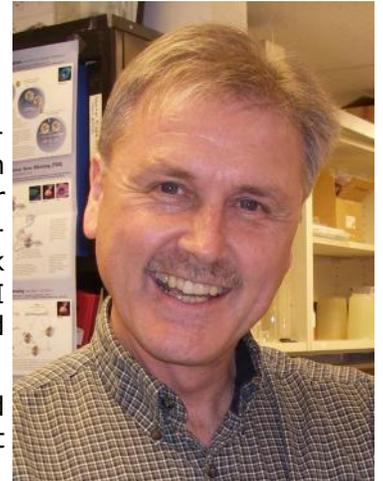
Greetings from the Colorado Rockies! I began my two-term as Chair at the conclusion of the 2012 annual meeting, taking over from Jim Hicks. Rich Londrville became secretary, succeeding Anna Ahn. I know I speak for the entire division membership when I express my sincere appreciation for Jim's and Anna's dedicated service and jobs well done.

We are having elections for Chair-Elect and Program Officer. I acknowledge the great work of the nominating committee, consisting of Steve Hand (Chair), Tim Bradley, and Paul Yancey, for assembling a great slate of candidates. Steve Secor and Donal Manahan are running for Chair-Elect and Jonathon Stillman and David Julian are running for Program Officer. Read their profiles and vote when the ballots come out in May! The term for Chair-Elect is one year and then two years as Chair; the term for Program Officer is two years. Both positions begin at the end of the 2013 meeting in January.

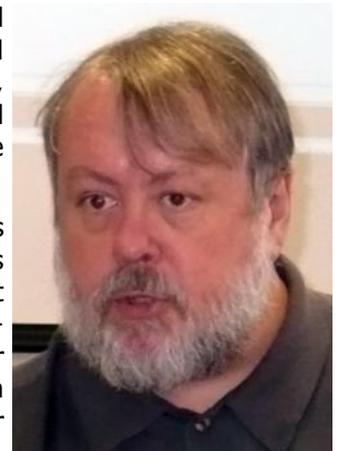
The 2012 meeting in Charleston was a great success in every aspect – record numbers of attendees and presentations, combined with a great location and venue. The division co-sponsored 4 symposia and a special contributed paper session in honor of David Towle and Steve Morris. Manny Azizi, UC Irvine, gave an engaging Bartholomew Lecture to a full house. The division thanks John Lighton, Sable Systems International, for his generous support.

Steve Secor (Chair), Doug Altshuler, Chris Guglielmo, Adam Summers, and Art Woods served on the selection committee for the Bart Award. I want to thank coordinators Harry Itagaki and David Tapley and about 70 judges for their work on the best student presentation competition. There were 94 entrants, split near evenly between oral and poster presentations. Congratulations go to **Geoffrey Dilly** for Best Oral Presentation and **Erica Heinrich** for Best Poster Presentation. The awards are named in memory of David Towle.

San Francisco in 2013 promises to be another great meeting.



Don Mykles



John Lighton



DCPB will be supporting 4 symposia and special contributed paper sessions honoring Bruce Sidell and Ken Nagy. The program and location should attract a large number of participants. The Macrophysiology workshop will give you a good excuse to linger a day or two after the meeting. The 2014 meeting will be in Austin. I encourage you to submit a proposal for a symposium. It's never too early to start planning. Be sure to work with Kristin O'Brien, our Program Officer, in developing your ideas.

I am here to serve the division. Please do not hesitate to contact me (Donald.Mykles@ColoState.edu).

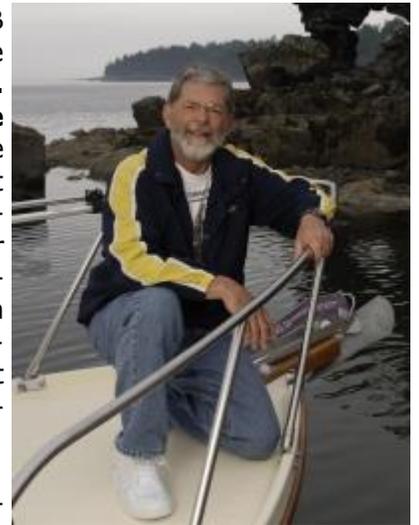
Call for Nominations -2013 Bartholomew Award- San Francisco

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 (2005 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 2013 SICB Meeting in San Francisco, CA. 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. The deadline for nominations is Friday, **24 August 2012**.

Oral Presentation and Poster Presentation Award Winners

This year the DCPB student awards were named in honor of **Dr. David W. Towle (1941-2011)**. The following is an excerpt from an obituary written by Nora Terwilliger and Ray Henry, originally published in Comparative Biochemistry Physiology (Part A 160 (2011) 309-310).



David Towle

In the midst of planning a June sailing trip on the eastern Adriatic in celebration of his upcoming 70th birthday, in the midst of rebuilding his 1962 vintage 36 foot wooden trawler *Spray*, in the midst of sharing the news that his latest publication on salinity induced changes in gene expression in the green crab *Carcinus maenas* had just been accepted, in the midst of singing and fiddling and playing his accordion, in the midst of living his vibrant, enthusiastic, caring life — David Towle died unexpectedly on January 3, 2011.

David Walter Towle, Ph.D., until recently Mt. Desert Island Biological Laboratories Senior Investigator and Director of the Marine DNA Sequencing and Analysis Center, retired in June 2009 to move on to further adventures. David attended the University of New Hampshire, first as an English major and eventually



in Biological Sciences. After completing his Master's degree, David earned his PhD from Dartmouth College in 1971.

David joined the faculty at the University of Richmond, Virginia, where he developed his research and teaching skills in comparative biochemistry and physiology, and was recognized with an Outstanding Educator Award. Also, during that time, David published some of the foundation work on the role of the Na/K-ATPase in low salinity

adaptation in both fish and crabs. His was one of the first labs to document the salinity-sensitivity of the enzyme in the gills of euryhaline marine organisms (Towle et al., 1976, 1977), opening an avenue of research that continues to this day. He began spending his summers with the Mt. Desert Island Biological Laboratory in 1982, appreciating the opportunities to do research on live marine animals

in their natural setting and to learn and share insights on ion regulation in vertebrate and invertebrate organisms with colleagues at MDIBL. While at MDIBL, David published a critical piece of work visualizing the basolateral localization of the Na/K-ATPase in the gills of blue crabs and green crabs (Towle and Kays, 1986), confirming the role of the Na-pump as the driving force of active ion uptake and cementing the enzyme as one of the central molecular components in the physiological mechanism of osmotic and ionic regulation. David also pioneered the preparation and use of membrane vesicles as a way to further study the role of the Na/K ATPase in ion transport in the crustacean gill. His work showed that ammonium ion (NH₄⁺) could

substitute for K⁺ in the action of the Na pump, thus providing a molecular mechanism for predictions made decades earlier by August Krogh (Towle and Holleland, 1987).

In 1988, after 18 years at the University of Richmond, David was recruited to be Chairman of the Department of Biology at Lake Forest College, Illinois. He continued with his summer research at MDIBL, often bringing

undergraduates from Lake Forest College to offer them summer research opportunities on the Maine coast. In 2000, David retired from Lake Forest College and accepted a year-round position at

MDIBL. In recognition of his contributions to undergraduate research, the College created the David W. Towle Excellence in Research Award to be given each year to

the Lake Forest senior who had undertaken the most exceptional research in the Biological Sciences.

During his tenure as a full-time scientist at MDIBL, David pioneered the use of molecular biology in the study of comparative physiology. His lab determined the nucleotide sequence of the alpha subunit of the Na⁺/K⁺ ATPase, its tissue distribution, and sensitivity to environmental salinity (Towle et al., 2001), a study that became the template for many other researchers to follow. He focused on introducing new techniques in gene expression into the laboratory, including real-time quantitative PCR, moving from the study of single genes to the whole genome through the development of EST libraries, and microarray analyses to further his interests in crustacean biology (Coblentz et al., 2006). David cogently summarized

his many years of interest and discovery on individual ion transporters in crustaceans in his most recent paper, submitted and accepted for publication just weeks before he died (Towle et al., 2011). This first comprehensive study of gene expression proteins in gills of crabs exposed to hyposalinity is an appropriate closing, signature work for a man who consistently used new technologies to move physiological and molecular studies forward.

David was adamant about the obligation to share data, especially EST and sequencing data, with the scientific community. He brought many new investigators to MDIBL and generously shared his time, knowledge, space, and resources, encouraging visitors to



jump into the world of molecular comparative biology by example and by direct experimentation. One of David's most profound legacies is the number of people he trained, from undergraduates to established scientists, who now use his techniques in their research. In the tribute given to David at his retirement in 2009

(<http://www.mdibl.org/bulletin.php#2009>), his colleagues listed 69 publications that resulted from their association with David's lab at MDIBL.

During his scientific career, David was invited to participate in numerous national and international meetings. He served SICB as the Society-wide Program Officer from 1987 to 1989; one of his goals was to schedule strong speakers for the last sessions of the annual meeting. After the final session, he would be there to give the speaker his warm thanks and a special hand-printed "Last Paper of the Meeting

Award." David was chair of the Division of Comparative Physiology and Biochemistry in 1996 and 1997. Throughout his career, he and his students regularly contributed oral and poster presentations at SICB. Many in his expanding network of scientific colleagues developed into close friends and collaborators, and they exchanged research visits, postdocs and students.

These words are a two-dimensional timeline of David Towle's career written in the past tense for those who marvel at the weaving together of events that shape a scientist. For a fuller understanding of David's attitudes and accomplishments and his ability to inspire students of all ages, please read "Genomics with Gusto" on the Mount Desert Island Biological Lab web site (MDIBL Bulletin (2009), Vol 48, x-xviii). Written contributions were gathered from David's colleagues and students and were woven together into an eloquent living testimonial to the greatness of David's person, words written and given to David during his MDIBL retirement fest in July 2009. Note particularly, the multitude of comments attesting

to David's ability

as a teacher — this, despite David's oft stated declaration that he preferred research to teaching. Note also the recurrent themes of generosity, hospitality, enthusiasm, openness, and joy.

The David Towle Award for Best Oral Presentation

The 2011 winner for best oral presentation is Geoffrey Dilly. Geoff Dilly received his B.S. in Marine Biology from UC Santa Cruz in 2003, and defended his PhD thesis at Harvard in October 2011. His PhD research with Dr. Peter Girguis focused on understanding the physiological responses to environmental stress on deep-sea hydrothermal vent polychaetes — specifically *Paralvinella sulfincola* and *Paralvinella palmiformis*. The work presented at SICB 2012 focused on comparative shifts in proteomic expression to thermal stress in these two species. He is currently working as a postdoctoral researcher with Dr. Gretchen Hofmann, looking at the effects of CO₂ stress on Antarctic sea urchin development.



Geoffrey Dilly

The David Towle Award for Best Poster Presentation

Erica Heinrich is the winner of the 2011 award for best poster presentation. Erica



Erica Heinrich



completed her B.S. in Molecular Biosciences and B.A. in History at Arizona State University in 2010. As an undergraduate she spent three years studying the effects of hypoxia on insect growth and development with Dr. Jon Harrison. Erica is currently pursuing her interests in insect physiology with Dr. Timothy Bradley at the University of California, Irvine. As part of her PhD research, she is investigating the mechanics and control of respiration in insects.



David Tapley



Harry Itagaki

David Tapley (dtapley@salemstate.edu) has stepped down from coordinating judging of the Best Student Presentations. We thank Dave for his many years of service. Harry Itagaki has bravely agreed to take his place. If you are interested in being a judge at our annual meeting, please contact him and let him know your availability (itagaki@kenyon.edu). Students are not eligible to be judges.

Message from the Program Officer

Kristin O'Brien

I hope you all enjoyed the stellar science and sunshine and at our most recent SICB meeting, which included 187 oral and poster pres-

entations within DCPB, not including the four symposia co-sponsored by the division: *Novel methods for the analysis of animal movement: spatial and temporal structure across scale*, organized by D. Altshuler; *Mangrove 'killifish': an exemplar of integrative biology*, organized by E. Orlando, B. Ring and R. Earley; *New frontiers from marine snakes to marine ecosystems*, organized by H. Lillywhite and F. Brischoux; and *Comparative proteomics of environmental and pollution stress*, organized by L. Tomanek.



Kristin O'Brien

I hope to see many of you at our next SICB meeting, which will be held at the Hilton San Francisco Union Square January 3-7, 2013. The Program Committee had a difficult task choosing among the 31 proposed symposia for the meeting. The long list was eventually whittled down and those supported by DCPB include: *Keeping time during animal evolution: conservation and innovation of the circadian clock*, organized by Adam Reitzel and Ann Tarrant; *Physiological responses to simultaneous shifts in multiple environmental stressors: Relevance in a changing world*, organized by Anne Todgham; *Hormone-mediated sex ratio adjustment in vertebrates*, organized by Kristen Navara, and *Coping with uncertainty: Integrating physiology, behavior and evolutionary ecology in a changing world*, organized by Zoltan Nemeth.

The society-wide symposia will include: *When Predators Attack: Sensing and Motion in Predator-Prey Interactions*, organized by Matt McHenry and Stacy Combes; *Vertebrate Land Invasions: Past, Present, and Future*, organized by Alice Gibb, Miriam Ashley-Ross, Richard Blob, Tonia Hsieh, and *Phenotypic plasticity and the evolution of gender roles* organized by Janet Leonard.



In addition, there will be two special sessions in 2013. One in honor of Bruce Sidell, organized by Rich Londraville and the other in honor of Ken Nagy, organized by Stephen Secor and Joe Williams.

It will be well worth your while to spend one extra day in San Francisco. Immediately following the SICB meeting, there will be a special one-day workshop on Macrophysiology, to discuss core challenges articulated by Gaston et al. (2009, full citation below). Those challenges to understanding physiological diversity at large spatial and temporal scales include: broadening the evolutionary array of organisms, broadening the array of traits studied, including 'omics enabled research, understanding the relationship between physiological mechanisms and demographic parameters, understanding responses to simultaneously variation in multiple environmental factors (both biotic and abiotic), and integrating laboratory and field experiments. The intention is to have a few stimulating presentations on those challenges and, as a community, develop strategies to address them, including implementation plans. The result of the conference will be outlines of a white paper, and a proposal to move the field forward. If you are interested in participating, please contact Jonathon Stillman (stillmaj@sfsu.edu) as soon as possible for more details.

Gaston, K.J., S.L. Chown, P. Calosi, J. Bernardo, D.T. Bilton, A. Clarke, S. Clusella-Trullas, C.K. Ghalambor, M. Konarzewski, L.S. Peck, W.P. Porter, H.O. Pörtner, E.L. Rezende, P.M. Schulte, J.I. Spicer, J. Stillman, J.S. Terblanche and M. van Kleunen. 2009. Macrophysiology: A Conceptual Re-unification. *American Naturalist*. 174: 595-612.

It's never too early to begin planning symposia for our next meeting in 2014 in Austin, TX. Please don't hesitate to contact me with ideas or questions (kmobrien@alaska.edu; 907-474-5311). Keep in mind that presentations from symposia are published in the society's journal, *Integrative and Comparative Biology*. The impact factor of ICB recently increased from

1.979 to 2.626 and regained Top 10 status in the ISI Zoology category!

There are many good meetings on the horizon including:

Society for Experimental Biology, June 29-July 2, 2012, Salzburg, Austria, (<http://www.sebiology.org/meetings/Salzburg2012/Salzburg.html>)

XIV European Congress of Ichthyology, July 3-8, 2012, University of Liege, Belgium, (www.eci-14.ulg.ac.be/index.php)

International Congress on the Biology of Fish, July 15-19, 2012, Madison Wisconsin (<http://conferencing.uwex.edu/conferences/icbf2012/index.cfm>)

XXXII SCAR and Open Science Conference, July 16-19, 2012, Portland, Oregon, (<http://scar2012.geol.pdx.edu/>).

First International Congress on Oxidative Stress in Aquatic Ecosystems Nov. 20-24, 2012, Los Cabos, Baja California, Sur, Mexico (<http://intranet.cibnor.mx/eplant1.php?pagID=anuncios/estres2012/index>)

International Union of Physiological Sciences, July 21-26, 2013, Birmingham, UK (<http://www.iups2013.org/>)

Minutes of the 2012 DCPB Business Meeting

[Click here for PDF file on SICB.org](#)

Message from the DCPB Student/Postdoctoral Affairs Committee Representative

Chris Slay

Greetings, fellow students and postdocs. I hope everyone enjoyed an interesting and productive Annual Meeting in North Charleston. It was a pleasure to interact with so many of



Chris Slay

you.

I would like to offer congratulations to the division's David W. Towle Award winners for best student presentations: Geoffrey Dilly (oral presentation) and Erica Heinrich (poster presentation). Congratulations, also, to the winners of SICB's Fellowships for Graduate Student Travel and Grants-in-Aid of Research, many of whom are DCPB members.

I would also like to thank the folks who attended the Student/Postdoctoral Affairs Committee (SPDAC) workshop, "Maximizing Your Potential Through Job Applications and Interviews," particularly those students and postdocs who volunteered to serve on panels. On a related note, the SPDAC may be sponsoring a booth at SICB 2013 staffed with individuals who can provide feedback on graduate student/postdoc application materials; plan on bringing your CV and other application materials with you to receive feedback. The SPDAC has also discussed potential workshops for SICB 2013. If any of you have ideas you for next year's workshop, feel free to contact me (see email address below).

Also, consider applying for these funding opportunities with impending application deadlines:

Sigma Xi Grants-in-Aid-of-Research, due 15 March:

<http://www.sigmaxi.org/programs/giar/index.shtml>

Company of Biologists/JEB, due 30 April:

<http://jeb.biologists.org/site/misc/fellowships.xhtml>

I look forward to working with you in the future, and will be happy to provide further de-

tails about the student/postdoc SICB 2013 events in the Fall newsletter. In the meantime, let me solicit your ideas; please contact me at cslay@uci.edu.

Message from the Secretary

Rich Londraville

After many successful attempts at avoiding responsibility (by losing elections), I was elected Secretary last Spring. I then was kindly and graciously schooled in the duties of the office by Anna Ahn, our excellent and most-organized previous Secretary. Thank you Anna for all that you did in your position, including punching up the newsletters with pictures. Because of your efforts I know much more about how SICB works, and how much work goes into these newsletters! The newsletter is our division's record of our history; it is also an effective outlet for getting information to like-minded people in our field. If you have anything that you want to communicate for the benefit of our members, please contact me (londraville@uakron.edu) and we will make sure it gets in the newsletter.



Rich Londraville

Jeffrey B. Graham (1941-2011) Remembered

Dr. Jeffrey B. Graham died from cancer on December 8, 2011. Jeff was well known to members of DCPB for his passion and enthusiasm for fish physiology, from the four-eyed fish of Panama to the giant air-breathing Arapaima in the Amazon River and the mudskippers of Southeast Asia. He contributed to our understanding of endothermic tuna physiology



Jeff Graham

and the cardiovascular adaptations of thresher and mako sharks near his home in San Diego, California. His 1997 book on air breathing fishes continues to be influential. Graham spent his entire professional career in San Diego at Scripps Institution of Oceanography, mentor to many students and colleagues. He served as executive director of the

Birch Aquarium at Scripps from 2000 to 2002; its monthly public lecture series is named in his honor. Additional information can be found here: <http://scrippsnews.ucsd.edu/Releases/?releaseID=1233>

Spring Elections

We have two positions to elect this Spring: Chair-Elect and Program Officer. The Chair-Elect will serve a one year term, and then automatically a two year term as Chair (currently Don Mykles) and two years and Past Chair (currently Jim Hicks).

The Program Officer will take over after Kristin O'Brien's term ends at the end of the next annual meeting (January 2013, San Francisco). The new Program Officer will serve a two-year term. Each of the positions has two candidates (and we thank them for running!). Ballots will be issues in May for these elections.

Candidates for DCPB Chair-Elect

Donal T. Manahan

Current Position: Professor of Biological Sciences, University of Southern California, Los Angeles, CA. Education: B.S., Zoology, Trinity College, University of Dublin, Ireland (1976); Ph.D., Physiology/Marine Biology, University of Wales, Bangor, UK (1980).



Professional Experience: Postdoctoral Research Fellow and lecturer in physiology, University of California, Irvine (1980-1983); Assistant, to Associate, to Full Professor, Department of Biological Sciences, University of Southern California, Los Angeles, California (1983 to present); Visiting Associate Faculty, Division of Biology, California Institute of Technology, Pasadena, California (1992-1993). Director, USC Graduate Research Division of Marine Biology (1995-2000); Dean of Research, USC College of Letters, Arts & Sciences (2000-2005); Director, USC Wrigley Institute for Environmental Studies (2008-2010); Vice Dean for Students, USC Dornsife College of Letters, Arts & Sciences (2010 to present). National Academies' National Research Council, Polar Research Board, Board Chair (1999-2002) and Board Member (1995-2002); NSF Advisory Committee (2006-2009). Director of national and international training courses for graduate students and postdoctoral fellows in Marine Molecular Biology (ONR supported, 1991-1993) and Integrative Biology and Adaptation of Antarctic Marine Organisms (NSF supported, 1993-present).

SICB Activities: Member of Division of Comparative Physiology and Biochemistry since 1980. Divisional Secretary and member



of the Executive Board for the Division of Comparative Physiology and Biochemistry (1991-1993); Local co-organizer of the annual SICB (then, Am. Soc. Zool.) meeting held in Los Angeles, CA (1993).

Other memberships: Elected as a Fellow of the American Association for the Advancement of Science (2011).

Research Interests: Environmental physiology and biochemical adaptation of marine invertebrates. Specific studies include the physiology of larval development in different environments; analysis of genetically-determined variability in physiological performance; and comparative studies of metabolism of species with different life-history strategies.

Goals Statement: I began attending SICB meetings as an early-career scientist and fully appreciated the immense impact this society has had on my professional development. Increasing the involvement of current early-career scientists in DCPB and SICB is a key goal for me. In particular, I would like to use my experience in directing national and international training courses to enhance research and educational opportunities in adaptational physiology (through symposia, workshops, etc.) for graduate students, postdoctoral fellows, and early-career faculty. I plan to promote ways to encourage graduate students and postdoctoral fellows to lead symposia at each annual meeting.

Science and Forestry (1980); M.S., Zoology, University of Oklahoma (1985); Ph.D., Biology, University of California, Los Angeles (1992); Postdoctoral Fellow, Department of Physiology, UCLA School of Medicine (1992-1998).

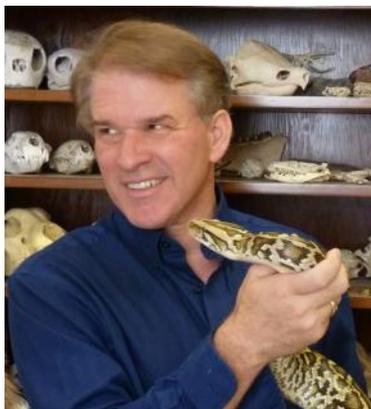
Professional Experience: Assistant Professor of Biology, University of Mississippi (1998-2001); Assistant Professor of Biological Sciences, University of Alabama (2001-2006), Associate Professor of Biological Sciences, University of Alabama (2006-present). Associate Editor, *Physiological and Biochemical Zoology* (2009-present), Editorial Board, *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

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.

Goals Statement: 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



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



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.

Candidates for DCPB Program Officer



David Julian

Current Position: Associate Professor of Biology, University of Florida.

Education: B.S. in Biology, San Francisco State University (1988); M.A. in Physiology and Behavioral Biology, SFSU (1991); Ph.D. in Physiology, UCSF (1997).

Professional Experience: Asst Research Scientist, Romberg Tiburon Center for Environmental Studies, SFSU (1996-1999); Research Scientist, Institut für Zoophysiology, Universität Düsseldorf, Germany (1999-2000); Asst Professor (2000-2006) and Assoc Professor (2006-present), Department of Biology, University of Florida.

SICB Activities: DCPB member since 1987; DCPB Student/Postdoc Representative 1990-1992; Judge for DCPB Best Student Paper Competitions; 16 oral and poster presentations at SICB (including with supervised students); 2002 DEE Best Poster Award to student A.M. Reitzel; 2006 DCPB D. Skinner Award for Outstanding Oral Presentation to student J. Joyner-Matos.

Other Memberships: American Physiological Society

Research Interests: Students in my lab are investigating how interactions among the cellular and biochemical responses to biotic and abiotic stressors in marine habitats may constrain species distribution and biological dispersal.

Goals Statement: As a longstanding SICB member I am honored to have been asked by the nominating committee to stand for election as Program Officer. Through our focus on organisms, the research, teaching and outreach by DCPB members helps place SICB at the nexus of many key issues facing 21st century science, including effects of climate change, biodiversity loss, invasive species, and emerging pathogens. This is being facilitated by advances in whole-genome sequencing and "omics" techniques that are rapidly making a broad diversity of animals feasible for development as our model organisms. In short, it's an exciting time to be a DCPB member in SICB. My primary function as Program Officer would be to promote the continued creation of timely, important symposia proposed by DCPB members. As has been the goal of previous Program Officers, I would also promote the development of symposia that cross disciplinary boundaries, which should continue to include other divisions in SICB and international comparative biochemistry and physiology societies, but could also include symposia with societies in the physical sciences, mathematics and engineering. I would also encourage symposia that address the challenges and opportunities created by the use of technology in our outreach and teaching, including active learning, distance learning and social media. Finally, I would continue to promote the full participation of postdoctoral fellows and students – both graduate and undergraduate – in all aspects of our annual meetings.



Jonathon Stillman

Current Positions: Associate Professor, Romberg Tiburon Center and Department of Biology, San Francisco State University, Adjunct Assistant Professor, Department of Integrative Biology, University of California Berkeley.

Education: B.S. University of Minnesota (1991); Ph.D. Oregon State University (1998); Postdoctoral Fellow (1999-2000) Johns Hopkins University, (2001-2003) Hopkins Marine Station, Stanford University.

Professional Experience: Assistant, Associate Professor (2005-present) San Francisco State University; Adjunct Assistant Professor (2009-present) University of California Berkeley; Assistant Professor (2003-2005) University Hawaii Manoa; Visiting Assistant Professor (2000-2001) Occidental College.

SICB Activities: Member since 1990; Secretary DCPB (2006-2007); Co-author of two Grand Challenges in Organismal Biology manuscripts (2010, 2011); Organized symposia: *Physiological Responses to Simultaneous Shifts in Multiple Environmental Stressors: Relevance in a Changing World* (2013); *Recent Advances in Crustacean Genomics* (2008); Symposia participant: *Genomic and Proteomic Approaches in Crustacean Biology* (2006); *Physiological Ecology of Rocky Intertidal Organisms: From Molecules to Ecosystems* (2002). Organized *Grand Challenges in Organismal Biology* workshop (2011)

Other Memberships: None at present, have been member of AAAS, Sigma Xi, APS, SEB, Protein Society, and AIBS in the past.

Research Interests: Marine environmental physiology, thermal biology, ecological consequences of physiological response limits in the context of climate change (global warming, thermal stress and ocean acidification), organismal, biochemical and genomic approaches.

Statement of Goals: Since 1987 when I attended my first SICB (ASZ) meeting as a freshman undergraduate student the society has been an important mainstay of my professional career. The strengths of SICB as a broad and student-postdoc friendly meeting that still draws notable mid-career and senior researchers are important to maintain. I have felt like many comparative physiologists have chosen to attend meetings besides SICB (e.g., Experimental Biology), which is a loss for SICB-DCPB. As DCPB program officer I will focus my efforts on two interrelated goals: 1) making the SICB annual meetings maximally competitive with other comparative physiology meetings to draw top scientists to SICB, 2) developing interdivisional symposia that reflect the present multi-disciplinary nature of comparative physiology and that help to promote future directions for comparative physiology.