Volume Spring 2008

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SICB Spring 2008 Newsletter

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Experiences in Integrative and Comparative Biology

The 4th installment of our series, featuring Past Presidents Al Bennett and Edwin Cooper.
[Read more]

2008 Elections

SICB-wide candidates and their biographies. Divisional candidates for 2008 Elections are listed under the individual divisions.
[Read more]

2010 Meeting Location

The SICB Executive Committee has selected **Seattle, Washington** as the site of the January 2010 SICB Annual Meeting. The meeting will be held in the Sheraton Seattle Hotel and the adjacent Washington State Convention and Trade Center.

Message from the President

The 2008 Annual Meeting in San Antonio was a great success. I was particularly pleased to see so many students and postdocs, some of them now familiar colleagues, others fresh arrivals. They hold the promise of a vibrant future for our Society, welcoming and facilitating continuing change.
[Read more]

Message from the Treasurer

- Policy on Establishing Named Funds
- More Budget Belt Tightening Required
- Development Committee Revitalized
- Dow-Jones Nausea

[Read more]

Message from the Program Officer

Two very important dates to put on your calendar are:

- The deadline of the submission of late-breaking symposium applications for the 2009 meeting in Boston is August 18, 2008.
- The deadline for the submission of the symposium

Committee Reports

Divisional Newsletters

Animal Behavior (DAB)

Comparative Biomechanics (DCB)

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Comparative Physiology and Biochemistry (DCPB)

Developmental and Cell Biology (DDCB)

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Invertebrate Zoology (DIZ)

Neurobiology (DNB)

Systematic and Evolutionary Biology (DSEB)

Vertebrate Morphology (DVM)

applications for the 2010 meeting in Seattle is August 18, 2008

[Read more]

Message from the Past Program Officer

At the 2008 meeting in San Antonio, we had 1336 registered participants. There were eight regular symposia and, for the first time, four late-breaking symposia. Symposia rooms were very full and the talks that I saw were incredibly interesting. For regular symposia, 7 of the 8 had external funding and these sources included NSF, NIH, Air Force Science and the Society for Systematic Biology.

[Read more]

Message from the Secretary

As we grow into our new web site, we are finding more and better ways of serving SICB members and promoting the goals of the Society. One new way to communicate is an electronic "Discussion Board" on our web site that allows members to make comments and ask questions about the proposed bylaws changes.

[Read more]

The Society for Integrative & Comparative Biology
SICB Newsletter

Volume Spring 2008

Experiences in Integrative and Comparative Biology

- Boyhood Memories Imprinted Comparative Immunology - *Edwin Cooper*
- The Magic of Field Biology - *Albert F. Bennett*

In this newsletter, we hear about some experiences from two former presidents of our Society, Al Bennett and Edwin Cooper. Edwin Cooper was president in 1983 and is a Distinguished Professor of Neurobiology in the David Geffen School of Medicine at UCLA. Al Bennett was president in 1990 and is a Professor of Ecology and Evolutionary Biology and Dean of the School of Biological Sciences at UC Irvine. Drs. Cooper and Bennett served as presidents when we were the American Society of Zoologists and when presidential terms were for one year instead of the current two year terms. I hope you enjoy some of the experiences these distinguished scientists share with us.

Lou Burnett, SICB Secretary

Boyhood Memories Imprinted Comparative Immunology

Edwin Cooper
Laboratory of Comparative Neuroimmunology
Department of Neurobiology
David Geffen School of Medicine at UCLA
University of California, Los Angeles

Dr. Aulogelio Aponte, Edwin Cooper, Mrs. Aponte in 2002, Barquisimeto Venezuela. Aponte was Cooper's graduate student in 1966 at the National Politecnic Institute, Mexico City sponsored by Agency for International Development. They had not seen each other since 1966.

I remember recognizing early on my fate to become a biologist-a zoologist. A lot of keen observations actually stayed with me and contributed enormously to shaping my career. In Houston Texas, where I grew up, spring rains unearthed a wealth of animals that I found most fascinating. Earthworms are not well when they are waterlogged so that excess rain brought them out seeking penetrable but not soggy soil. I never learned or liked to fish, instinctively not wanting to sacrifice earthworms to serve as bait for a sport about which I had no interest. Little did I know that earthworms would become one focus of my life's work as a comparative immunologist demonstrating in them in the early 1960s for the first time that an invertebrate could destroy a transplant, heralding the field of invertebrate immunology and rattling the monolithic world of immunology-much like Metchnikoff did when he discovered phagocytosis down by the seashore in southern Italy in Messina to be precise.

Visits to my maternal grandfather's farm further piqued my fascination with earthworms. As he plowed fields for planting, I became increasingly interested in earthworms as tillers of the soil. Grandfather Porche even told me that they would regenerate should his plow split them! There was even more barnyard biology at the farm as I actually saw what later became widely accepted in ethology as imprinting. Sneaking in and out of the barn, I saw how young chicks would follow the mother hen responding to her clucks. Or I saw his beehives and the dancing workers.

When I did my early work, the world of immunology was no more receptive than it was with Metchnikoff. As open as scientists seem or profess to be, rocking the boat is not always greeted with cheers! Persistence was important to Metchnikoff and it was to me as well. Returning from immunology meetings I became more convinced that I was on the right track with my discovery of graft rejection. And I was not alone since this observation had been made by the Germans in the 1920s. Graft rejection in earthworms to them was a developmental phenomenon, mediated by "individuality differentials" so well explained in Leo Loeb's book: The Biological Basis of Individuality. This was different from my interpretation-the *self not self*-concept, governed my interpretations as did all of immunology following the credo of Nobel Laureate Sir MacFarlane Burnet. Following his immunologic surveillance idea, some still ponder how efficient is the invertebrate immune response since there is relatively little incidence of cancer in invertebrates. Then simultaneously with my own seemingly independent work, the French School of emerging comparative immunologists notably in Bordeaux (DuPasquier, Valembois and his student Philippe Roch-later my post doc, winner of the First von Behring Metchnikoff Prize in Immunology awarded by the Societe Francaise d'Immunologie) were also thymectomizing frog larvae and grafting earthworms!

Later in my career, my earlier barnyard interest in observing nature was translated into watching and documenting the effects of aggressive behavior in the edible fish *Tilapia* and how the response to aggressive encounters could depress the immune system-the beginnings of psychoneuroimmunology-and other evidence that there are connections between the immune, nervous and endocrine systems, through cross-talk and sharing of cell markers such as receptors and mediator molecules. Much later at UCLA I actually received funding from Norman Cousins (first Editor of *Saturday Review* and a popularizer of self healing), since he was interested in behavior. To my advantage I assembled an international team and published a lot on an altered immune responses in β or subordinate fish after exhaustive chasing and biting and ramming by the α or dominant fish. Our movies show this clearly and even when a single fish is allowed to confront itself in a mirror, it will recognize itself and do the very same attack strategies and attempt to defeat it showing the same

behavioral moves! When seemingly frustrated, that single fish will suspiciously cast a gaze: frustrated trying to figure a next winning move?

Student of Professor Bingin Ru, Beijing; Professor Ru, Edwin Cooper, in Beijing 2004. Edwin was searching for labs that deal with Traditional Chinese Medicine (TCM).

Back to Houston and rains, what else did I see as a boy-the houses of crayfish, those piles and piles of mud sticking up like primitive mud houses, or in puddles, tadpoles that eventually sprouted legs and became frogs? Later my explorations would lead to a complete dissection of the immune system of the frog-the discovery of the thymus, lymph glands connected to gills that, because of their structure, clean up blood and provide a source of antibody-producing lymphocytes. Even more in the frog, with a high school student, we showed the presence of stem cells in bone marrow and their capacity to restore an immune system damaged severely by irradiation.

I received the BS *cum laude* in Biology from Texas Southern University in 1957 and was awarded a scholarship to Atlanta University for the MS in Biology. In 1958, I was accepted in the invertebrate zoology course at the Marine Biological Laboratory in Woods Hole and did a project centrifuging the eggs of *Chaetopterus*, a marine annelid, (ideas from the early embryologist Dreisch: 1867-1941). I remember seeing the quotation of Louis Agassiz: "Study Nature Not Books!" I returned to Atlanta University and finished up my MS thesis in 1959 on differentiation of the embryonic chick otocyst on the chorioallantoic membrane of older chick embryos.

Clearly I had demonstrated a measure of focus that changed drastically after I had arrived eagerly in 1957. I had been so excited and had decided to do about 15 projects for my thesis! My major Professor Mary L. Reddick, Phi Beta Kappa and PhD. Harvard (student of Leigh Hoadley, zoologist and marine biologist) did her thesis on ear development in chicks. So in 1957 when I entered her office with my not so short list of proposed projects, she tore it into pieces, smoked her Lucky Strike and said in firm terms, "Mr. Cooper you will work on this!" (chick otocyst development!).

From Reddick's sharp ultimatum, (still did not daunt my enthusiasm and questioning at the ripe old age of 20 years!) I had learned then immediately before arrival at Brown in 1959 (finished the PhD in 1962) to sharpen my focus and quickly chose to work with Professor Richard J. Goss (another Harvard PhD in zoology and an authority on stem cells and regeneration in any animal that upon amputation of a part would grow it again: salamander limbs and deer antlers). No one had done one intriguing project that excited me tremendously. So I decided to try and grow the salamander regeneration blastema in tissue culture. However there was one interruption in the tissue culture experiments that proved to be beneficial and a major turning point that determined the course of my career. Goss had plans for me to live in a glass house in Maine.

Spending a couple of summers with Richard Goss at the Mt. Desert Island Biological Lab, Salisbury Cove, Maine was fruitful. On a foggy day in the summer of 1961, Goss shocked me to no end essentially withdrawing me from my blastema project and urging me that upon returning to Brown in the fall, to continue the immunosuppression project. Although hurt and disappointed and feeling faint that my unique work had been destroyed, I followed his advice, completed the project, later published in the journal *Transplantation*

and finished Brown on time. Goss gave me two admonitions: he wanted me to finish a project, not stay on for my PhD forever and not do a thesis that needed to be wheeled in! -the blastema work was only giving me enough positive results to keep me enthused, but not convinced. Of course I was egged on at Developmental Biology Meetings, where I was encouraged to continue by greats in embryology like the late Professor Paul A.Weiss, Rockefeller University (formerly Rockefeller Institute for Medical Research).

Finishing up my Ph.D., I mulled the future. What kind of post-doc would I do? I thought - developmental biology? No because the blastema project had not been convincing and I was not sure about immunology, entering it without ever having had a course-modern immunology was not yet exploding as it has done since. Then one day in the Brown U library, I met Jane Oppenheimer, the embryologist (*Fundulus!* embryos were included on the 1975 Apollo-Soyuz space shuttle mission) and former president of ASZ, chatted with her in the stacks and she mentioned the thymus in fish.

I quickly thought why not? At that time, the current immunology explosion was just beginning with people removing the thymus in mice, rats, even opossums primarily by Jacques Miller. So I thought, thymus in fish, maybe also thymus in tadpoles and immunosuppression and all was beginning to gel.

Before leaving Brown, I prepared a post doc application to NIH (National Cancer Institute) and drove west to California to work with William Hildemann at UCLA. Although the proposal was for immunosuppression in fish, I actually wanted to thymectomize bullfrog larvae to suppress their immune response. But remembering my earthworms, I knew that they had no thymus, an organ of vertebrates, but surely they had to have some kind of immune response because they lived in soil-never mind the habitat. I reasoned that all living creatures should be able to defend themselves. So I dreamed: I will exchange skin grafts in earthworms to show rejection as others were doing in birds, mice and rats. Once again I was right. My sure project was the tadpole immune project, grafting and showing antibody synthesis-the bread and butter as Hildemann called it. Why? No one wanted to believe that I was demonstrating graft rejection in earthworms, so Hildemann was cautious!

Edwin Cooper, Peter Engelman, Peter Nemeth (Chair Immunology, University of Pecs Hungary, oldest Hungarian University; Cooper awarded Doctor Honoris Causa in Comparative Immunology, at ceremony in November 2007).

The American Society of Zoologists was a natural outlet for my interests and energy. Later I became involved with the International Society of Developmental and Comparative Immunology, serving as its president and editor of its journal, *Developmental and Comparative Immunology*. I am now working to bring the SICB along as a corporate member of the International Society of Zoological Sciences, which will be convening a Congress in Paris in August 2008.

Participants in the Symposium on Developmental Immunology. Top row, L to R: B. Kindred, R. Auerbach, L. Ruben, J. Bagnara, M. Manning, J. Horton, N. Cohen, D. Boraker, R. Ashman. Middle Row, L to R: J. Decker, N. Cohen, J. Phillips-Quagliata, S. Goldstine, E. Cooper, J. Linna, H. Schapiro, E. Cooper, E. Moticka. Bottom row: L to R: R. Duquesnoy, E. P. Volpe, H. Riviere, J. Turpen, R. Wright.

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The Magic of Field Biology

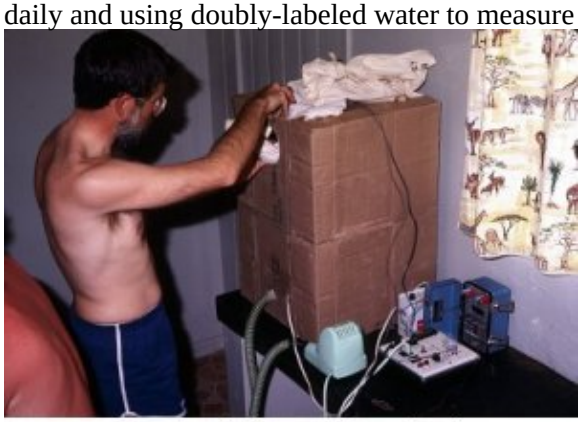
Albert F. Bennett
Department of Ecology and Evolutionary Biology
University of California, Irvine

Welcoming Committee

I was never a born biologist. I did not collect insects, watch birds, or chase frogs. I was a rather bookish boy, inclined more to remain indoors, rather than rambling around outside. I liked reading about animals, but it was a more intellectual than practical attraction. All that changed for me in college. While still a sophomore, I began doing field work as a laboratory assistant for Bill Mayhew at the University of California Riverside and spent a lot of time camping in the desert. One morning I remember waking up at sunrise and finding myself staring directly into the face of a kit fox, who seemed less excited by the experience than I was. By the end of that summer of noosing lizards and chasing snakes, I felt the transformative magic of being with animals in their world. From that point, I knew my calling and my career.

I have had the great fortune be able to undertake research expeditions to study animals in the field in North, Central and South America, Australia, and Africa. And it has been a privilege to be able to do this in the accompaniment of great friends, mentors and colleagues. In particular, my time in the field with my graduate advisor, Bill Dawson, studying the thermal physiology of wallabies, birds, and lizards in Australia was among the most rewarding and enjoyable experiences of my graduate career.

Here I want to highlight just one of those expeditions. This was my first trip to Africa. Ray Huey conceived and planned the expedition, which included Ken Nagy, Henry John-Alder, and me. We went into the Kalahari Desert, on the border between Botswana and the Republic of South Africa, to compare the physiology, behavior, and energetics of two closely-related species of lizards, one of which was a sit-and-wait and the other, a widely-foraging predator. This was back in the good old days, when two species comparisons without a phylogeny were still considered respectable. We spent a month sweating through hot days, watching animals daily and using doubly-labeled water to measure field metabolic rates, energy intake, and water turnover.



Our controlled temperature chamber

We converted our kitchen into a "controlled temperature room" by turning the burners and oven on full blast and regulated the temperature of our lizards in a "chamber" constructed of a cardboard box and a hair dryer. We measured speed and endurance on an ersatz racetrack and treadmill. You learn to improvise and invent and make do, lemons become lemonade, and duct tape becomes the tool of choice. It was challenging and fun, exhausting and incredibly intellectually alive all at once. Part of my mind was always concentrated on the data being collected. Bob Josephson once said that as he collects data, he envisions how it will stand up to the statistical analysis and how it will look in the published figures, and I realized that is always how I worked as well: be sure that you have a sufficient amount and then move on.

Looking back on that trip, however, it is not actually the lizard study that draws my thoughts. More what I remember is just being there in the field, in Africa. We had a memorable welcome to our field site. I was walking the area looking for lizards, when a leopard growled and jumped out of a bush not 50 meters from me. No gun, no run. I was so dumbfounded that my first thought was to call out to Ray to come over to see it. It snarled at me and then ran off. About 3 seconds later the adrenalin hit, my heart nearly exploded, and my legs gave out. Only then did I realize the danger; before that it was all wonder. Later we saw the leopard often, with kills up in a tree. As we drove in to work in the morning, we shared the road with brown hyenas going to their den to sleep. Later we found their den, and in the late afternoon would park by it and watch them play with their pups before going out on a hunt. We saw an enormous mustard yellow cape cobra, nearly 2 meters long, climbing a tree to raid weaver finch nests. Lion were common, including males with enormous black manes. At the edge of our study site was a large acacia tree under which Ray had once seen a lion with a kill on a previous trip. He told us about that just once too often, and for the rest of the trip one of us would point out the tree and tell the story to the others twice a day. There was a lot of that kind of kidding and humor, and it helped to melt the frustration and exhaustion associated the long hot days. We played a lot of music while we worked. To this day I cannot listen to the Rolling Stones play *Start Me Up* without going immediately back in my mind to the dry bed of the Nassob River, where we listened to *Tattoo You* as we watched ground

squirrels using their tails as parasols to shade themselves from the sun. My most enduring image of the trip is driving back to camp at high speed late one afternoon, passing eland and gemsbok, cheetah and lion, looking at enormous mauve thunderheads blotting out the setting sun, promising rain that never arrived. What a privilege it was to see that and be part of it, especially with such a fine group of companions.

Lizards on a treadmill at Sauna Kalahari

George Bartholomew once said that Africa is special and pulls you in like no other place. That is certainly true and part of what made this expedition so memorable. But part of it also just being in a natural environment with animals living their own lives outside of human needs and concerns. It is always magical to enter their world and a privilege to be permitted to share it and to try to understand in some small measure what it is like for them to live there. As rules multiply and natural areas shrink and change, it is more difficult to do, but it remains both rewarding and renewing.

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The Society for Integrative & Comparative Biology

SICB Newsletter

Volume Spring 2008

Message from the President

John Pearse

As I'm sure all who attended will agree, and as described by our dedicated, hard-working program officers in this newsletter, the 2008 Annual Meeting in San Antonio was a great success. It was among the largest in our Society's history, and saw a wide diversity of participants from high school students to old-fogy's like me, all drawn by our fascination with inclusive biology, comparing and integrating different perspectives of life. I was particularly pleased to see so many students and postdocs, some of them now familiar colleagues, others fresh arrivals. They hold the promise of a vibrant future for our Society, welcoming and facilitating continuing change.

Much of the success of the San Antonio meeting was due to the diligence of Sue Burk, Lori Strong, and their team at Burk & Associates, who negotiated good rates and a convenient venue for our meeting, as well as making sure that events during the meeting ran smoothly. As a testament to their success this year, one member came to the registration desk on the last day of the meeting and loudly announced, "I have a complaint!" Sue Burk, used to the member's often pointed complaints in the past, asked what it was this time. He replied, "There is nothing to complain about!!" That was my experience as well, and indeed, things went so smoothly that I unexpectedly found myself with time on my hands to actually attend talks and peruse posters. These, of course, are the center of successful meetings, and they were rich and diverse, much to the credit of our program officers, especially our out-going Society-wide program officer, Linda Walters. Thank you, Linda!

Interlaced throughout the meeting, of course, were the many divisional and other meetings, where much of the Society business takes place. The Executive Committee meetings at the beginning and end went smoothly, considering all the different needs and activities addressed. As you can read in the Treasurer's report in this newsletter, the Society continues to be financially healthy, although attention is needed to get us out of the current projection of deficit spending. That projection is largely due to the generous financial support we provide our student members, many of whom we anticipate will eventually move into full membership to help in that support. Like all non-profit organizations, including our local and state governments (but stupidly not federal), we need a balance between income and expenditures, and we need either to increase our income or to decrease our expenses. The adjustment probably requires only minor tweaks, but it is essential, and will be addressed this coming year.

I was pleasantly surprised by the large number of members in attendance at the Society's lively annual business meeting (see: http://www.sicb.org/resources/minutes.php3 -- once again, I commend Lou Burnett and Ruedi Birenheide for the easy-to-use, information-packed website). Having such a large turnout made our discussion and passage of a resolution presented by Past President Michael Hadfield especially meaningful. The resolution (http://www.sicb.org/resources/resolutions.php3) addresses the serious political distortion of

science and the scientific process that our nation is experiencing from the current federal administration, as well as from some areas of the public arena. Our Society joins other organizations, including AIBS, Union of Concerned Scientists, National Center for Science Education, and Defend Science, to counter this movement, not only to protect funding, but more importantly, to promote knowledge of the world we live in so that it can be better appreciated and understood. Defend Science had one of the most visited tables in the Exhibit hall this year, illustrating the concern of our members with this issue; I hope to see them again in Boston.

Following the authorization provided by the resolution, Peter deFur, in-coming Chair of the Public Affairs Committee, authored with me an opinion piece that was submitted to major national newspapers, and that we distributed by email to all SICB members to modify and submit to local newspapers. To date, no newspaper has published any version of the opinion piece, and I have heard from only four of you (thanks George, Larry, Ruth, and Ted). Nevertheless, it is reassuring that our Society has continued to take an active stance in bringing to public awareness the importance of science for improving our lives, both materially and spiritually. I welcome your comments.

I should also acknowledge that the high attendance at the Annual Business Meeting was in part because we presented awards at the meeting. It was a pleasure for me to announce the following awardees: Peter Thomas (Howard Bern Lecture), Sheila Patek (George A. Bartholomew Award), Deborah Lutterschmidt (Dorothy M. Skinner Award), and Johanna Cannon (Libbie H. Hyman Scholarship). In addition, recognition awards were presented to Society officers completing their terms: Linda Walters (Program Officer), Sönke Johnsen (Member-at-Large), Robert Denver (Chair, DCE), Pat Walsh (Chair, DCPB), Billie Swalla (Chair, DEDB), Don Swiderski (Chair, DSEB), and Miriam Ashley-Ross (Chair, Public Affairs Committee). Moreover, it was especially pleasing for me to present our webmaster, Ruedi Birenheide, with an Outstanding Service Award.

I was also pleased to list the names of the students who received Grants-in-Aid of Research (GIAR) and Fellowship for Graduate Student Travel (FGST) awards at the Annual Business Meeting and then hand them out at the Society-wide Evening Social in Honor of Students and Postdocs. Sherry Tamone, Chair, and her dedicated colleagues on the Student Support Committee poured through 92 applications and selected 24 GIAR and 4 FGST for awards. The awardees are listed on our website: http://www.sicb.org/grants/giarawards2008.php3. In addition, 24 best student paper/poster awards were made at the San Antonio meeting by the divisional committees; see: http://www.sicb.org/students/awards/.

As evidenced above, much of our Society depends on the on-going, sometimes little recognized work of committees at all levels. A lot of satisfaction can be gained by committee work. Not only is the work worthwhile in benefiting many members and beyond, but it also builds up long-lasting friendships among like-minded colleagues. One of my responsibilities is appointing suitable people to our Society-wide committees. I have gained a great deal of insight into our Society's needs and strengths when talking to colleagues about the roles of the committees and their service on them. If you are interested in serving (see the Resources page of our website), please let me know. And, of course, I just might track you down too, so don't be surprised if I contact you.

Of course, one of our most important committees is the Nominating Committee, this year ably chaired by Past Program Officer Catherine Loudon. This year was particularly challenging, with a large number of positions to fill: President-Elect, Program Officer-Elect, Treasurer-Elect, Member-at-Large, and Education Council Chair. As you can see in this newsletter, Kate and her committee have succeeded in compiling an outstanding slate of candidates. Please consider them carefully and vote. Let the candidates know that you appreciate their willingness to serve.

Next year will be a big year for all of us. It is both the 200th anniversary of Charles Darwin's birthday and the 200th anniversary of the publication of Jean-Baptiste Lamarck's "*Philosophie Zoologique*," which was among the first publications to clearly frame the idea of biological evolution. Fifty years later, Darwin not only

provided overwhelming evidence in support of this idea, but also the underlying mechanism that drives evolution. And now, 150 years later, the idea has spread throughout biology and into other sciences as well. It is a time to celebrate, and I look forward to doing so with you in Boston.

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Message from the Treasurer

Ron Dimock

New Policy on Named, Endowed Funds

While the Society is very happy to have new awards such as the recently available Skinner Scholarship, the Executive Committee felt the need to provide guidelines for how new funds might be established. One concern, of course, is that some funds will be in competition for contributions from prospective donors. Therefore, the Executive Committee approved the following policy at its meeting in San Antonio in January. This policy is also found on the SICB web site under Resources > Policies.

Policy on Establishing Named Funds

Rules:

1. A new program must state clearly its intended purpose.
2. New programs will normally require a minimum of $25,000 to establish an endowment whose earnings will be used to support the proposed activities according to the formula specified below.
3. Normally, 4% of the trailing 5 year average of the value of the fund will be available for expenditure on an annual basis for the designated purpose of the fund. However, in no case will expenditures be allowed to invade the principle of the fund. Exceptions to these rules must be granted by the SICB Finance Committee. For funds with less than a 5 year history, the SICB Finance Committee will determine the amount available.
4. Mechanisms for the disbursement of the funds consistent with the stated purpose of the program must be clearly established. If a committee determines how funds are to be disbursed, e.g., determines award recipient(s), what is the composition of the committee, how will the committee be formed, and how often will membership on the committee be changed? An example is the DCPB Bartholomew Award in which the procedures are spelled out in the DCPB Bylaws, Article XIII, B.
5. Programs may be discontinued by the SICB Executive Committee provided proper legal issues associated with the disbursement of remaining funds are resolved.
6. The SICB Finance Committee will oversee the activities of the program to insure adherence to the stated purpose of the program and adherence to all financial procedures governing income, investment, and disbursement of the associated fund.

Procedures:

1. Proposals for new programs must be submitted to the SICB Executive Director, who will forward the proposal to the SICB Finance Committee. The Finance Committee will review the proposal and it

may recommend modifications of the proposal to the individual, group of individuals, division or organization making the proposal.
2. The SICB Finance Committee will make a recommendation to the SICB Executive Committee for approval or disapproval of the proposal.
3. The SICB Executive Committee must approve the proposal.

More Budget Belt Tightening Required

The Society remains financially very solvent. However, the general operating budget continues to generate a deficit every year. For example, for fiscal year 2008 the anticipated overrun is about $51,000 while fiscal 2009 is projected to be approximately $35,000 in the red.

The overages for these 2 years are occurring even though the Society managed through Burk & Associates' negotiations, to have between $30,000 and $50,000 in audio visual expenses waived by the hotels/convention centers in San Antonio and Boston. These 'donations' at these venues were the result either of ongoing construction or promotion of a new facility, both of which worked to the Society's advantage.

It is very unlikely that Sue Burk can keep up this run of excellent negotiation for 2010 and beyond. That means that in addition to the budget overruns of recent years, SICB can anticipate an additional expense of perhaps $40-50,000 per year for A.V. at the annual meeting. Obviously the Society cannot sustain cost overruns on the order of $70-80,000 per year.

As the budget recommendation for fiscal 2010 is developed this summer and fall, the Finance Committee will be looking hard at ways to balance the general operating expenses. Increasing some fees or decreasing some subsidies and other expenses are areas that will be targeted. Of course if the Society can grow its membership, that would help offset expenses.

Development Committee Revitalized

Under the very able guidance of Tom Daniel, University of Washington, the long-dormant Development Committee will be rejuvenated in 2008 and beyond. A concerted effort to attract corporate sponsors and other donors to fund aspects of the Society's activities could greatly improve the Society's annual balance sheet. If there are members who would specifically like to assist Tom as members of the Development Committee, please contact our Secretary, Lou Burnett, who will coordinate any such interest.

Dow-Jones Nausea

The roller-coaster ride on the stock market the past few months has not been pleasant for anyone. However, SICB's financial manager very astutely held nearly 45% of the Society's investment portfolio in cash and cash equivalents beginning early last fall. The outcome is that our overall invested assets have decreased only about 3% since mid-December while the Dow, S&P and Nasdaq have alternately been in free-fall and spectacular (albeit short-lived) recovery. Our manager now is poised to capitalize on what will be some bargain mutual funds when the market finally stabilizes. If only some of us could have managed our personal 401(k) s as well...

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Message from the Program Officer

Eduardo Rosa-Molinar

Hola de Puerto Rico Amigos!!

¡Saludos from Puerto Rico, the Island of Enchantment (we are coming up on hurricanes season)! Well, this is my first newsletter as Society-wide Program Officer. After a few months on the job, I have come to the realization that there is much going on in our society and that I have big shoes to fill. My first official act as the Society-Wide Program Officer of SICB is to thank Linda Walters for the outstanding job she did during her tenure as Society-wide Program Officer. Linda, Divisional Program Officers (DPO), Sue Burk, Lori Strong, staff at Burk and Associates, and Ruedi Birenheide work very hard to provide you an outstanding program every year and they should be commended for this. I know that in the beginning I will make mistakes, but I hope that you will bear with me.

Two very important dates to put on your calendar are:

1. The deadline of the submission of late-breaking symposium applications for the **2009 meeting in Boston** is **August 18, 2008**.
2. The deadline for the submission of the symposium applications for the **2010 meeting in Seattle** is **August 18, 2008**.

Each of the DPO's newsletters has details about the symposia that each of the Division of SICB are supporting. The symposia for the 2009 meeting in Boston that will be held at the Westin Boston Waterfront Hotel are

Society Wide Symposia

1. Tim Bradley, Insect Evolution. Supported by: DCPB

2. Jerry F. Husak, Hormonal Regulation of Whole-Animal Performance: Implications for Selection. Supported by: DAB, DCE, DVM

Regular Symposia

1. Matt McHenry, Sensory Biomechanics. Supported by: DCB, DVM, DNB

2. Jeffrey D. Shields and Christopher Boyko, The Biology of the Parasitic Crustacean. Supported by: Crustacean Society, DEE, DIZ, DSEB, AMS

3. Brook O. Swanson, Biomaterials: Properties, Variation and Evolution. Supported by: DCPB, DVM

4. Darrin Hulsey, Genomics and Vertebrate Adaptive Radiation: A Celebration of the First Cichlid Genome. Supported by: DVM, DAB

5. Lynn B. Martin II, Psychoneuroimmunology Meets Integrative Biology. Supported by: DCE

6. Michaela Hau and Tom Hahn, Evolution of Mechanisms Controlling Timing of Breeding in Animals. Supported by: DCE, DAB

7. Jennifer S. Sorensen and William Foley, PharmEcology: Integrating Ecological Systems and Pharmacology

8. John S. Torday, Cell-Cell Signaling Drives the Evolution of Complex Traits. Supported by: DCE, DEDB, DIZ

Keep checking the SICB website for updates about the meeting. This is all for now. Think about sending in applications for symposia for Seattle 2010 and discuss these ideas with the DPO's. They have the expertise and know all of the details that you need for the development and the submission of symposia proposals.

I hope to see you all in Boston.

¡Hasta Pronto!!

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Message from the Past Program Officer

Linda Walters

My term as SICB Program Officer ended at the conclusion of the final oral presentation at the 2008 annual meeting and I want to thank everyone who made my job so easy, especially Sue Burk, her colleagues at Burk and Associates, and Ruedi Birenheide. By all accounts the meeting was a huge success - good science, good people and good venue. I was proud to have played a role in it and am incredibly grateful to all Divisional Program Officers for their hard work in setting up the detailed program in October 2007. Prior to taking this position, I never knew how much goes into a meeting behind-the-scenes, but I'm confident that the incoming Program Officer Eduardo Rosa-Molinar will also soon learn all this details and provide us with excellent events for the next two years!

At the 2008 meeting in San Antonio, we had 1336 registered participants. There were 375 poster presentations and 630 oral sessions. There were eight regular symposia and, for the first time, four late-breaking symposia. Symposia rooms were very full and the talks that I saw were incredibly interesting. For regular symposia, 7 of the 8 had external funding and these sources included NSF, NIH, Air Force Science and the Society for Systematic Biology. NSF funding for symposia has been a cause for concern in recent years, so I am especially pleased to report that five regular symposia and one late-breaking symposium received funding from this agency. Please continue this tradition of excellent symposia and submit your ideas for 2009 or 2010 by the summer deadline!

Students are the future of SICB. To encourage student participation, at the 2008 meeting SICB supported 337 students (299 received housing support and 38 received registration support). Special events that were also well received included: 5 showings of Dr. Randy Olsen's "*Flock of Dodos*" movie with Randy answering lots of questions after three of the showings, and 2) Dr. Richard Lutz discussing and showing his IMAX movie, "*Volcanoes of the Deep*." Every SICB annual meeting should be the best one ever. I look forward to seeing everyone at the next, best-ever meeting in Boston in 2009!

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Message from the Secretary

Lou Burnett

Proposed Changes to the SICB Constitution and Bylaws. At its January 6, 2008 meeting in San Antonio, the SICB Executive Committee proposed a number of changes to the SICB Constitution and Bylaws. These changes and the rationale for each change have been posted on the SICB web site since January. A Discussion Board is available for members to ask questions and make comments. This requires members to login (see below). Voting will occur on a ballot that will be distributed later in the spring (around May 1). Approval requires an affirmative vote by two-thirds of the members voting.

The Society Secretary is charged with overseeing elections and any measures placed on the ballot. As our rules have been adjusted over the past several years to accommodate advances in electronic communication, we lose a little bit of the traditional interactions we once had, especially with ballot measures such as the proposals for bylaws revisions that are now before us. In the "old days," we would publish the proposals in the paper newsletters that were mailed to members, we would discuss them at the Society business meeting, and then vote. Ultimately, only a very small segment of the society voiced their opinions and voted. Today, our talented webmaster has set up an electronic "Discussion Board" on our web site that allows members to make comments and ask questions about the proposed bylaws changes. This is the first time we have done this and while it is not quite the same as the discussions that used to take place at the business meetings, all members can participate in the discussion, not just a few, and all members can vote. As always, we welcome your feedback on the process and suggestions for making it better.

SICB Web Site Matures. As we grow into our new web site, we are finding more and better ways of serving SICB members and promoting the goals of the Society. Here are some examples.

1. **Member Directory.** Membership has many benefits, however, now only members can access the SICB directory. This requires that members know their SICB ID number, which is sent to members in many of the emails from SICB headquarters, or you can retrieve your number through the SICB web site under the Members tab and click on Retrieve Member Number.
2. **Journal.** Another member benefit is access to our wonderful journal *Integrative and Comparative Biology* (through the Publications tab); issues go all the way back to the very first American Zoologist in 1961.
3. **For Students.** Students are very important to SICB and have their very own tab on the SICB web page. Under the "For Students" tab we have developed a number of resources and we continue to look for better ways to serve our student members.
4. **SICB Calendar.** A calendar of many SICB activities, especially administrative activities for Society-wide and divisional officers, is available on the web under the Resources tab.
5. **Elections, Elections, Elections.** Every year the Society elects a number of Society-wide and

divisional officers and a full schedule of these elections is available under Resources > Elections. Furthermore, we have posted a list of people that have been candidates for offices in the past. This greatly helps nominating committees. This list is not entirely complete and we will continue to update it.

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Society-Wide Elections
Candidates and Biographies

Click on a candidate's name to jump to her/his biography and statement.

Candidate for President Elect

- Steve Hand
- Kenneth P. Sebens

Candidates for Program Officer Elect

- Bret Tobalske
- Brian Tsukimura

Candidates for Treasurer Elect

- Charles E. Booth
- Robert Roer

Candidates for Chair of the Educational Council

- Robert D. Podolsky
- Andrew M. Smith

Candidates for Member-at-Large

- Raymond Henry
- Adam P. Summers

Candidate for President Elect

Steve Hand

Current Position: Thompson Professor, Department of Biological Sciences, Louisiana State University, Baton Rouge

Education: B.S., Zoology, Louisiana State University (1973); M.S., Zoology and Physiology, Louisiana State University (1975); Ph.D., Physiology, Oregon State University (1980); Postdoctoral Fellow, Scripps Institution of Oceanography, UCSD (1980-1982).

Professional Experience: Assistant Professor of Biology, University of Louisiana, Lafayette (1982-1986); Assistant through Full Professor of Biology, University of Colorado at Boulder (1986-2000); Professor and Chair of Biological Sciences, Louisiana State University (2000-2005); Thompson Professor , Louisiana State University (2002-present); Visiting Scientist, Mass General Hospital, Boston (2005-present). Associate Editor, Physiological and Biochemical Zoology (1997-2001); Associate Editor, Journal of Experimental Zoology (1990-1994). Editorial boards, Journal of Comparative Physiology (1992-2004), Physiological Zoology (1996-1997).

SICB Activities: Member (1973-present); Chair, Division of Comparative Physiology and Biochemistry (2000-2002); Bartholomew Award Committee (member, 2004-2006, Chair, 2005-2006); U.S. and Foreign Travel Awards Committee, American Society of Zoologists for the 2nd International Congress of Comparative Physiology and Biochemistry (1988).

Other Memberships: Fellow, AAAS; member, American Physiological Society; Executive Board Member, Mitochondrial Physiology Society; member, Sigma Xi.

Research Interests: Molecular and integrative physiology of animals; mechanisms of metabolic depression during anoxia and diapause; mitochondrial bioenergetics; sensing and signalling within mitochondrial-based pathways for apoptosis; desiccation tolerance in animals; biostabilization of cells during dehydration and freezing.

Statement of Goals: The strong traditions of SICB continue to be ones of fostering the scientific development of students and post-docs, and providing a forum for scientists engaged in fields that are integrative and interdisciplinary. I will work as an advocate for the Society at the national and international levels, based upon listening to the ideas and considering the needs of our members. I will try to expand Society membership with scientists representing all levels of biological organization, and will cooperate closely with the Executive Committee, standing and temporary committees, and the management group to facilitate thoughtful and effective development of innovative scientific programs and directions for the society. Publicizing the annual meetings, and particularly highlighting the scientific discoveries presented there, are activities that should be continued and expanded.

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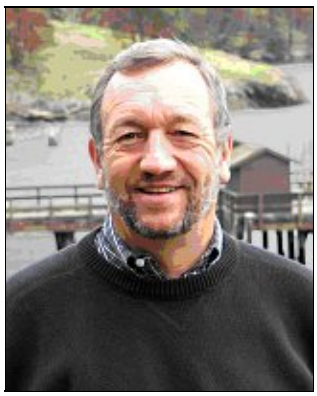
Kenneth P. Sebens



Current Professional Positions: Director, University of Washington Friday Harbor Laboratories (since 2005), Professor, Department of Biology, University of Washington, Seattle (2005-present)

Education: B.A. with Honors, Honors Program, Biology, 1972, University of Connecticut, Storrs; Ph.D., Zoology, 1977, University of Washington, Seattle

Professional Experience: Assistant Professor, Department of Organismal and Evolutionary Biology, Harvard University (1977 - 1982), Associate Professor and Curator, Harvard (1982 - 1985), Associate Professor, Biology, Northeastern University (1985 - 1986) Professor (1986 -1992), Director, Marine Science Center, Northeastern University (1985 - 1991), Professor, U.M. System Center for Environmental Science, Horn Pt. Environmental Labs (1994 -1997), Professor, Zoology/Biology, University of Maryland (1991 - 2005), Professor, Biology, University of Massachusetts Boston (2003 - 2005), Dean, College of Science and Mathematics, UMass Boston (2003 - 2005), Mercer Award, Ecological Society of America 1984, "Outstanding Ecological Paper, 1982", Fellow, A.A.A.S. 1986, Fulbright Senior Scholar Award 1998-1999

SICB Activities: ASZ Nominating Committee (1986 - 1989, 2003 - 2004); ASZ Centennial Local Committee (Co-Chairperson) (1988 -1989); Invited speaker in SICB Symposium (2002), presentations at ASZ and SICB; Meetings (1978 - 2007)

Other Memberships: American Society for Limnology and Oceanography; The Oceanographic Society; A.A.A.S.; Sigma Xi; Ecological Society of America; International Society for Reef Studies (Gov. Board Member,1992 - 1997); Marine Flora and Fauna of the Northeastern United States, N.O.A.A. Tech. Repts. Editorial Board (1988 - 1997), Editor (1997 - present); Pew Fellows Program, Nominating Committee (1997 - 1998); Phi Kappa Phi, Faculty Membership, 1987; New England COSEE Advisory Committee (2004 - 2005); Marine Resources Committee San Juan County WA (2005 - present); SeaDoc Society Science Advisory Committee (2005 - present); National Association of Marine Laboratories Board Member (2006 - present); Western Association of Marine Laboratories (Pres. Elect, 2007-present)

Research Interests: Subtidal benthic populations and communities in both temperate and tropical locations, indeterminate growth and optimal size in marine invertebrates, long-term change in rocky subtidal habitats in the Gulf of Maine, rocky subtidal community ecology in the San Juan Islands WA, coral

ecology focused on the diverse sources of nutrition for reef corals and the influence of hydrodynamics on coral particle capture, nutrient uptake, calcification and growth rate.

Goals Statement: I enjoy the breadth of interests in SICB, and the spontaneous development of interest groups around exciting new research topics and areas within the area of integrative and comparative organismal biology. SICB has become the primary place to share new information for some of these specialties, and I would like to see this trend continue. I would foster the concept of thinking and talking across disciplines and across levels of biological organization, i.e., the molecules to ecosystems approach that has become very productive. SICB is also a wonderful venue for graduate students and postdocs to share their first research findings with a larger community of scientists; I would make sure this continues and expands, that funding for their participation is increased, and that diversity of new members is a goal. I recognize the importance of keeping the membership informed and excited, reaching out to meet new needs and interests, and increasing the membership and the visibility of SICB. Encouraging timely symposia is one great way to generate enthusiasm, and I would make sure SICB continues this trend. SICB has recently taken on more of an advocacy role for organismal biology, evolutionary biology, biology education and related disciplines both within the funding community and to the public at large. This is an important direction for SICB, and for its new leadership, which can only increase the visibility and impact of SICB.

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Candidates for Program Officer Elect

Bret Tobalske

Current Position: Associate Professor of Biology, University of Portland, Oregon

Education: Southern Illinois University at Carbondale, Zoology, B.S. 1988; University of Montana, Missoula, Zoology, M.A. 1991; University of Montana, Missoula, Organismal Biology and Ecology, Ph.D. 1994

Professional Experience: 2004-present: Associate Professor, University of Portland; 1999-2004: Assistant Professor, University of Portland; 1998-1999: Post-doctoral Fellow, Harvard University; 1997-1998: Visiting Assistant Professor, Allegheny College; 1996-1997: Post-doctoral Scholar, University of Montana;

1994-1996, Post-doctoral Scholar, Parc Naturel Régional du Haut-Jura, France

SICB Activities: Division of Vertebrate Morphology Program Officer (2002-2004); member since 1991; primary affiliations are Division of Comparative Biomechanics and Division of Vertebrate Morphology

Other Memberships: American Ornithologist's Union; Cooper Ornithological Society; Groupe Ornithologique du Jura; Oregon Academy of Science; Sigma Xi; Society for Experimental Biology

Research Interests: Biomechanics and Physiology of Bird Flight. I use a variety of techniques in the laboratory and in the field to measure wing motion, muscle contractile behavior, and aerodynamics with an overall goal of improving understanding of how flight shapes the ecology and evolution of birds and other flying animals.

Statement of Goals: The program is excellent in its present form, so rather than changing anything fundamental, I am seeking to maintain this strength by encouraging cooperation among divisional program officers and motivating opportunities for student and post-doctoral involvement. I feel that the worthwhile symposia are generally those that bring new people to SICB who would otherwise not attend the yearly meeting. I would seek to enhance the international flavor of SICB; one potential mechanism for this would to develop a one-time joint meeting with the Society for Experimental Biology.

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Brian Tsukimura

Current Position: Professor of Biology, Department of Biology, California State University, Fresno

Education: University of California, Berkeley, A.B. Zoology, 1981; University of Hawaii at Manoa, M.S. Zoology, 1985; Ph.D. Zoology, 1988

Professional Experience: Professor of Biology, California State University, Fresno 2005- present; Interagency Ecology Project - Mitten Crab Workteam, 1999 - present; Associate Professor of Physiology, 2000 - 2005, California State University, Fresno; Assistant Professor of Physiology, 1994 - 2000, California State University, Fresno; Acting Assistant Professor, Illinois State University, 1992 - 1994; Lecturer in Biology, Illinois State University, 1990; Postdoctoral Fellow, Endocrinology, Illinois State University, 1988 - 1992

SICB Activities: My first annual meeting was 1986 ASZ, Nashville, and I have attended every meeting to date except 1987 (New Orleans). Chair, Student/Post-Doctoral Affairs Committee, 1995-1999; Chair,

Student Support Committee, 2002-2006 (implemented and increased number of FGST awards); Member SICB Program Committee as The Crustacean Society Liaison to SICB, 2004 to present. Participation in the Midwestern Regional Conference on Comparative Endocrinology (co-organizer, 1990), and Western Regional Conference on Comparative Endocrinology.

Other Memberships: The Crustacean Society; American Microscopical Society; Western Society of Naturalists; American Association of the Advancement of Science; Sigma Xi; Sierra Foothill Conservancy

Research Interests: Comparative endocrinology of the regulation of development, growth, and reproduction using crustaceans (Branchiopoda, Brachyura, Astacidae and Penaeoidea). Current studies focus on the influence of environmental factors on reproduction and development, and the regulatory hormones integrating these influences, particularly on vitellogenin synthesis and larval growth. Recent studies on the invasive Chinese mitten crab have diversified my research to include invasive species ecology, particularly with respect to larval population dynamics on adult year class strength, and taxonomy, where we are developing larval keys for local decapod crustaceans. In addition, we have started examining selenium toxicity as a stressor on tadpole metamorphosis.

Statement of Goals: Since my first meeting in 1986, I have found that the SICB annual meetings serve as a forum for our Society members to share data and exchange ideas. If elected, I will make my primary objective to collaborate with SICB divisional program officers to encourage our membership to develop proposals for integrated and high profile symposia and workshops, and provide guidance to SICB divisional program officers and symposia organizers in their fund raising efforts (i.e., travel funds) to bring together integrative biologists to continue developing "big picture questions," as well as on the latest techniques, paradigms and theories. My second objective is to continue to organize the key words lists and options during abstract submission, as well as continue to simplify the process. I will continue to strengthen ties and increase the collaborative and integrative efforts between SICB divisional program officers and their divisions.

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Candidates for Treasurer-Elect

Charles E. Booth

Current Position: Professor of Biology, Eastern Connecticut State University

Education: B.A., College of Wooster (1974); M.A., College of William and Mary (1977); Ph.D., University of Calgary (1983); Postdoctoral Fellow: 1982-4, McMaster University

Professional Experience: Assistant through Full Professor, Eastern Connecticut State University, 1984-present; Biology Dept. Chair, ECSU,1992-95; Visiting Assistant Professor, University of Miami, 1987

SICB Activities: Member since 1975; DCPB representative to Integrative and Comparative Biology Editorial Board (2006-2010); Judge and Committee Chair for DCBP and DIZ Best Student Paper Award competitions; DCPB Nominating Committee

Other Memberships: American Association for the Advancement of Science; Beta Beta Beta Biology Honors Society

Research Interests: Exercise physiology of crustaceans; mechanisms of pH regulation in marine crabs; effects of environmental stresses on regulation of pH and ion balance and respiratory gas exchange in aquatic animals

Statement of Goals: As SICB Treasurer, I would work with the other members of the Executive Committee and Burk and Associates to assure prudent monitoring of the financial affairs of the Society in accordance with the SICB Constitution and By-Laws.

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Robert Roer

Current Position: Professor of Biology & Marine Biology, Dean of the Graduate School & Research, University of North Carolina Wilmington

Education: Sc.B., Aquatic Biology, Brown University (1974), Ph.D., Zoology, Duke University (1979)

Professional Experience: Visiting Scientist, Zoology Department, University of Reading, England, 1975; Assistant Professor, 1979-1985, Department of Biological Sciences (now Biology & Marine Biology), University of North Carolina Wilmington, Associate Professor, 1985-1990, and Assistant Director of the Institute for Marine Biomedical Research, 1981-1986; Professor, 1990-present, and Assistant Chair for

Graduate Studies, 1994-2002; Dean of the Graduate School and Research, University of North Carolina Wilmington, 2002-present

SICB Activities: I presented my first paper as a graduate student at the ASZ meeting in Toronto in 1977, and I have been an active participant in the annual ASZ/SICB meetings ever since. Over the years, I have chaired numerous sessions, participated in symposia, and judged student poster and paper awards. From 1994-98, I served on the DCPB Bartholomew Award selection committee, and was chair of the committee from 1997-98.

Other Memberships: Sigma Xi, American Physiological Society; The Crustacean Society (Charter Member); American Association of University Professors; Phi Kappa Phi; American Association for the Advancement of Science

Research Interests: Mechanisms of membrane transport in osmoregulation and in biomineralization, crustacean molting physiology and biomineralization, crustacean osmoregulation, control of mineral nucleation in crustacean cuticle

Statement of Goals: SICB has served as my principal society, scientific home, and most significant means of interacting with my colleagues for over 30 years. My experiences as a graduate student and new faculty member at the ASZ/SICB meetings helped shape my career and established life-long friendships and collaborations. The SICB, more than any other society, has served to promote and showcase comparative biology, and provide both undergraduate and graduate students a welcome introduction to the discipline. It is vital to these functions that the fiscal health that has been restored to SICB be maintained and safeguarded. I will work closely with the Executive Committee and with Burk and Associates to ensure that this is the case.

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Candidates for Chair of the Educational Council

Robert D. Podolsky

Current Position: Assistant Professor, Biology Department and Grice Marine Laboratory, College of Charleston, Charleston SC.

Education: A.B. Biology, Princeton University, 1985; M. S. University of Florida, 1989; Ph.D. University of Washington, 1995

Professional Experience: Assistant Professor, Biology, College of Charleston, 2005-present; Assistant Professor, Biology Department, UNC-Chapel Hill, 1999-2005

SICB Activities: Member and regular meeting contributor since 1992; DIZ student paper award (1992) and Adrian M. Wenner award (1995); regular student paper and poster judge for DIZ & DEE; symposium participant 2003 ("Selection and Performance in Nature"); symposium organizer and participant 2006 ("Marine Life Cycles"); Membership Diversity committee 2004-2005; Educational Council 2008

Other Memberships: Society for the Study of Evolution, American Society of Naturalists, Sigma Xi

Research Interests: Evolutionary and physiological ecology; life-history evolution and larval ecology; fertilization ecology; phenotypic plasticity; marine invertebrate form and function.

Statement of Goals: As a professional organization and annual meeting, ASZ/SICB has been my highest priority since early graduate school. I have benefited often from its focus on student development and its unique role in the conceptual integration of a broad range of disciplines. In both regards the society has significant opportunities to contribute to biology education, and I see important goals in at least three areas. 1) To play a more active role in developing the SICB Digital Library (DL), for example by working with division chairs to establish new disciplinary sections and editors and by coordinating with symposium organizers to encourage submissions. I would like to consider turning the DL into a more interactive "wiki" that preserves the original content and credit but allows users to enhance exercises from their experience. 2) To create other means for sharing teaching expertise, for example by creating a page of links to members' course websites organized by discipline. I also want to explore developing a workshop series, "Teaching and Learning X," with the discipline X rotating from year to year. As a fixture of the annual meeting, these workshops would allow faculty to exchange their most innovative and effective teaching methods, hopefully with regular contributions to the SICB-DL. 3) To explore ways to contribute to current national discussions about the effectiveness of the general biology curriculum in training future scientists and non-scientists, particularly regarding the unifying role of integrative biology. I am currently a member of the Council and would welcome the opportunity as Chair to move forward these and other members' ideas.

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Andrew M. Smith

Current Position: Associate Professor of Biology, Ithaca College

Education: AB, Dartmouth College (1987); PhD, The University of North Carolina at Chapel Hill (1992)

Professional Experience: Assistant through Associate Professor of Biology, Ithaca College (2000-present); Assistant through Associate Professor of Biological Sciences, Butler University (1994-2000); Visiting Assistant Professor of Biology, Davidson College (1994); NATO-NSF Postdoctoral Fellow, Laboratoire Arago, Université Pierre et Marie Curie (Paris VI) Banyuls-sur-Mer, France (1992-1993); NSF-Predoctoral fellow, University of North Carolina at Chapel Hill

SICB Activities: My first annual meeting was in my second year of graduate school, and I have gone on to present at fourteen meetings. In recent years I have served as a session chair and as a judge for the best student paper competition.

Other Memberships: Sigma Xi.

Research Interests: I study biological glues, in particular those that are visco-elastic gels. Many mollusks secrete dilute gels that are powerful adhesives. I am interested in the biochemistry and mechanics of these gels, and am currently trying to determine the mechanism by which they form strong attachments.

Statement of Goals: I have always been a strong proponent of teaching excellence, and feel I have a well-developed understanding of the skills involved in great teaching. My experience includes receiving grants to implement teaching innovations, publication in an educational journal, and winning a university-wide teaching award. I have supervised thirty-nine undergraduate researchers, more than a quarter of whom are co-authors of peer-reviewed papers. My goal for the Education Council of SICB is to build on and expand the education-related activities at the annual meeting. The fact that we often have dedicated sessions for education topics is important -- we should expand the profile of these sessions. I feel that we can do this by adding focused workshops on educational topics of specific interest, with associated paper sessions, highlighted by an invited speaker. In addition, the new SICB digital library is an excellent resource that we should continue to develop. A particular interest of mine is integrating research into teaching. SICB has always played an essential role in the development of young scientists. Thus, we are in excellent position to serve as a forum for the advancement of education.

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Candidates for Member-At-Large Elect

Raymond Henry

Current Position: Professor and Associate Chair, Department of Biological Sciences, Auburn University, Auburn, AL

Education: B.S. (1973), M.S. (1978) College of William and Mary; PhD (1981) University of Texas at Austin; Postdoctoral Fellow (1981-1983) University of Pennsylvania

Professional Experience: Assistant through Full Professor, Auburn University (1983-present); Associate Chair, Department of Biological Sciences (2002-present); visiting scientist, Mt. Desert Island Biological Lab (1998-present).

SICB Activities: Member since 1977 (DCPB, DIZ, DCE); Symposium speaker (1982, 1990); Symposium organizer and speaker (bimodal breathing symposium, 1991); Judge for student paper/poster awards (multiple years).

Other Memberships: American Physiological Society; Society for Experimental Biology; Crustacean Society; AAAS.

Research Interests: Comparative physiology and biochemistry of carbonic anhydrase; salt and water balance; cell volume regulation; nitrogen metabolism; bimodal breathing and the transition from aquatic to aerial respiration; neuroendocrine regulation of carbonic anhydrase gene expression in response to environmental salinity in euryhaline crustaceans.

Statement of Goals: SICB is the major comparative and evolutionary biological society in the country, and as such I believe we should play a more active role in public outreach and education, especially in the area of K-12 science education. Our society is well positioned to help improve science literacy in the next generation of students and to contribute to the national dialog on critical issues such as biodiversity, habitat preservation, sustainability, and climate change. Within the society itself, I would advocate for more interdisciplinary efforts (e.g., integrative symposia sponsored by multiple divisions) that not only review the current state of knowledge but also highlight major new avenues of research, so that the society can have more of an active role in defining the future of our field.

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Adam P. Summers

Current Position: Associate Professor, UC Irvine

Education: Swarthmore College 1986 - BA Math, BS Engineering; New York University 1991 - MS Biology; University of Massachusetts, Amherst 1999 - PhD Organismic and Evolutionary Biology

Professional Experience: Miller Fellow UC Berkeley 1999-2001; Asst. Prof. UC Irvine 2001-2007; Associate Prof. UC Irvine 2007 - present

SICB Activities: Membership Committee (2004-2007); Student Support Committee (2004-2005), Chair (2006-2007); D. Dwight Davis best student paper judge - DVM (2001, 2005, 2006); Best paper judge DCB (2008); Chair of the best poster prize naming committee (2000); Post-doctoral representative for the Division of Vertebrate Morphology (2000-01); Graduate student representative for the Division of Vertebrate Morphology (1995-98)

Other Memberships: American Society of Ichthyologists and Herpetologists; Society for the Study of Amphibians and Reptiles; American Physiological Society; Society of Experimental Biology; American Elasmobranch Society; Society of Vertebrate Paleontology

Research Interests: Form, function and comparative biomechanics of skeletal biomaterials

Statement of Goals: As the member-at-large I will endeavor to bring the perspective I have gained as a member of three divisions - DVM, DCPB and DCB to the leadership of the society. SICB is my intellectual home, my first publication was an abstract in American Zoologist and the support and guidance I have received from the SICB community has been instrumental in making me into a broad minded biologist. I hope, as a member-at-large, to repay some of the attention and care that has been given to me by the generous people who have given their time and energy to the society. I strongly believe that the backbone of our society is the students and that the very interdisciplinary nature of our organization is its greatest strength. We were integrative biologists before it was fashionable and this inclusive agenda is what ensures that the society remains relevant going forward.

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Committee Reports

- Educational Council
- Public Affairs Committee
- Student/Postdoctoral Affairs Committee
- Student Support Committee

Educational Council

Robin Cooper, Chair

The Educational Council is happy to report that we again had a good turnout of recruiting local high school students, that conducted biological research towards their INTEL affiliated Science fair, to attend the annual meeting. A few of their high school teachers also attended. One student even commented "Oh this meeting is so exciting. Now I know that I will have a place to present my research as an undergraduate." Comments like this make the outreaching effort worthwhile.

This council is also planning a workshop and a series of education talks for the Boston meeting. We hope members will attend to learn up-to-date approaches in teaching. We continue to solicit submissions to the digital library within SICB. Please see the SICB web page for more information.

The Council encourages new ideas in which we can better serve the SICB and the general public. So please send us your ideas and comments.

Public Affairs Committee

Peter deFur, Chair

The Committee met at the annual meeting in San Antonio with President John Pearse and Secretary Lou Burnett to discuss the upcoming work of the Public Affairs Committee (PAC). The PAC will seek to establish ongoing relationships with science reporters in the national media (*Science, Nature, Post, Times*, etc.). We discussed our work in the coming year and how to maximize news coverage of SICB and promotion of SICB issues, such as the resolution to promote the teaching of evolution in public schools. Following the annual meeting, we worked with President John Pearse to draft and submit an Op-Ed on teaching evolution and the SICB resolution. Despite our best efforts, we were not able to get the Op-Ed placed in national papers, but were pleased that several members modified the piece to submit to their local papers. The PAC members will be contacting symposium organizers and Division Chairs to prepare advance media material for the 2009 annual meeting in Boston. We will also modify the web site to be more "media friendly" and provide the information and contacts that reporters need to better cover SICB and our issues.

Student/Postdoctoral Affairs Committee

Larry Riley, Chair

I would like to thank the students and post-docs on this committee for their help during the meeting in San Antonio. We had a very successful SPDAC workshop at this past meeting in San Antonio. The workshop "I Have a Great Idea, But Who Will Fund Me: How to Write a Grant" consisted of a panel of past/present granting agency Program Directors and faculty review panelists: Dr. Goggy Davidowitz (the NSF), Dr. Ken Halanych (Auburn University), and Dr. Stacia Sower (University of New Hampshire). They provided valuable information on 1) how to write a strong and convincing proposal; 2) key ingredients to be included in a grant proposal; 3) the importance of the broader impacts and intellectual merit statements; 4) the importance of the project summary. For additional information please follow the link on the For Students page and click on the Student Postdoctoral Affairs Committee link.

I encourage all the students to become familiar with who is your division SPDAC representative. They are your channel to express your concerns about or appreciation of the Society. You will find their name on the Student Postdoctoral Affairs Committee link and on each Division's page. We are currently deciding on a topic for the SPDAC workshop during the next meeting held in Boston. If you have a suggestion please contact your SPDAC representative. See you all in Boston.

Student Support Committee

Sherry Tamone, Chair

This was my first year as the chair of the Student Support Committee and I have to thank the entire committee for making this responsibility go so smoothly. We had twelve SICB members representing all divisions participating in the process this year. Our charge is to distribute SICB funds to successful graduate students through the Grants In Aid of Research (GIAR) awards and the Fellowship for Graduate Student Travel (FGST) awards. There is a substantial amount of SICB money, approximately $30,000.00 available to graduate students through these grants. This year prior to the Annual SICB meeting in San Antonio, TX, the Student Support Committee received 14 FGST proposals and 79 GIAR proposals to review. We were able to meet in person to discuss each proposal and funded 4 FGST and 24 GIAR proposals. The successful applicants and the titles of their proposals are listed on the SICB webpage (http://www.sicb.org/grants/giarawards2008.php3). The committee was impressed with the quality of the proposals that we received and we are planning on restructuring the guidelines for the application process coming up this fall.

The new deadline for 2008 applications will be October 1, 2008. Final decisions will be made at the Boston 2009 meeting. Graduate students who will be applying for FGST and GIAR awards this fall should please keep an eye on the SICB webpage for any announcements concerning Student Support.

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Division of Animal Behavior (DAB): 2007 Spring Newsletter

- Message from the Officers
- Election Candidates

Message from the Officers

Tom Hahn (Chair), Sarah Humfeld (Program Officer), and Scott MacDougall-Shackleton (Secretary)

Greetings from your DAB executives!

We hope everyone had a great time in San Antonio. The weather and food were great, and there was a terrific collection of animal behavior talks and posters. Behavior is a popular topic at SICB in many divisions, not just DAB. The business meeting/social was well attended and we plan to continue that format at future meetings.

Best Student Presentations

We again had a number of excellent presentations to evaluate in San Antonio. We extend many thanks to all of the judges who assessed the talks and posters. Among the many excellent presentations the following two students are recipients of this year's prizes:

Best Student Oral Presentation

Maren Vitousek, Princeton University, *"Heterospecific alarm-call recognition in a non-vocal reptile"*

Best Student Poster

Jennifer Curtis, University of Central Oklahoma, *"Collared Lizards Decrease Testosterone Levels in Response to Staged Territorial Intrusions: A Test of the Challenge Hypothesis"*

Congratulations Maren and Jennifer!

Student/ Postdoc Rep

Zach Stahlschmidt (zstahlsc@asu.edu), a PhD student in Life Sciences at Arizona State University, has been appointed as the new DAB representative on SICB's Student/Postdoctoral Affairs Committee for a term of 2008-2011. Thank you Zach!

Our Journal

Diana Hews, of Indiana State University, has been appointed the new DAB representative on the Integrative and Comparative Biology editorial board for 2008-2013. Thank you, Diana, for your service to the journal on our behalf.

Upcoming Meeting

We have a number of excellent symposia we will be supporting at the 2009 annual meeting in Boston. We hope that you will be able to participate in the Society-wide symposium entitled "Hormonal Regulation of Whole-Animal Performance: Implications for Selection." We would also like to encourage you to attend two regular symposia, entitled "Genomics and Vertebrate Adaptive Radiation: A Celebration of the First Cichlid Genome" and "Evolution of Mechanisms Controlling Timing of Breeding in Animals."

If you believe that there is an important and quickly-emerging topic in your particular area of expertise, we would encourage you to consider organizing a late-breaking symposium proposal. These are due on or before the abstract submission deadline. Currently, these symposia are treated the same as normal symposia, with the exception that decisions for approval and financial support will be contingent on the program committee's assessment of the impact and urgency of the proposed symposium topic. As with regular symposia, SICB financial support for late-breaking symposia WILL BE available if the organizer solicits outside support.

If you are considering submitting a proposal for a regular or Society-wide symposium in 2010, please remember that the deadline is in August 2008. Please contact Sarah Humfeld, the DAB Program Officer with any questions of if you would like assistance in developing the proposal.

Web site

Want to promote your research? Send divisional Secretary Scott MacDougal-Shackleton (smacdou2@uwo.ca) a jpeg of something cool from your research and a short paragraph describing it and we will add this to the SICB website database. These are the photos you see on the main SICB web page in the upper left-hand panel.

As well, please double check your membership information on the SICB web site. As people move some of the information may become outdated. It is very easy to change. Just click on your name in the divisional membership list and follow the instructions.

Election-fever!

Channel some of your election fever from the U.S. Presidential election to SICB! DAB needs to elect a new secretary this year. Jordanna Sprayberry, a long-time active participant in the DAB, has expressed a strong interest in contributing to the division as secretary. Please show her your support by voting -and while you're at it, don't forget to vote in the Society-wide elections as well.

Have a great Spring and Summer!

DAB Election Candidates

Candidates for Secretary

Jordanna D. H. Sprayberry

Current Position*: Postdoctoral Research Associate, ARL Division of Neurobiology, University of Arizona

** as of 08/2008, Assistant Professor of Biology, Muhlenberg University*

Education: B.S. Zoology at University of Rhode Island (1998), Ph. D. Biology at University of Washington (2005)

Professional Experience: Postdoctoral Research Fellow at U Arizonaís ARL Division of Neurobiology (2006-present), Instructor at Pima Community College (Spring 2008), Postdoctoral Research Associate at U Washingtonís Biology Department (2005-2006), Graduate Researcher at U Washingtonís Biology Department (1996-2005)

SICB Activities: Member since 2000, winner of DAB and DNB best student presentation awards in 2004 and 2005 respectively, DAB Student Presentation Judge for the 2006-2008 meetings

Research Interests: An animal's behavior can both define its role in an ecosystem and affect its fitness. There is an intrinsic link between the neural substrates of behavior and how relationships between organisms evolve. A universal principle regarding control of behavior is that sensory information is processed into some form of motor output and this output in turn produces the actual behavior. This is true for such simple behaviors as phototaxis by a bacterium, where transduction of photons triggers motor protein activity, and such complex behaviors as prey capture by bats where echolocation signals are processed to reveal prey location and an intercept course is executed. Much of my research has been devoted to trying to understand neural control of behavior, and how pollinator behavior might affect evolutionary relationships between pollinators and plants.

Goals Statement: SICB offers unparalleled opportunities for students to gain experience presenting information, both in the form of oral presentations and posters. The student competitions create an atmosphere that fosters a high quality of presentation work. I would look forward to continuing the current student poster and presentation competitions. In addition, if student members of DAB showed interest, I would like to organize an informal session on "What makes a good talk." The ability to communicate your research clearly is vital, and I would like to continue SICB's history of fostering these skills in students.

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Division of Comparative Biomechanics (DCB): 2008 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary
- Minutes of the January 2008 Business Meeting

Message from the Chair

Robert Full
Just over a year ago we created a new division for the study of comparative biomechanics. We adopted a set of bylaws. We held our first elections in 2007. All the interim officers we elected to assume office at the January meeting. These include: me, Robert Full as chair, Frank Fish as program officer and Miriam Ashley-Ross as secretary. We thank the nominees and the membership for your participation in the elections. Nearly 75% of the members voted. Gabriel Rivera is our new divisional representative to the Student/Postdoctoral Affairs Committee.

We had 198 join the Division last year. This year we have a total of 349 members!

The San Antonio Meeting was remarkably successful. DCB sponsored three symposia. There were 19 sessions related to biomechanics with 99 contributed papers and 53 posters. We look forward to Boston next year.

I attended the Biological Approaches for Engineering meeting at the University of Southampton on 17th to 19th of March. The meeting was small and of very high quality. Many of our European colleagues gave plenary talks - J. Rayner, C. Ellington, R. Blake, J. Vincent along with our own Steve Vogel. The meeting was supported by the new journal Bioinspiration & Biomimetics (http://www.iop.org/EJ/journal/bioinsp). The editor-in-chief Robert Allen is interested in being associated with our new division. I would appreciate your thoughts.

The North American Congress on Biomechanics (NACOB). NACOB 2008 will be held from Tuesday, August 5 to Saturday, August 9, 2008 on the Central Campus of the University of Michigan in Ann Arbor,

Michigan, U.S.A. NACOB 2008 is the combined Annual Meetings of the American Society of Biomechanics and the Canadian Society for Biomechanics. This combined meeting is held once every six years to promote scientific exchange and to foster collaboration among those interested in all aspects of biomechanics. The new president of the American Society of Biomechanics is Rodger Kram. He made a specific appeal to us concerning a closer relationship in their recent newsletter. "First off, I am determined to grow the participation of biologists in the society. One way is to reach out to the Society of Integrative and Comparative Biology (SICB). Research interests at SICB span the range of organisms on the planet from ants to zebras and from amoebas to xylem. I encourage you to google "SICB biomechanics" and check it out. They provide a list of their members and institutional affiliation. You probably have a local biomechanics colleague and don't even know it. Drop them an email, invite them to your lab, have a cup of coffee, exchange ideas and encourage them to join ASB or attend our meeting. Or maybe put together a proposal for a regional joint ASB-SICB conference. Bob Full of UC Berkeley is the chair of biomechanics for SICB and we are working on a plan to encourage ASB and SICB members to attend each other's meetings." Send me your thoughts. If you would like to volunteer to lead these efforts please contact me.

The Annual Scientific Meeting of SEB is July 6th - 10th in Marseille, France, 2008 at the Parc Chanot Conference Centre. There is a wonderful symposium on Integrating the Mechanics and Energetics of Locomotion organized by Richard L. Marsh. There have also been requests to have a joint meeting with SEB. Again, send me your thoughts. If you would like to volunteer to lead these efforts please contact me.

IUPS is in Kyoto, Japan on July 27 - August 1, 2009. As suggested last year, DCB could come up with a satellite symposium to coincide with the meeting. If you would like to volunteer to lead these efforts please contact me.

The 16th Congress of the European Society of Biomechanics is to be held July 6th - 9th, 2008 in Lucerne, Switzerland. I will be presenting and will report on possible links to this society.

Message from the Program Officer

Frank Fish

The program associated with the Division of Comparative Biomechanics (DCB) at the 2008 SICB was extremely successful and displayed the strength of the new division. Indeed, there were problems in just being able to choose for all the concurrent papers that were delivered by members of the DCB. There were contributed papers on running, swimming, flying, clinging, jumping, feeding, growth, mechanics, biomaterials, and adhesives. The crown achievement was the DCB-sponsored symposium "Going with the Flow: Ecomorphological Variation Across Aquatic Flow," which was organized by Grabriel Rivera and Richard Blob. Steve Vogel started it off and Mimi Koehl concluded. DCB also helped to sponsor the symposia "Electromyography Interpretation and Limitations in Functional Analyses of Musculoskeletal Systems" and "Aeroecology: Probing and Modeling the Atmosphere-The Next Frontier." DCB pooled its collective resources with the Division of Vertebrate Morphology to have a "kegger" for a social, which went extremely well.

I would like you to think about possible symposia to have at future meetings. The strength of this new division rests on the participation of the members of DCB and the symposia that are sponsored. If you have an idea for a symposium, please contact me and we can work out the specifics. There is also opportunity to have symposia presented at the next meeting as a Late-Breaking Symposium. Although these symposia will be

limited in number, it is a mechanism to have a forum for fast developing and important ideas.

Message from the Secretary

Miriam Ashley-Ross
What a great meeting in San Antonio! Not only did our Division sponsor three excellent symposia, but we also inaugurated the Best Student Paper competitions quite successfully - we had 23 entries, spanning the spectrum from the microscopic to fully organismal. Here are the winners:

Best Student Oral Presentation

Anne Peattie, University of California Berkeley, *Effect of Variation in Length and Width on Single Seta Force in Geckos*

Best Student Poster

Kevin Miklasz, Hopkins Marine Station of Stanford University, Pacific Grove, *A Low-Reynolds number conundrum: How fast should diatoms sink?*

Congratulations to Anne and Kevin! They have set the bar high for future years!

Further congratulations go to Sheila Patek, DCB member and this year's recipient of the Bartholomew Award!

It's also not too soon to start making plans for the Boston meeting in 2009 and beyond. DCB is sponsoring one symposium for Boston, *Sensory Biomechanics*, organized by Matt McHenry and Sanjay Sane. We want to continue making a strong showing as a Division, so please consider organizing a symposium for a future meeting. There are some specific tips on obtaining NSF funding for symposia in the Minutes of the Business Meeting.

We are establishing a Researchers Database for the Division. Please e-mail me a short description of your research, along with a nifty picture related to it, for inclusion in the online database. It's a great tool for attracting potential students, and only takes a couple of minutes - most of us already have websites, and it's simple to copy the most salient points from that, and send them along.

Have a great summer!

Minutes of the January 2008 Business Meeting

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Division of Comparative Endocrinology (DCE): 2007 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary
- Minutes of the January 2008 Business Meeting
- Message from the DCE Representative to the Student/Postdoctoral Affairs Committee
- Candidates for Elections

Message from the Chair

Stacia Sower (sasower@cisunix.unh.edu)

We had another outstanding annual meeting of the SICB in San Antonio in January 2008. The turnout for the DCE was excellent and, as always there were more outstanding presentations than one could possibly attend. The highlight of the meeting was the seventh annual Howard Bern Lecture presented by Professor Peter Thomas. Peter Thomas presented a fascinating lecture on "Nonclassical Steroid Actions Mediated by Novel Membrane Receptors: Lessons from Studies in Fish." The research that was presented on membrane receptors represents very significant contributions to not only the field of comparative endocrinology but also the fields of endocrinology and systems biology. We also again thank Elsevier and the SICB for support of the Howard Bern Lecture series. Our oral and poster presentations covered a broad range of comparative endocrinology and highlighted some of the best work in our field.

There were one DCE-sponsored symposia at the San Antonio meeting entitled "Consequences of maternally-derived yolk hormones for offspring: Current status, challenges and opportunities." ***As in the past, I want to strongly encourage DCE members to propose symposia for our future meetings***. Symposia represent one of the most important activities of our Division and are essential for the continued development and vigor of our field. If you are considering proposing a symposium for the West Coast Meeting in 2010 please contact Stephen Schoech as soon as possible. The deadline for symposium proposal submission will be sometime in August, 2008. We especially like to encourage the Western Regional Division of Comparative Endocrinology to consider hosting their meeting in 2010 at the annual SICB meeting-it will either be held in

Long Beach or Seattle.

Note that the SICB sponsors three kinds of symposia: 1) divisional or co-sponsoring society symposia, 2) society-wide symposia, and 3) mini-symposia. SICB also entertains proposals for 'late breaking', half day symposia. There is still time to propose such a symposium for the Boston Meeting, 2009. Contact Stephen Schoech, DCE Program Officer, or Eduardo Rosa-Molinar, SICB Program Officer, for information.

I want to thank C. Loren Buck for chairing the best student paper award judging committee and each of the 14 judges for their hard work in identifying suitable candidates for the awards. The poster and oral presentations were very competitive and of high quality. Congratulations to all of the participants, and especially to the following award winners:

The **Aubrey Gorbman Award for Best Student Oral Presentation** was **Jamie Cornelius** (University of California, Davis) for the oral presentation entitled "Seasonal variation in the stress physiology of an opportunistic, nomadic songbird, the red crossbill (*Loxia curvirostra*)." The **Award for Best Student Poster Presentation** was given to **Alison Hagemeister** (North Dakota State University) for the poster titled "Somatostatin Isoforms Selectively Activate the MAPK Pathway through Somatostatin Receptor Subtype One."

At the annual DCE business meeting we thanked Bob Denver (Chair) and Michael Romero (Program Officer) for their excellent service for division for the past years. Please note that Bob Denver was willing to serve an extra year as Chair and his effort and time are much appreciated. I also want to thank Cathy Propper as our continuing Secretary who has been doing a wonderful job. On each of the Divisions webpages, is an item called "Researchers Database"--we were encouraging each of our members to add one page with photo (see examples in other divisions).

Regarding support for meetings, requests are made to the chair of DCE and these are placed into the divisional budget to be approved by the SICB Treasurer. The budgets are formulated in the early fall, so if you are planning a meeting for which you intend to request funds from SICB please get those requests in as early as possible. It may not be possible to grant requests made after the budget is submitted.

I want to thank David Borst for serving as our DCE representative on the Board of Integrative & Comparative Biology. Bob Denver has been approved as our new representative and will serve through January 2013.

Message from the Program Officer

Steve Schoech (sschoech@memphis.edu)

First, I'd like to thank our outgoing divisional program officer, Michael Romero for his service the last two years. I hope that I can keep up the high standards Michael and his predecessors have set. With an excellent meeting in San Antonio behind us, let us set our sights on Boston next January where DCE will, either solely or in cooperation with other divisions, support four symposia. For a list of symposia and related details, visit the meeting website - http://www.sicb.org/meetings/2009/index.php3.

I hope that we will have an excellent attendance in Boston, a truly international city with wonderful historic and cultural sites - not to mention fine dining (I had the best lobster bisque and crème brulee of my life in

Boston). Although the abstract deadline is a few months off, it's not too early to start thinking about a presentation, and I encourage senior members to encourage their students and colleagues to attend and present.

Also, a reminder that it's never too early to start thinking about a symposium for the 2010 meeting!

Message from the Secretary

Cathy Propper (Catherine.Propper@nau.edu)

Offer of a library: Dr. Ian Callard would like to see his extensive library distributed to caring individuals and institutions rather than being consigned to the trash. In journals, Dr. Callard has Biology of Reproduction 1990-2005, Endocrinology 1985-2006, Endocrine Reviews 1980-2002, GCE 1987-1993, Steroids, 1986-2001, Amer.Zool/Int.Comp.Zool; 1963-2005; and JEZ 1986-2006. Dr. Callard also has an extensive Comparative Endocrinology reprint collection (over 5000 articles, roughly 1960-1990). If you or your institution has any interest in these volumes or articles, please contact Dr. Callard directly at ipc@bu.edu.

CALL FOR SYMPOSIA for 2010 American Physiological Society Inter-Society Conference on Comparative and Evolutionary Physiology.

This summer a proposal will be submitted requesting that the APS host a fifth version of this premier international congress in comparative and evolutionary physiology, to be tentatively held in late July, 2010. The theme of the meeting will be *Global change and global science: comparative physiology in a changing world.* The SICB will participate in this meeting. The Organizing Committee is requesting proposals for symposia that highlight exciting and important new research in comparative and evolutionary physiology. Symposium organizers will receive approximately $1400 from APS to partially allay costs of invited speakers; we can also facilitate search for additional external financial support for symposia. Symposium proposals must be submitted by **July 1, 2008 to Jon Harrison**, but it is best to submit sooner and to work with a member of the organizing committee to develop the proposal. Please contact any member of the organizing committee if you have questions. Developing information on the meeting will be available at: http://www.public.asu.edu/~icjfh/apsmeeting.

Organizing Committee

Siribhinya Benyajati: siribhinya-benyajati@ouhsc.edu

Andrew Biewener: abiewener@oeb.harvard.edu

David Goldstein: david.goldstein@wright.edu

Jon Harrison (chair): j.harrison@asu.edu

Carlos Martinez del Rio: cmdelrio@uwyo.edu

Hans-Otto Pörtner: hpoertner@awi-bremerhaven.de

Patricia Schulte: pschulte@zoology.ubc.ca

Don Mykles: don@lamar.colostate.edu (Program Officer, Division of Comparative Physiology and Biochemistry, SICB)

Some SICB Constitution and Bylaws revisions are being proposed by the Executive Committee. These proposed changes have been posted on the SICB web site. You can find them from the home page (www.sicb.org) in our new scrolling headline or go to http://sicb.org/about/bb1/. You can also access this through About SICB > Constitution and Bylaws or Resources > Constitution and Bylaws. As you navigate to the details of the proposed changes, you will find explanations for each change. I f you have any questions or comments, please enter them on the Discussion Board available on these links. Members of the Executive Committee will be checking the Discussion Board regularly to answer any questions or address any issues that may come up. Voting on these revisions will begin around May 1 when we send out the ballots for the spring elections.

Receiving a print copy of *ICB*. We have set up a mechanism whereby members can elect to receive only the electronic version of the SICB journal *Integrative and Comparative Biology* and not the print copy. Some members have requested this option as an environmentally sensitive measure to save paper. A reduced number of issues of the journal shipped to members will also result in some savings to SICB. This action will not result in a reduction in dues except for that already in place for Emeritus Members. You can select this option by logging on to your personal member data through the Directory (lower left panel or click on http://www.sicb.org/membership/memberinfo.php3). You will need your member ID number. You can also select this option when you pay your dues.

Digital Library. Please take a few minutes to browse the SICB Digital Library, which can be accessed directly through the SICB home page (www.sicb.org) or under the Publications (tab) > SICB Digital Library, or http://sicb.org/dl/. The Digital Library is a wonderful resource for SICB members to share teaching information. We are looking for resources that will expand the coverage to areas in addition to Biomechanics.

Minutes of the January 2008 Business Meeting

Message from the Graduate Student and Post-doc Representative

Alexandra M. Class (classam@vt.edu)

Hello graduate and post-doc members of DCE. I am pleased to introduce myself as your new representative to the student/post-doctoral affairs committee. My dissertation research focuses on the timing and regulation of behavioral cycles in an equatorial bird species *Zonotrichia capensis*. I am currently investigating a population of *Z. capensis* in the eastern Andes of Ecuador. I am working toward my PhD with Dr. Ignacio T. Moore through Virginia Tech.

We had a productive and informative meeting this January in San Antonio. Several symposia highlighted comparative endocrinology, particularly those centered on consequences of maternally-derived yolk hormones on offspring, stress physiology and neuroendocrinology. The discussion panel for students, "I have a great idea, but who will fund me: How to write a grant," was well-attended and constructive. Many of us left feeling

ambitious. I list some sources for funding and career opportunities below for those of us that are still searching. I also provide some links to career opportunities. If there are any comments you have about specific student-related aims or themes you would like to see at upcoming meetings please send me ideas.

Unquestionable progress was made in the accessibility of information on the SICB webpage this year. I encourage all to discover SICB resources, funding and career opportunities through their webpage.

SICB resources and links: http://www.sicb.org/

- **Jobs and fellowships**: http://www.sicb.org/jobs.php3
- **Career openings:** http://www.sicb.org/careers/resources.php3
- **Student support:** Grants in Aid of Research (GIAR) and Fellowship for Student Travel (FGST) http://www.sicb.org/students/

- *Congratulations to the 2008 awardees of (GIAR) and (FGST)*!! Awardees are now listed: http://www.sicb.org/grants/giarawards2008.php3.

Sigma *Xi* resources and links: http://www.sigmaxi.org/about/overview/index.shtml

- **Student support:** GIAR (Deadline biannually **15 March**/ 15 October)

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

- **Minorities/ women in science:** http://www.sigmaxi.org/resources/links/diversity.

Foundations: often overlooked, yet can provide substantial support without tedious application processes or progress reports. For diverse funding opportunities try: http://foundationcenter.org/.

Post-doctoral opportunities: through national and international organizations, foundations, grants, and non-profits http://www.phds.org/postdoc/postdoctoral-fellowships/.

DCE Elections

Candidates for Program Officer, in alphabetical order

Rosemary Knapp

Current Position: Associate Professor and Director of Graduate Studies, Department of Zoology, University of Oklahoma (OU)

Education: 1984, B.S. with honors, Biology, Cook College, Rutgers University; 1987, M.S. Zoology, University of Wisconsin-Madison; 1996, Ph.D. Zoology. Arizona State University

Professional Experience: 1987-1990, Assistant Director of General Biology Laboratories, Dept. Biological Sciences, Barnard College, New York; 1989-1990, Research Assistant, Dept. Psychology, Barnard College; 1990-1996, Graduate Teaching and Research Associate (NIMH Individual Predoctoral Fellow, 1993-96),

Dept. Zoology, Arizona State University; 1996-1998, NIMH Individual Postdoctoral Fellow, Section of Neurobiology and Behavior, Cornell University; 1998-2006, Assistant Professor, Dept. Zoology, OU; 2006-present, Associate Professor and Director of Graduate Studies, Dept. Zoology, OU; 2008-2010 Editorial Board, *Hormones and Behavior*; 2002, 2004, 2007, 2008 NSF Panelist.

SICB Activities: I attended my first meeting in 1983 to present my undergraduate honors research. I have subsequently attended most meetings since 1990, as well as the Western Regional conferences while a PhD student (1990-96). In 1999, I was a member of the SICB Task Force on Education. I was a speaker in the 2003 DCE-sponsored symposium on "*Physiological Mechanisms underlying Phenotypic Plasticity and Polyphenisms*." I have served DCE as judge for the best student presentation competitions (1999, 2003 (chair), 2007, 2008), as session co-chair (1998, 1999, 2000, 2005, 2007) and as a member of the Nominating Committee (2007).

Other Memberships: AAAS, American Physiological Society, American Society of Ichthyologists and Herpetologists, American Society of Naturalists, Animal Behavior Society, International Society for Behavioral Ecology, Sigma Xi, Society for Behavioral Neuroendocrinology, Society for Neuroscience, Society for the Study of Evolution, Society for the Study of Reproduction

Research Interests: Behavioral neuroendocrinology, especially the role of sex steroids and glucocorticoids in male reproductive behavior and morphology. My current focus is on alternative male reproductive tactics and male parental behavior in sunfish.

Goals Statement: The 1983 ASZ meeting was the first scientific meeting I attended. It was a milestone in several ways, but perhaps most of all by exposing me to a wide range of exciting biological research under one roof. ASZ/SICB meetings were a critical contributor to my development as a scientist because of their student-friendly and integrative nature. They continue to be the meetings that I try to attend every year because their value to me has remained high. As Program Officer for DCE, I would do my best to help ensure that future generations of students and established researchers alike also consider SICB critical for their professional development. I would work to continue the tradition of excellent, broad symposia for which I believe DCE is currently recognized within the society. I would also try to increase the number of mini-symposia and workshops on developments in methodologies. I would also explore the possibility of having "Meet the Professor" lunches modeled after those at the meetings of Society for Behavioral Neuroendocrinology, which I believe have been very successful and enjoyable for all involved.

Duncan McKenzie

Current Position: Associate Professor, Department of Biology, Texas A&M University

Education: B.S., Zoology, University of California, Davis, 1975; Ph.D., Zoology, University of California, Berkeley, 1980

Professional Experience: 1980-1981, Visiting Scientist and 1981-1983 Alberta Heritage Foundation for Medical Research Postdoctoral Fellow, Department of Zoology, University of Alberta; 1983-1989, Assistant Professor Department of Biology, Texas A&M University; 1984, Visiting Scientist, Laboratoire de Physiologie des Poissons. INRA. Rennes, France; 1989-present, Associate Professor, Dept. of Biology, Texas A&M University; 1993-1998, Graduate Advisor, Dept. of Biology, Texas A&M University; 1998-2002, Chair, University Laboratory Animal Care Committee, Texas A&M University; Member, Local Organizing Committee, 5th International Symposium on Reproductive Physiology of Fish, Austin, Texas, July 1995;

Member, NOAA Sea Grant Aquacultural Endocrinology Review Panels, National Science Foundation Integrative Animal Biology Review Panel.

SICB Activities: Member since 1977; DCE Nominating Committee, 1989, 1997; 1988, Co-organizer, Southwest Regional Conference on Comparative Endocrinology, Port Aransas, Texas; 1990, Organizer, Southwest Regional Conference on Comparative Endocrinology, College Station, Texas; Member, Annual Meeting Best Student Paper Judging Committees

Other Memberships: American Association for the Advancement of Science

Research Interests: Comparative endocrinology of reproduction and thyroid function, including environmental and physiological control of thyroid activity in nonmammalian vertebrates, evolution of pituitary glycoprotein hormones, reproductive cyclicity and control of reproduction in ectothermic vertebrates, interactions between thyroid function and growth, reproduction, nutrition.

Goals Statement: The SICB meeting serves as the premiere annual forum for communication of comparative endocrine research in North America. To continue its success, my first goal as Program Officer will be to work to maintain a diverse array of contributed paper sessions which are appealing in scope and format to both established researchers and trainees. Secondly, I will work to develop and promote symposia that showcase the integrative and comparative nature of endocrine research. Symposium topics should represent rapidly-developing areas of integrative endocrinology which appeal not just to our divisionâβ s members, but also to the broader membership of the SICB. Finally, I would like to explore the possibility of incorporating into the annual meeting regular workshops on technical advances, research approaches, and instructional methodologies in endocrinology.

The Society for Integrative & Comparative Biology

SICB Newsletter

Volume Spring 2008

Division of Comparative Physiology & Biochemistry (DCPB): 2008 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary
- Minutes of the January 2008 Business Meeting
- Message from the Graduate Student/Postdoc Representative
- 2010 APS Inter-Society Conference: Special Call for Symposia
- Candidates for Elections

Message from the Chair

Joseph B. Williams

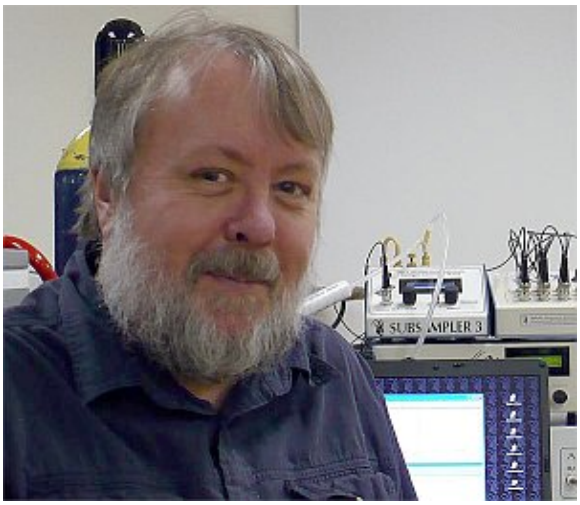
By most standards, the SICB meeting in San Antonio, TX, was a success for those who attended. We had 67 oral presentations and 82 poster presentations. DCPB supported 2 symposia, Crustacean Genomics and Evolution vs. Creationism. At the upcoming 2009 Boston meeting DCPB will sponsor a symposium on Biomaterials and we will co-sponsor one on Insect Evolution.

Sheila Patek and Pat Walsh

2008 Bartholomew Award recipient: Sheila Patek, UC Berkeley

Dr. Sheila Patek was the winner of the 2008 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. An Assistant Professor in Integrative Biology at the University of California Berkeley, Dr. Patek studies the evolution of sensory and mechanical systems in arthropods. We congratulate her on this outstanding achievement at such an early stage in her career. Sheila captivated the audience when she presented her work about the biomechanics and evolution of mantis shrimp raptorial strikes and spiny lobster anti-predator acoustics. Thank you Sheila for a stimulating presentation and for making us aware of the cacophony of sound that occurs in the world below the ocean surface. I heard a student say after your presentation, "it was better than National Geographic."

On behalf of DCPB, I wanted to thank the Bartholomew Award Committee, Drs. Gilmour (Chair), Burnett, Gordon, Riddiford, Wainwright, and Huey (ex officio), for their efforts in selecting Dr. Patek as this years Bart Award winner. Sable Systems generously sponsored the Bartholomew Award, a highlight not only for DCPB but the entire SICB community.



John Lighton

Bartholomew Award - Boston 2009

Over the years Sable Systems has presented the Bartholomew Award winner with a check for $500 as a tribute to George Bartholomew, John Lighton's mentor. For the 2009 Boston meeting, John has indicated to me that he will increase this award to $1000. John, we appreciate what you have contributed in scholarship, time, and financial support to DCPB. For those of you who measure metabolic rate of animals, you might want to see John's forthcoming book, "Measuring metabolic rates: A manual for scientists."

Best Student Papers - Robert C.Terwilliger Awards

DCPB presents awards each year for the best student paper and poster. These awards are titled to honor a deceased distinguished comparative physiologist or biochemist. The awards this year are named in honor of Robert C. Terwilliger.

Bob Terwilliger

Robert C. Terwilliger 1940-1989

"*Who knows more of molecules, tidepools and people? Please tell us again of the bizarre and beautiful things you have seen, read, learned, done, dreamed, imagined. Wonderful, sensitive, questioning, witty, adventurous, zesty, intense man with your awful puns."*

That's how Bernie Hartman, friend and colleague, described Bob Terwilliger at the memorial service in February 1989. These words capture the essence of Bob, a poet-scientist who inspired his friends and students to seize the day and celebrate the biology of life. Bob switched his career trajectory as a pre-med/math major

dramatically after taking a biology course his senior year at Bowdoin College, and his PhD studies in biology with Frank Belamarich at Boston University focused on characterizing cardioactive peptides from the pericardial organs of the crab *Cancer borealis*. Spending a summer in the Physiology course at the Marine Biological Laboratory, Woods Hole, further honed his interests in marine invertebrates and introduced him to oxygen-binding proteins and squid hemocyanins (and to his future wife, Nora). He began extensive investigations of invertebrate myoglobins and hemoglobins with his postdoc collaborator, Ken Read, and ventured west for a postdoctoral fellowship at Friday Harbor Laboratory. The diversity and beauty of Pacific Northwest marine inverts helped convince Bob and Nora in 1970 to move with their two young children from New England to a fishing village on the Oregon coast and a faculty position in the University of Oregon's Institute of Marine Biology and Department of Biology. Bob flourished at OIMB, introducing graduate and undergraduate students to the fascination of Comparative Physiology and Invertebrate Zoology through his inspired teaching, both on the Oregon coast and the Eugene campus, until his untimely death in 1989. He expanded his research on oxygen binding proteins with an emphasis on the structure and function of invertebrate hemoglobins - as well as vertebrate hemoglobins, molluscan and arthropod hemocyanins, and hemerythrins! Bob had an eye for the interesting biological question and the organism with which to pursue it, and he clearly recognized the value of experimental studies on non-model organisms. Some of the discoveries from the Terwilliger team included the multidomain structure of the extracellular hemoglobins of planorbid snails and Carditidae clams, hemoglobins from branchiopod crustaceans living in ephemeral, vernal pools in the Oregon desert, terebellid polychaetes with both extracellular and intracellular hemoglobins plus body-wall myoglobins, tube-dwelling serpulid polychaetes with a mixture of red and green blood due to both hemes and chlorohemes, and the unique properties of hemoglobin from a rhizocephalan barnacle parasitic in the king crab. Bob's academic life was filled with enthusiastic teaching and mentoring students in the lab and in the field. He was particularly keen on using marine organisms to convey his love of the beauty of biological patterns and processes and to illustrate the close link he saw between art and science to students and colleagues. Sabbaticals with the family at Friday Harbor Laboratory, WA, Duke University Marine Laboratory, NC, and The Marine Biological Laboratory, Plymouth, England, enhanced his research opportunities. He regularly attended the national meetings of the American Society of Zoologists (now SICB) as an active participant in the Division of Comparative Physiology and Biochemistry (DCPB) and the international meetings on Invertebrate Oxygen-Binding Proteins, and he strongly encouraged his students to present talks and posters at the meetings. Bob's ideals and goals continue to be expressed through Nora's ongoing tenure at OIMB, his children's lives, and in his legacy of the many students, colleagues and friends he inspired. Congratulations to this year's DCPB winners.

Kristen Hardy

The best oral presentation by a student in our division was awarded to Kristen Hardy of University of North Carolina Wilmington. We congratulate Kristen and thank her for her outstanding presentation on "Intracellular diffusion constraints may influence organelle distribution in skeletal muscle." In addition to a certificate, DCPB also sent a check for $100 to Kristen, and as you can see from her picture, she was happy to receive it.

Kristen Hardy hails from Birmingham, AL and got interested in research as an neuroscience undergraduate at Tulane University. Her goal in pursuing graduate work was to study neurobiology/neurophysiology in marine organisms. She started as a Master's student with Stephen Kinsey, investigating how reaction-diffusion limitations influence aerobic metabolic rates in giant crustacean muscles. Kristen soon switched to the Ph.D. program and expanded the scope of her research. In her spare time, Kristen surfs, SCUBA dives, runs triathlons, and plays the cello.

Because a large number of students were ranked near the top of the judges list, choosing the best oral presentation was difficult this year. Kelly Hyndman of the University of Florida and Jen Olson of Ohio State University received "Honorable Mention" for their talks. Kelly and Jen received certificates of recognition from DCPB.

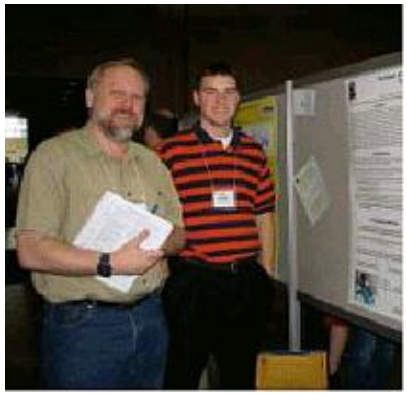
Mike Elnitsky

This year the judges selected Mike Elnitsky, a graduate student at Miami University in Ohio, as the presenter of the best poster. The title of Mike's poster was "Salinity tolerance in the antarctic midge: Seawater acclimation confers cross tolerance to freezing and dehydration." Mike also received a check for $100.00 from DCPB, which made him smile too.

Michael Elnitsky grew up in Pennsylvania and completed a B.S. in biology at Slippery Rock University. It was there that he became interested in insect and lower vertebrate cold hardiness research while working with Jack R. Layne. He then moved on to Miami University in Ohio, completed a M.S. degree in Zoology and is (he hopes) in his final year of Ph.D. work with Richard E. Lee, Jr. His doctoral work has focused on the tolerance and physiological response of Antarctic arthropods to environmental stress. As part of this research he has spent two field seasons at Palmer Station on the Antarctic Peninsula, where much of this research was conducted. When not in the lab he enjoys cycling, hiking, and fly fishing.

For those students interested in what the "best poster" looked like, I have reproduced it **here**.

DCPB also recognized Adam Martin, University of Florida, and Jennifer Ro, Ohio State University, with an "Honorable Mention" for their posters. They received a certificate of recognition from DCPB. Well done Adam and Jenny.



Dave Tapley and Mark Bollinger

Judging posters is a huge task and I wanted to thank David Tapley and members of awards committee for their service in judging oral presentations and posters. Dave's work begins in early September when he begins asking for volunteers to judge posters and talks, a task equivalent to herding cats. Dave, your efforts toward providing critical feedback and rewards for excellence for our young scientists are appreciated. Well done.

Advisory Committee on Fostering Undergraduate Participation in DCBP

Several DCPB members have approached me about fostering more undergraduate participation in SICB meetings. To this end, we have established an advisory committee composed of Bob Mauck, Kenyon College, Itzick Vatnick, Widener University, and Mark Hausman, Bucknell University. Anyone else who is interested in being involved with this committee, or who has ideas that would promote a positive experience for undergraduates at our meetings, please contact Bob Mauck at mauckr@kenyon.edu or Itzick Vatnick at ivatnick@widener.edu. One idea that has surfaced is to present certificate awards to undergraduates for the best presentation by an undergraduate student, oral or poster, apart from general student awards. In addition, we would present certificates of honorable mention to the first and second runner up. Another idea is to hold an undergraduate mixer early in the meeting. At this gathering, we would invite a few graduate students and faculty to serve as mentors to provide advice to undergraduates who might be a bit overwhelmed by their first experience. We anticipate that this might be a coffee break meeting early in the schedule at Boston. Other ideas? Contact Itzick or Bob.

Itzick Vatnik

Bob Mauck with minnow

Message from the Program Officer
Don Mykles

Dorothy M. Skinner Award to Deborah I. Lutterschmidt

Deborah I. Lutterschmidt was selected this year's winner of the Dorothy M. Skinner Award. The award was established to recognize women in the early stages of their careers and have demonstrated outstanding scholarship and show high potential for continued excellence in research. Dorothy Skinner was an exceptional scientist and an advocate for the promotion of women in scientific careers. Dr. Lutterschmidt earned her Ph.D. in 2006 from Oregon State University and is currently a postdoctoral fellow at the Center for Behavioral Neuroscience, Georgia State University. She gave two papers at the San Antonio meeting.

San Antonio 2008

The meeting was one of our largest, with over a thousand papers presented. The division had 149 abstracts, which were distributed between 67 oral and 82 poster presentations. DCPB cosponsored the symposium

"Evolution vs. Creationism in the Classroom: Evolving Student Attitudes," organized by E. Lovely and the late-breaking symposium "Recent Advances in Crustacean Genomics: A Two-Year Progress Report," organized by J. Stillman. Both symposia were well attended.

Boston 2009

The meeting is January 3-7, 2009 at the Westin Waterfront Hotel (**http://www.starwoodhotels.com/westin/property/overview/index.html?propertyID=1528**).

DCPB is sponsoring a society-wide symposium on Insect Evolution, organized by T. Bradley and A. Briscoe, and a regular symposium on Biomaterials: Properties, Variation, and Evolution, organized by B. Swanson and A. Summers. The program committee will consider proposals for late-breaking symposia for the Boston meeting. Information on this and other meeting details will be announced in the summer and fall.

Advanced Call for Symposia for the 2010 meeting

I encourage you to start thinking about proposing a symposium topic for the 2010 SICB meeting. Information on how to prepare a proposal is at: **http://www.sicb.org/meetings/2002/nsfinstructions.pdf**

Please feel free to discuss your ideas with me (e-mail: **don@lamar.colostate.edu**).

Other upcoming meetings (in chronological order):

- Experimental Biology 2008 San Diego, CA, April 5-9, 2008. http://www.eb2008.org
- The Crustacean Society Summer Meeting Galveston, TX, June 9-13, 2008. http://www.vims.edu/tcs/
- 6th International Symposium on Fish Endocrinology University of Calgary, Canada, June 22-26, 2008. http://www.isfe.ucalgary.ca
- Society for Experimental Biology Marseille, France, July 6-10, 2008. http://www.sebiology.org/meetings/Quicklinks/Registration.html
- 11th International Coral Reef Symposium Fort Lauderdale, FL, July 7 - 11, 2008. http://www.nova.edu/ncri/11icrs/index.html
- 4th International Conference in Africa for Comparative Physiology & Biochemistry Maasai Mara National Reserve, Kenya, July 19-25, 2008. http://www.natural-events.com/mara/default-follow.asp
- 5th North American Echinoderm Conference Melbourne, FL, July 20-25, 2008. http://research.fit.edu/naec/
- 36th International Congress of Physiological Sciences Kyoto, Japan, July 27-August 1. http://www.iups2009.com/
- 25th Conference of the European Society for Comparative Physiology & Biochemistry Ravenna, Italy, September 7-11, 2008. http://ESCPBnew.ambra.unibo.it
- APS Intersociety Meeting: The Integrative Biology of Exercise V Hilton Head, SC, September 24-27, 2008. http://www.the-aps.org/meetings/aps/hiltonhead08/index.htm

- Beijing Joint Conference of Physiological Sciences 2008 Beijing, China, October 19-22, 2008. http://www.the-aps.org/eforms/beijing.asp

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

Allen Gibbs

As the new DCPB secretary, my job is to facilitate communication among members of our division and with other divisions of SICB. Please feel free to contact me (**allen.gibbs@unlv.edu**) if you have any suggestions or announcements. I particularly want to encourage you to submit images and short descriptions of your work for our Researchers Database. The DCPB collection (**http://www.sicb.org/divisions/DCPB/researchers.php3**) contains only five of these so far (and I plead guilty to not having submitted anything yet). We are way behind other divisions.

Minutes of the January 2008 Business Meeting

Message from the Graduate Student/Postdoc Representative

Jennifer Ro

Hello to all DCPB graduate students and postdocs! I hope everyone had a great time in the San Antonio meeting. As a new student/postdoc representative, I would like to thank Joanna, our past representative, for all of her hard work and effort that she offered to our division for past four years! Also I would like to say, that I'm honored to serve as a student/postdoc representative of this great division. I will do my best to facilitate all of your needs during annual meetings and to be your voice during executive committee meetings.

I wanted to congratulate winners of the DCPB student oral and poster competitions:

Oral presentation

Kristen Hardy of University of North Carolina Wilmington: *Intracellular diffusion constraints may influence organelle distribution in skeletal muscle*

To see her abstract go to: **http://www.sicb.org/meetings/2008/schedule/abstractdetails.php3?id=832**.

Poster presentation

Mike Elnitsky of Miami University: *Salinity Tolerance in the Antarctic Midge: Seawater Acclimation Confers Cross Tolerance to Freezing and Dehydration*

To see his abstract go to: **http://www.sicb.org/meetings/2008/schedule/abstractdetails.php3?id=38**.

During the 2008 annual meeting Student/ Postdoctoral Affairs Committee (SPDAC) hosted two workshops entitled *"How to get the most our of your SICB meeting"* and "*I Have a Great Idea, But Who Will Fund Me: How to Write a Grant.*" If you have any feedback that you would like you share, please feel free to e-mail me (**ro.25@osu.edu**).

If you are looking for funding opportunities here are some options:

-Sigma Xi Grants-in-Aid

Applications are due March 15 and October 15 annually

This program awards up to $1,000 to students from all areas of the sciences and engineering, and designated funds from the National Academy of Sciences allow for grants of up to $5,000 for astronomy research and $2,500 for vision related research.

Visit: **http://www.sigmaxi.org/programs/giar/index.shtml**

-The Journal of Experimental Biology Traveling Fellowships

The Journal of Experimental Biology offers fellowships of up to US$4000 / £2500 to graduate students and post-docs wishing to make collaborative visits to other laboratories.

Applications are due April 30, August 31, and December 31.

Visit: http://jeb.biologists.org/misc/fellowships.shtml

-National Science Foundation Postdoctoral Research fellowships in Biology

Full proposal is due November 3, 2008

Visit: **http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12720**.

Also NSF has Doctoral Dissertation Improvement Grant. Visit http:// nsf.gov for details.

-I found a website of Community of Science very helpful not only for funding opportunities but also for other helpful research resources. **http://www.cos.com/**

During the DCPB executive meeting, Joanna and I tried to brainstorm about some ideas to improve students/postdocs involvement in annual meetings. Some of those were

1) Develop a mentoring system: Pair up senior student and postdoc members who have been around SICB for number of years with new student and postdoc members to provide guidance during the meeting.

2) Having random introduction minuets during SPDAC workshops to facilitate more interaction among student/postdoc members.

3) Develop a social time to meet other divisional students and postdocs to promote interdivisional interaction.

I would like to develop these ideas into action during the next meeting; if you have any feedback or would like to add-on, please let me know.

SPECIAL CALL FOR SYMPOSIA

2010 American Physiological Society Inter-Society Conference on Comparative and Evolutionary Physiology:

Global change and global science: comparative physiology in a changing world

This summer a proposal will be submitted requesting that the APS host a fifth version of this premier international congress in comparative and evolutionary physiology, to be tentatively held in late July, 2010. The theme of the meeting will be *Global change and global science: comparative physiology in a changing world.* The SICB will participate in this meeting. The Organizing Committee is requesting proposals for symposia that highlight exciting and important new research in comparative and evolutionary physiology. Symposium organizers will receive approximately $1400 from APS to partially allay costs of invited speakers; we can also facilitate search for additional external financial support for symposia. Symposium proposals must be submitted by July 1, 2008 to Jon Harrison, but it is best to submit sooner and to work with a member of the organizing committee to develop the proposal. Please contact any member of the organizing committee if you have questions. Developing information on the meeting will be available at: **http://www.public.asu.edu/~icjfh/apsmeeting**.

Organizing Committee

Siribhinya Benyajati: **siribhinya-benyajati@ouhsc.edu**

Andrew Biewener: **abiewener@oeb.harvard.edu**

David Goldstein: **david.goldstein@wright.edu**

Jon Harrison (chair): **j.harrison@asu.edu**

Carlos Martinez del Rio: **cmdelrio@uwyo.edu**

Hans-Otto Pörtner: **hpoertner@awi-bremerhaven.de**

Patricia Schulte: **pschulte@zoology.ubc.ca**

Don Mykles: **don@lamar.colostate.edu (Program Officer, Division of Comparative Physiology and Biochemistry, SICB)**

2010 APS Conference on Comparative and Evolutionary Physiology Symposium Proposal Form

Symposium Title:

Symposium organizer(s) and contact information:

Scientific justification for symposium:

Describe any Recent Similar Symposia:

Presenters: List up to six (4 + 2 alternates) speakers (each of whom will speak for 30 min), giving institutional affiliation and tentative title.

Symposia will run 2 hrs (based 4 speakers/symposium)

Elections: Candidates for Chair-Elect

Jon Fewell Harrison

Current Position: Professor and Associate Director for the School of Life Sciences, Arizona State University

Education: B.Sc. University of Toronto, 1978; Ph.D. Univ. of Colorado, Boulder, 1987

Professional Experience: Postdoctoral fellow, Dept. of Zoology, University of British Columbia; Selected Honors: Elected Fellow of the American Association for the Advancement of Science, 2005; The Scholander

Award, American Physiological Society, 1990; Izaak Walton Killam Postdoctoral Fellowship, 1988, National Science Foundation (NATO) Postdoctoral Fellowship, 1988; Best Student Paper Award, Division of Comparative Physiology and Biochemistry, American Society of Zoologists, 1986

SICB Activities: Co-Organizer (with Robert Sterner), Cross-Society Symposium on: "Integrated Research Challenges: Biological Stoichiometry from Genes to Ecosystems:" (2003); Program Officer, Division of Comparative Physiology and Biochemistry (2000-2003); Editorial Board, *Physiological and Biochemical Zoology* (1999-2007); Best Student Paper Judge, Division of Comparative Physiology and Biochemistry (2000); Co-Organizer (with John E. Phillips), Symposium on "Responses of terrestrial invertebrates to variation in temperature and water availability: molecular, organismal, and evolutionary approaches" (1996); Co-Organizer (with John E. Phillips), Symposium on "Insect Acid-Base Regulation", (1992); Nominating Committee, Division of Comparative Physiology and Biochemistry, (1990-91)

Other Memberships: American Physiological Society; Scholander Award Competition Judge, American Physiological Society (2000)

Research Interests: Ecological and evolutionary physiology, insect physiology, respiratory and nutritional physiology.

Statement of Goals: I remember my first SICB meeting very clearly. It was after my first semester as a graduate student (December, 1982) and I remember being stunned when I realized that these important-sounding people whose papers I had been reading were real people, and that some of them were actually friendly! I have always considered SICB to be a critical society for our discipline, and am proud to be a 25 year member. As chair of DCPB, I would work to further promote our discipline within SICB and beyond. I haven't thought hard about specific policies I'd promote yet, but I do think that a "best poster by an undergraduate" is something to consider.

James W. Hicks

Current Position: Professor of Ecology and Evolutionary Biology, University of California, Irvine

Education: B.S., California State University at Fullerton (1977); M.S., University of New Mexico (1979); Ph.D., University of New Mexico (1984)

Professional Experience: Postdoctoral fellow with Dr. Norbert Heisler at the Max-Planck Institute for Experimental Medicine in Gottingen, Germany (1984-1985); postdoctoral fellow with Dr. Fred N. White at the Physiological Research Lab, Scripps Institution of Oceanography, UCSD (1986-1987)**;** Assistant and Associate Professor, Creighton University School of Medicine (1988-1992)

SICB Activities: Editor-in-Chief 2002-present of *Physiological and Biochemical Zoology*, a journal, sponsored by the Division of Comparative Physiology and Biochemistry of the SICB; *PBZ* began publishing in 1928, and publishes results of original investigations in animal physiology and biochemistry.

Other Memberships: American Physiological Society

Research Interests: As a broadly trained, integrative physiologist, my research efforts are divided among five areas; understanding the mechanism(s), regulation and functional significance of cardiac shunting in "lower vertebrates", investigating the factors that determine and regulate the cardiopulmonary response to elevated metabolism in vertebrates, investigating the ontogeny of cardiovascular regulation, studying acclimatization to hypoxia and investigating the effects of gravity on the vertebrate cardiovascular system. My research focuses on vertebrates and spans several vertebrate groups. My laboratory provides an evolutionary perspective into circulation and respiration and seeks to discover not only differences among organisms, but the unifying principles shared by diverse organisms.

Statement of Goals: If elected chair of the Division, my goals are to strengthen our interactions and communication with other societies, such as the American Physiological Society, the Society for Experimental Biology and the International Union of Physiological Sciences. Through the development of co-sponsored symposia at meetings sponsored by these various societies and/or the development of conferences, we promote the exchange of ideas with physiologists from all backgrounds and underscore the importance of comparative physiology and biochemistry.

Elections: Candidates for Program Officer

Kathy Dickson

Current Position: Professor of Biological Science, California State University Fullerton

Education: 1977, B.A., Zoology, Connecticut College; 1988, Ph.D., Marine Biology, Scripps Institution of Oceanography

Professional Experience: 1984-1985, Lecturer, University of San Diego; 1985-1988, Assistant Professor, Bucknell University; 1988-present, California State University Fullerton; visiting researcher at the Inter-American Tropical Tuna Commission Achotines Laboratory in Panama, the National Maine Fisheries Service Kewalo Research Facility in Hawaii, and the University of Cambridge

SICB Activities: SICB member almost continuously since 1980 and have attended a majority of the annual meetings since then.

Other Memberships: American Institute of Fishery Research Biologists, American Society of Ichthyologists and Herpetologists, Southern California Academy of Sciences

Research Interests: My research focuses on understanding the development and evolution of endothermy in fishes, and on muscle function in fish swimming. Generally, my research uses an integrative approach, using techniques ranging from enzyme assays and microscopy to whole organism respirometry and swimming kinematics, and involves a comparative approach to elucidate patterns of evolution.

Statement of Goals: Two of SICB's strengths are its integrative focus and the large number of students and postdoctoral researchers who participate in the annual meetings. It is a vibrant and growing organization! As the largest division within SICB it is important that DCPB offers symposia at each meeting and also that DCPB jointly sponsors symposia that integrate the different subdisciplines. If elected DCPB Program Officer, I will work with the membership and the Program Officers of other divisions to develop symposia on topics that are of wide interest and involve as many young investigators as possible. I am also interested in working with the education committee on symposia or sessions that present best practices of teaching and ways to integrate comparative physiology and biochemistry into biology curricula.

Don Lovett

Current Position: Professor, Department of Biology, The College of New Jersey, 2006-present

Education: B.A.S., University of Montana, Zoology (1975); B.S., University of Montana, Fisheries (1975); M.S., University of Michigan, Ann Arbor; Resource Ecology (1977); Ph.D., University of Louisiana, Lafayette, Evolutionary and Environmental Biology (1988)

Professional Experience: Assistant and Associate Professor, The College of New Jersey, Department of Biology (1990-1996); Lecturer and Research Associate, Lake Forest College, Department of Biology (1988-1990); Research Assistant, NOAA Sea Grant, University of Southwestern Louisiana, Department of Biology (1985-1988); Aquatic Ecologist, U.S. Army Corps of Engineers, Kansas City District (1981-1983)

SICB Activities: Member of SICB since 1982; I have brought over 20 undergraduate students to present their research since 1989. I have been a best student paper judge for DCPB, DIZ and TCS for almost 15 years, serving as committee chairperson in 1998 and co-chair in 2007. I was a panelist on the Post Doc/Student Workshop in 2006: "Strategies for Landing an Academic Job/Post Doc."

Research Interests: The focus of my research has been osmoregulation in estuarine crabs. I have examined time-course changes in gill ultrastructure and Na^+,K^+-ATPase activity and expression following salinity change and currently am testing candidate compounds as signals for these changes. I also am examining how methyl farnesoate levels respond to hemolymph ionic content and osmolality. Other areas of research include ontogeny and physiology of the shrimp digestive system, shrimp nutrition, allometric growth in crustaceans, and vertical migration of zooplankton.

Statement of Goals: Recognizing how important SICB was to my own development as a scientist, one of my goals will be to promote SICB's efforts to enhance and support undergraduate and graduate student participation in the organization. I also wish to work toward reducing schedule conflicts between symposia and related contributed sessions at the annual meeting.

The Society for Integrative & Comparative Biology
SICB Newsletter

Volume Spring 2008

Division of Developmental and Cell Biology (DDCB): 2008 Spring Newsletter

- Message from the Chair
- Message from the Secretary
- Minutes of the January 2008 DEDB/DDCB Business Meeting

Message from the Chair

Karen Crawford

Greetings,

With the start of 2008 the Division of Developmental and Cell Biology is renewed. Scott Gilbert, Swarthmore College, PA, has come aboard as our Program Officer and Jennifer Dearolf, Hendrix College, in Arkansas, has become our new Secretary. Thanks to you both in advance for your service to the division and welcome!

There are two positions on our team that remain open, the Student/Post-Doc Representative and someone willing to serve on the Editorial Board of the journal. My goal is to identify folks within our membership for these positions as soon as possible. I welcome volunteers or suggestions from our membership for these positions.

The meeting in San Antonio was wonderful. The science, venue and accommodations were just terrific. I hope that everyone managed to find the Alamo, admire the horse drawn carriages, stroll the Riverwalk (pleasurable even at half-tide) and enjoy the many exciting talks and posters presented at this meeting. It was wonderful for me to connect with so many of you and I thank everyone for their helpful advice regarding how best to move our division forward.

Planning for the future: At the San Antonio meeting, Alexa Bely, University of Maryland, came forward with some wonderful ideas for a symposium she would like to organize for 2010 on Regeneration. This is just the kind of thing that happens best at our meetings! And what a great way to regenerate the DDCB! Although in the early planning stages, her idea is to create a symposium that integrates the development, evolution and ecology of regeneration, in addition to highlighting recent advances in our understanding of the developmental basis of regeneration across a wide range of animal groups. This symposium topic is ideally

placed within our division and promises to be of great interest to many members within SICB. So while we will not have a formal program for the 2009 (Boston) meeting, we should have a great session in 2010.

Well, as my grandmother would say, "Winter's back is broken," spring is around the corner for many and stirring under the snow for most. I hope this finds you well as we all bring academic year 2007-2008 to a frantic close. Please contact us, Scott Gilbert, Jennifer Dearolf or me, with your ideas for the Division of Developmental and Cell Biology.

Message from the Secretary

Jenn Dearolf

Hello!

Since my name may not be familiar to many of you, let me introduce myself. My name is Jenn Dearolf, and I am an Assistant Professor of Biology at Hendrix College, a small liberal arts college near Little Rock, Arkansas. My primary affiliation with SICB has been the Division of Vertebrate Morphology, since I was a masters student at UNC Wilmington. However, I always checked the box beside the Division of Developmental and Cell Biology in addition to DVM, anytime I was asked to fill out forms by the society. When Karen asked me to serve as secretary for DDCB, I was unsure about how well I could serve. I mean, I have never really been a card-carrying member of DDCB. So, her request forced me to look at the reasons why I checked this division's box.

I found, to my surprise, that my research really focuses on cells, specifically muscle cells (fibers), and that recently, my lab's focus had shifted almost completely towards development. My funded research is a study of the effects of prenatal steroids on breathing muscle development, using guinea pigs as a model. We are looking for changes in fiber-type profile (percentage of fast-twitch fibers) and fiber size. Thus, my and my students' work fits perfectly within DDCB.

You may wonder why I am sharing this personal revelation with you. Well, to help us with the regeneration of DDCB, I am asking you to take a similar hard look at your research. Like me, you may currently characterize yourself as a vertebrate morphologist, an evolutionary biologist, a molecular biologist, or a biomechanist. But, I hope you find, when you look at the work you have been doing that at its core, it is the study of cells, the study of development, or both. If so, please consider submitting an abstract to be considered by our division for next year's meeting in Boston, and encourage your students to do the same.

At the meeting in San Antonio, we did not have any student presentations or posters to judge for the awards for DDCB! And, I know that there are some excellent student research projects out there that should be acknowledged. Having students present in DDCB sessions will breathe new life into our division.

Finally, even if you determine that the divisional home of your research is not DDCB, I ask you to remain active in the division. We need all of the folks that are members of the division to help us make it come alive again. We will take any suggestions you have to make us more visible and more vibrant. Don't just check the box!

Minutes of the January 2008 DEDB/DDCB Business Meeting

The Society for Integrative & Comparative Biology
SICB Newsletter

Volume Spring 2008

Division of Evolutionary Developmental Biology (DEDB): 2008 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary
- Minutes of the January 2008 Business Meeting
- Message from the Student/Postdoc Representative

Message from the Chair

Linda Holland

Yes, it is spring in San Diego. The desert flowers should provide a good show this year. There's been plenty of rain, and a lot seeds that require a good scorching will be sprouting in the burned areas.

It was good to see many of you in San Antonio in January. Evo-devo is clearly very much alive. The symposia sponsored by the DEDB, "Vertebrate head segmentation in a modern evo-devo context" co-chaired by Shigeru Kuratani and Thomas Schilling and "Reptile Genomics and Evolutionary Genetics" co-chaired by Dan Janes and Chris Organ were very well-attended as was the related contributed paper session-Session 31 -"Vertebrate head segmentation-heads to legs", chaired by Billie Swalla. There were also some excellent development-related sessions-- No. 20: Evolution-Genetics and Development co-chaired by Annalise Nawrocki and Mihaela Pavliacev, No. 34: "Development-differentiation and morphogenesis," chaired by Jackie Webb, Nos. 45 and 46: "Evolution-evo-devo-appendages," chaired by Marcus Davis and Kathryn Kavanagh respectively, No. 56: " Development-evo-devo-metamorphosis" chaired by Tobias Landberg. No. 69: "Evo-devo-morphology" chaired by Gunter Wagner and No. 70: "Evolution-invertebrates: larval development" chaired by Ariel Chipman. I sincerely thank all the session chairs and all of the speakers for making evo-devo a major part of the SICB.

The poster sessions were as usual well attended. There were 19 posters in the evo-devo poster session and another two in the poster session related to the Vertebrate Head Segmentation symposium. The winners of the student poster and talk awards were, respectively, **Nathan Bird**, George Washington University and **Pierre**

Le Pabic, East Carolina University. Their abstracts are posted on the SICB website. I encourage students to sign up for the competition for the meeting in Boston in January 2009. It would be great to have 5 or 6 students giving talks and twice as many presenting posters. One of the big advantages of the SICB meetings is that is an opportunity for students to hone their skills in presenting their work-highly advantageous for giving a good postdoc interview.

The San Antonio meeting saw the splitting of the DEDB and DCDB divisions with my taking over from Billie Swalla as chair of the former and Karen Crawford as chair of the latter. Elaine Seaver is secretary-elect, and will take over from Marcus Davis in 2009. Paulyn Cartwright is the DEDB representative on the editorial board of *Integrative and Comparative Biology*. This year, DEDB will be electing a chair to take over from me in 2010, and a program officer to take over from Wendy Olson in 2010. Although elections for most divisions will be held in the spring, this year those for DEDB will be held in the fall. Candidates will be announced in the Fall Newsletter. Since I only took over from Billie Swalla as chair of DEDB after the San Antonio meeting, the delay will give me and the secretary, Marcus Davis, time to establish a nominating committee and give the nominating committee time to solicit people to run for these offices. If you would be willing to serve on the nominating committee (or run for Chair or Program Officer) please let either me or Marcus know. I encourage everyone to vote!

The major cloud over devo-evo is the financial situation at NSF. Chris Amemiya, the program manager of developmental systems, tells me that money is very tight this year. By the way, he is due to step down in June and is looking for a replacement. If you are interested, please contact him at camemiya@nsf.gov.

Now is an excellent time to think about organizing a symposium for the 2010 meeting. The two cities under consideration are Long Beach, CA and Seattle, WA.

I hope to see you all in Boston in January, 2009 at the Westin Waterfront Hotel. In spite of its name, the hotel is not directly on the water, but it is within walking distance of the New England Aquarium, which is well worth a visit.

At this point, Billie Swalla would have included a plug for the Evo-devo class at Friday Harbor, WA this summer. I recommend it highly. It takes advantage of the wealth of embryos available in the summer off San Juan Island. I also recommend the summer developmental biology class at Woods Hole. The latter is more oriented towards the latest techniques in developmental biology and uses a wide range of "model" and "non-model" organisms. Both classes provide the camaraderie that lasts throughout a career in evo-devo.

Message from the Program Officer

Wendy M. Olson

Greetings from Iowa (which is currently having the snowiest winter on record).

The San Antonio meeting was a blast, despite all the construction. DEDB/DDCB was the main supporter of two symposia: "Reptile Genomics and Evolutionary Genetics" (organized by Dan Janes & Chris Organ) and "Vertebrate Head Segmentation in a Modern Evo-Devo Context" (organized by Shigeru Kuratani & Thomas Schilling), plus a slew of sessions as noted above. We also supported "Conservation of Maternally-derived Yolk Hormones for Offspring: Current Status" (DDCB) and "Evolution vs. Creationism in the Classroom: Evolving Student Attitudes" (DEDB). All were successful - many thanks to the organizers and presenters!

There were two BSP winners from DEDB. Best Oral Presentation went to **Pierre Le Pabic** ("Evolutionary divergence of pharyngeal arch specification in teleosts"); Best Poster Presentation went to **Nathan Bird** ("Differential growth and the evolution of novel vertebral morphology: lessons from the cypriniform Weberian apparatus"). Congratulations, Pierre and Nathan, and a big thank you once again to everyone who volunteered to serve as judge.

At the business meeting, we discussed changing the wording for the BSP competition, such that students no longer must be single-authors to be eligible. I suspect we will have to vote on this, so watch your email. We also discussed continuing issues surrounding keywords and their role in sorting abstracts. I will send out some recommendations prior to the 2009 abstract deadline, to try to ensure that as many EDB abstracts as possible are directed to me. Keep in mind that with the split, Scott Gilbert is the current program officer for DDCB. For those of you with interests in both camps (which I suspect is many if not most of you), be sure to read the DDCB newsletter, as well as this one!

DEDB is currently supporting one symposium for the Boston 2009 meeting, "Cell-cell signaling drives the evolution of complex traits," organized by John Torday. All the 2009 symposia are up on the meeting page, so take a look. And we always need to be thinking ahead. Please send me your ideas for symposia for 2010 - something fascinating, integrative, and /or pushing the boundaries of EDB. These meetings are good platforms for promoting new ideas, discussing old ones in a new light, etc. Some argue that EDB is generating tons of data with very little explanatory synthesis or mechanism. Prove these people wrong. Feel free to contact me (wendy.olson@uni.edu) with proposals or ideas at any stage of gestation - I am happy to help you flesh them out or just act as a sounding board.

In the meantime, Happy Spring! (should the snow ever actually melt...)

Message from the Secretary

Marcus C. Davis

Greetings from the rather parched Deep South,

San Antonio was a great meeting and I enjoyed seeing all my colleagues and friends. With so many interesting Evo-devo symposia and related sessions... well, I ended the meeting with holes in my shoes! Thanks to everyone who attended our business meeting and social. As mentioned by Linda (officer elections), Wendy (BSP rules) and in the minutes (by-laws edits) there will be a number of items up for vote in Fall 2008. So don't forget to vote! It's your division, thanks for playing an active role!

Minutes of the January 2008 Business Meeting

Message from the Student/Postdoc Representative

Becky Shearman

Hello fellow DEDB graduate students and post-docs!

If you haven't already heard, Nathan Bird has stepped down as DEDB's graduate student/post-doc representative. Many thanks to Nathan for several years of great service. For those of you who don't know me, I graduated from the University of Chicago almost two years ago and am currently a post-doc at Wesleyan University in Annie Burke's lab. As the new graduate student/post-doc representative, I look forward to getting to know all of you and want you to feel free to contact me with any questions or concerns you may have about DEDB or SICB in general. I hope everyone enjoyed the San Antonio meeting and found the grant writing workshop informative.

Cheers from Connecticut. I will see you in Boston.

The Society for Integrative & Comparative Biology
SICB Newsletter

Volume Spring 2008

Division of Ecology & Evolution (DEE): 2008 Spring Newsletter

In this newsletter:

- Message from the Officers
- Minutes of the January 2008 Business Meeting
- Candidates for Elections

Message from the Chair *George Bakken*, Program Officer *Mike O'Connor*, and Secretary *Michael Finkler*

Greetings from the DEE officers. San Antonio was a great meeting, and we would like to thank everyone who helped to make it so. DEE co-sponsored four symposia and by all accounts these were very successful.

We are looking forward to an exciting meeting in Boston next January, where DEE is co-sponsoring four symposia:

1. The Biology of the Parasitic Crustacean
2. Genomics and Vertebrate Adaptive Radiation: A Celebration of the First Cichlid Genome
3. Cell-Cell Signaling Drives the Evolution of Complex Traits
4. PharmEcology Symposium: A pharmacological approach to understanding plant-herbivore interactions

The DEE webpage is still featuring the research of its division members. Please check out the site at http://sicb.org/divisions/dee.php3. If you would like to contribute material to the site please submit text files as either Word or text documents, images as either .tif, .jpg, .png, or .gif, and movies as .avi or .mpeg, to Michael Finkler (mfinkler@iuk.edu) or George Bakken (gbakken@indstate.edu).

This year we had 48 students participate in the DEE Best Student Presentation Competition, with 30 talks and 18 posters entered into the competition. The Best Student Paper Award went to **Phillip Bergman** for his talk "Conservatism in lizard vertebral number evolution is widespread but not universal," and the Best Student

Poster Award went to **Allison Churcher** for her poster entitled "In search of the sea urchin nose: The molecular basis for chemoreception in *S. purpuratus.*" We congratulate the winners and all the students who participated in the competition for the high caliber work that was presented. We would like to thank the following DEE members who graciously volunteered their time at the meeting to serve as judges for the best student paper competitions: Roger Anderson, Ken Angielczyk, Audrey Aronowsky. Sarah Berke, Wendy Binder, Isabelle-Anne Bisson, Jean Block, Patrice Boily, Mark Botton, Robert Cox, Dan Hahn, Meg Hall, Roi Holzman, John Hranitz, Molly Jacobs, Jennifer Jost, Misha Matz, Chas Peterson, Christoph Schubart, and Pete Zani. Judging student papers is a great way to support DEE. If you didn't volunteer this year - please consider volunteering your time in Boston. We will be forwarding a more formal request for judges in the fall.

Attendance at the San Antonio DEE business meeting was extremely low compared to the number of DEE members. We would appreciate your input on how we might make the division more relevant to your interests and/or make it easier for you to attend the business meeting.

We currently have two business items to deal with before the next meeting.

- Our bylaws need to be revised to bring them into line with the Society generally and with some proposed changes regarding officer terms and the creation of two new positions (secretary-elect and program officer-elect). These are items we will consider in the fall and will be detailed in the fall newsletter.

- Election of Chair-Elect and Program Officer.

Elections: Candidates for Chair-Elect and Program Officer

Candidates for Chair Elect

Chris Tracy

Current Position: 2005-present, Research faculty, Charles Darwin University, Darwin, Australia

Education: B.S. (Zoology), Colorado State University, 1992; M.S. (Zoology), University of Oklahoma, 1995; Ph.D. (Zoology), University of Wisconsin, 2002

Professional Experience: 2005- present, Research faculty, Charles Darwin University; 2004-2005, Postdoctoral fellow, Mitrani Department of Desert Ecology, Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev; 2002-2005, NSF International Postdoctoral Fellow, hosted by Dr. Keith Christian at Charles Darwin University; 1995-2002

SICB Activities: Member since 2000

Other Memberships: American Society of Naturalists, Ecological Society of America, American Society of Ichthyologists and Herpetologists, Herpetologistsâβ League, Society for the Study of Amphibians and Reptiles

Research Interests: My primary interests are in physiological, biophysical, and evolutionary ecology of reptiles and amphibians. My research projects cover a broad range of physiological ecology linked by a theme of learning how individuals interact with their environment to exploit physiological opportunities, and to meet the physiological challenges of local and global environments. This information forms the basis for answering ecological and evolutionary questions about population or species characteristics. One focus of my research is in the interconnected processes of thermoregulation and hydroregulation in amphibians. Australian tree frog species differ greatly in their ability to resist water loss, so they make an excellent model group for studying the relationships between water and temperature balance in amphibian. Understanding these autecological interactions has allowed me to explore questions about patterns of habitat use (terrestrial, arboreal, or aquatic habitat use) among species in the tree frog family. A second focus of my research has been on autecological interactions that drive the evolution of patterns of variation in reptile life history, body size, and body shape in a desert lizard (the chuckwalla) as a model species.

Goals Statement: I believe that the importance and strength of the DEE, and generally of SICB, is that the Division actively encourages interaction among the many subdisciplines used by researchers to understand the ecological an evolutionary relationships among organisms. This is reflected in the purpose of the DEE "... *to advance, coordinate, and assist research and publication of knowledge regarding the ecological and evolutionary relations of organisms, and to act as a liaison agency between investigators in the several scientific disciplines involved*." Thus, one of my goals as Chair of DEE would be to promote the exchange of information to and among members. I see important initiatives in this area including, encouraging and promoting of interdisciplinary symposia at the annual meetings, and expanding the information available on the Division website to make it a central hub for exchange of information about the research interests of members as well as Society or Division news and information. The DEE website also represents an opportunity to promote science in general, and ecology & evolution in particular, to the general public and such opportunities seem increasingly important with the current atmosphere of skepticism toward ecological and evolutionary sciences. My hope would be to attract interest of others to help us make our website outstanding and helpful to our members.

Because the future strength of the DEE and SICB depends on continued recruitment of young biologists who represent a diversity of interests and backgrounds, another of my goals as DEE Chair would be to extend the Societyâβ s laudable history of strong support of its younger members. This would include encouraging underrepresented groups as well as international members to join and participate in our meetings, and to promote opportunities for younger members to take an active role in directing the society.

H. Arthur Woods

Current Position: Assistant Professor of Biology, University of Montana, Missoula, MT

Education: B.S., Stanford University 1991; PhD University of Washington, 1998

Professional Experience: Postdoctoral Fellow, Arizona State University (1998 - 2001), Lecturer & Research Scientist, University of Texas at Austin (2001 - 2006), Assistant Professor, University of Montana (2006 - present)

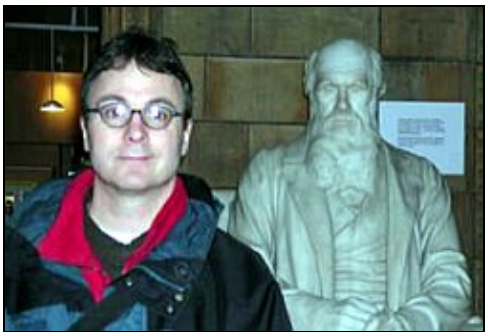
SICB Activities: member since 1993, SICB poster judge for most years after 2000.

Research Interests: I am broadly interested in the physiological ecology of insects and marine invertebrates. My research projects focus on physiological responses to abiotic factors, especially temperature, water, and oxygen. Although the field of physiological ecology has deep roots, its goals, questions, and techniques have undergone radical change in the past 15 years. From my perspective, the two most important conceptual advances have been a much stronger integration of evolutionary processes and a better understanding of how different physiological systems interact across spatial and temporal scales. Technically, better and cheaper tools have allowed us to observe processes that simply weren't visible 10 years ago. Currently I am pursuing two projects. The first is an examination of the physiological ecology of plant-insect interactions from the perspective of insect eggs. Leaf-associated eggs live in boundary layers that are profoundly influenced by leaf morphology and physiology. My project seeks to understand how variation in egg experience is partitioned among different geographic and biological levels and how that variation affects egg physiology and fitness. A second project, in collaboration with Amy Moran, examines the evolutionary physiology of oxygen biology in marine-invertebrate egg masses. We're interested in how latitudinal variation in sea temperature and oxygen availability has influenced the evolution of egg masses of nudibranchs. So far, we've been to a very cold place (McMurdo Sound) and a somewhat cold place (Friday Harbor) to study egg masses. In an ideal world, we will also visit a very warm place (e.g., Solomon Islands), though no funding for the warm leg has yet been procured.

Goals Statement: Like many of you, I have grown up intellectually at SICB. The meeting welcomes young scientists into a stimulating, friendly atmosphere. Although substantial mechanisms for supporting students already exist, I will work to increase both the funds available to cover student travel and meeting costs and the visibility and organization of DEE-student interactions. I applaud the suggestion outlined in the last DEE minutes to raise the visibility of the student poster competition, and I will work to make this so. For more established SICB scientists, another possibility would be to institute a high-profile talk, akin to DCPB's

Bartholomew Award, but aimed more directly at those working in ecology and evolution. Such a move would have to be approached cautiously, as we wouldn't want to step on Bartholomew's toes or saturate the meeting with too many plenary talks. However, such an award could provide a venue for very interesting talks. Finally, I will work to organize more and better DEE socials. Many of my most memorable and productive conversations at SICB occurred while playing hooky from the talks to chat with other scientists. Scheduling 'unscheduled time' may help new or shy recruits start to make those connections themselves.

Candidates for Program Officer



Dale D. Edwards

Current position: Professor of Biology, University of Evansville

Educational Background: B.S., Brandon University, 1986; M.S., Wake Forest University, 1988; Ph.D., Wake Forest University, 1993

Professional Experience: Visiting lecturer, High Point University, 1993; Visiting Assistant Professor of Biology, University of Richmond, 1993-1994; Assistant Professor of Biology, University of Evansville, 1994-2000; Associate Professor of Biology, University of Evansville, 2000-2006; Professor of Biology, University of Evansville, 2006-present; Chair of the Local Arrangements Committee for the Indiana Academy of Science, 2007-present

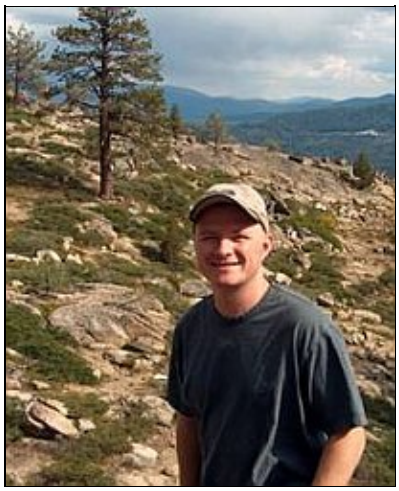
SICB Activities: Member since 1991; Member of the Public Affairs Committee, 2002-present

Other Societal Memberships: American Microscopical Society; Southeastern Society of Parasitologists; Indiana Academy of Science

Research Interests: Ecology and behavior of symbiotic associations involving invertebrates; population genetics and speciation; phylogenetic systematics

Statement of Goals: One of the things that has always impressed me about SICB is the diversity of its membership. The mixture of graduate students, postdoctoral fellows, junior and senior colleagues from a variety of biological disciplines, has allowed allow SICB to be one of the most comprehensive and truly integrative professional societies. As Program Officer, I would do my best to promote DEE to ensure that it continues to reflect the diversity of professionals and integrative science exemplified by the Society. Professional diversity begins with a healthy recruiting base. I would, therefore, continue to actively encourage graduate students and postdoctoral researchers to join DEE, and look for new and innovative ways to promote

the Division to this important constituency. Despite increasing specialization within the fields of ecology and evolution, these disciplines naturally form intricate and intimate relationships with many areas of study from other Divisions within the Society. In an effort to reinforce interdisciplinary synergy within DEE, I would attempt to develop and promote talks and poster sessions and symposia that buttress synergistic relationships with other Divisions of the Society. As program officer, I would also like to see DEE increase the visibility of the research interests and achievements of its members, both to the press (and as a consequence the public) and to professional scientists from other societies and organizations. One way DEE could do this would be through the SICB website. The Division could routinely feature a select number of its members on its web site on a regular basis. Moreover, it could provide press releases or access to presentations made by our members made during annual meetings. It might even be worthwhile to create a special link for members of the press that would provide them with scientifically friendly summary presentations of DEE member research findings.



Michael Sears

Current Position: 2006-present, Assistant Professor, Department of Zoology, Southern Illinois University

Educational Background: B.S. (Biology) Rhodes College; 1993; Ph.D. (Biology; Ecology and Evolutionary Biology) University of Pennsylvania; 2001

Professional Experience: 2006-present Assistant Professor, Department of Zoology, Southern Illinois University; Postdoctoral Fellow with Jack Hayes at the University of Nevada, Reno, 2004-2006; National Science Foundation Postdoctoral Fellow in Biological Informatics, 2002-2004

SICB Activities: member since 1998

Other Societal Memberships: American Society of Naturalists; Ecological Society of America

Research Interests: I am a broadly trained biologist with interests in quantitative aspects of evolutionary ecology, physiological and behavioral ecology, and population biology. I am especially interested in confronting models-either developed by myself or others-with real data to advance our conceptual understanding of issues in evolutionary ecology. Research in my lab seeks to explain landscape-level patterns of the distributions of animals by understanding the basic physiologies and behaviors of individuals. We use an integrative approach to address ecological problems by combining elements not only from physiological and behavioral ecology, but also from new techniques available in evolutionary programming, geographic

information systems, remote sensing, statistics, and computer science. Recently, I have become especially interested in how spatial arrangements of thermal habitat influence the integrated thermoregulatory and movement strategies of small ectotherms. Past interests have included the evolution of geographically-variable life histories, the evolution of endothermy, and physiological adaptations to cold environments.

Goals Statement: One of the strengths of research in this society is its integrative and cross-disciplinary nature. This strength is why SICB has been my primary meeting since I began attending meetings in graduate school. As program officer, I would foster symposia that not only emphasize integrative work, but also will synthesize and direct future research in their respective fields. I would encourage symposia that highlight the integration of new or nontraditional fields into research that will likely guide the work of many of our subdisciplines for years to come. I would also encourage younger researchers to become active in these symposia because they are excellent avenues to become involved in the society as well as promote early career development. I would also like to enhance and create opportunities to further involve student members in SICB activities. The annual SICB meetings have been integral to my own career development (and I suspect many others), and as program officer, I would help to ensure the same for others.

The Society for Integrative & Comparative Biology

SICB Newsletter

Volume Spring 2008

Division of Invertebrate Zoology (DIZ): 2008 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary
- Minutes of the January 2008 Business Meeting
- Message from the Graduate Student-Postdoctoral Affairs Committee Representative
- Message from the Student Awards Committee Chair
- Minutes of the 2007 Annual Business Meeting
- Elections: Candidates for DIZ Program Officer and Changes to DIZ Bylaws

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Message from the Chair

Janice Voltzow

Knock, knock, knocking on Darwin's door!

Dear invertebrate zoologists,

Last summer I finally fulfilled one of my long-term dreams - to visit Darwin's Down House. The building and grounds are being beautifully restored and maintained by English Heritage. It was truly moving to see his study, walk the Sandwalk, and think about the amazing depth and breadth of Darwin's contributions to science. Next year marks the 200th anniversary of Darwin's birth and many institutions and organizations are organizing Darwin Day celebrations to commemorate this anniversary. This is a wonderful opportunity to express, demonstrate, and explain the centrality of evolution to biology. I encourage you all to organize events for your local communities.

One of my primary goals for DIZ is to nurture our next generation of invertebrate zoologists. To that end, we will host another auction at the Boston meeting next January to benefit the fund for the Libbie H. Hyman Memorial Scholarship. Please think about what you can donate-original invertebrate-themed art, jewelry, or perhaps a memento from your early days before you were famous. The last auction was extremely successful; I hope we can do even more to support students as their careers evolve.

I enjoyed seeing so many of you in San Antonio. Once again, outstanding presentations on invertebrates dominated many of the sessions, from the DIZ-sponsored symposia on ecomorphological variation across aquatic flow regimes, decapod phylogenetics, crustacean genomics, and evolution vs. creationism in the classroom, to the many contributed papers and posters on our favorite organisms.

Amy Moran completed her term as DIZ program officer at this meeting. It has been a tremendous pleasure to work with her; I thank her for all her help and dedicated service. These duties are now in the capable hands of Jim McClintock, who began serving by attending the program officers' meeting last fall. Please be sure to send him proposals for symposia you would like the Division to sponsor.

Ben Miner has continued to chair our student awards competition. I thank him and all who served as judges. I am also grateful to Wiley-Liss and Oxford University Press for their support of our students. Each year they provide the winners of the best oral presentation and best poster (respectively) with a book of the winner's choice. Please see Ben's message to learn who won and join me in congratulating our students on truly outstanding oral presentations and papers.

I would like to thank Scott Nichols for serving as our representative to the graduate student/postdoctoral affairs committee. I am pleased to announce that Jann Vandetti has agreed to be our next representative to this committee and I encourage our student and postdoctoral members to contact Jann with your comments and suggestions.

We will have another election this year, this time for DIZ chair-elect. A nominating committee consisting of Ben Miner, Beth Davis, and Ken Halanych, with the help of Tom Wolcott and myself, has nominated Dianna Padilla and David Wethey to fill this position. Please read their statements elsewhere in this newsletter and be certain to vote. I thank all those willing to nominate and especially those willing to serve.

This fall you will receive a proposal to revise the DIZ bylaws to clarify how we proceed and to make our bylaws consistent with the SICB constitution and bylaws. Please look for more information about this later this year and participate in the voting process.

Best wishes for the spring!

The view from the Sandwalk.

The garden at Down House features plants that would have been common in area gardens in Darwin's lifetime.

Message from the Program Officer

James McClintock

Dear SICB members,

Once again, we had a wonderful showing of DIZ members who participated in the meetings in San Antonio, Texas. Congratulations to everyone that presented either posters or oral presentations, and a special thank you

to those of you who readily volunteered when asked to serve as session chairs. The general consensus was that the poster and paper sessions, and the many events (IMAX "Volcanoes of the Deep Sea", and "Flight of the Dodo") and mixers, came off very well indeed. Overall, there were 1005 abstracts received making San Antonio among the top 4 largest SICB meetings. The general meeting location, with ready access to the sights, sounds and great cuisine along the River Walk, was marvelous. Moreover, your understanding and patience with the construction underway at the Marriott Rivercenter was most appreciated, and beyond the control of the executive committee who skillfully negotiated in turn a society savings of approximately $50,000 in our audio visual costs. We were primary sponsor for one symposium, Joel Martin and Darryl Felder's "Advances in Decapod Crustacean Phylogenetics" which was very well received. We also co-hosted a symposium organized by Eric Lovely on ""Evolution vs. Creationism in the classroom: Evolving Student Attitudes". This was both timely and very well attended. Our joint social with the Crustacean Society, DEE, AMS, and DSEB turned out to be a great party as usual. Because the venue for our presentations was shifted to the convention center across the street from our hotel, the prevailing opinion was that the layout of the conference venue was convenient due to the close proximity of all the meeting rooms. Indeed, this seemed well worth the walk across the street. Please feel free to share any comments or concerns that you have about the meeting site or program and I will bring them to the attention of the Program Committee.

At the upcoming 2009 meeting at the Westin Boston Waterfront Hotel, DIZ will be the co-sponsor of two symposia including: (1) "The Biology of Parasitic Crustacea" organized by Jeffrey Shields; co-sponsored by the Crustacean Society, DEE, and DSEB, and (2) "Cell-Cell Signaling Drives the Evolution of Complex Traits" organized by John Torday; primary sponsor DEDB. Another highlight of next year's Boston meeting will be the 2nd Invertebrate Auction to support the Libbie Hyman Awards Endowment. Many of you will recall this boisterous and hugely successful event from its first iteration in 2004, where it was one of the highlights of the New Orleans meeting.

Once again in 2008 there will be an opportunity to host "Late Breaking Symposia" in which the organizers select and solicit talks for a half-day session. The abstracts for talks in late-breaking symposia for 2009 will be due in August 2008, so they can be put together on a short time frame. Please contact Society Program Officer Eduardo Rosa-Molinar (**ed@hpcf.upr.edu**) if you are interested in putting together an organized late breaking session for Boston.

It's not too early to start thinking about symposia for DIZ to host or co-host for the 2010 meeting; the deadline is August 2008, and I look forward to hearing about ideas for great DIZ symposia. Good luck with your teaching, research and travels and have a safe and productive spring!

Message from the Secretary

Renae Brodie

Dear SICB members,

I enjoyed seeing many of you again at the San Antonio meeting and hearing about new research developments, though I was often running after my late stage larva, who was a tiny blur of noisy motion. There was a good turn-out for the business meeting; I encourage you to read the minutes for information about NSF funding provided by Goggy Davidowitz of Integrative Organismal Systems (IOS) and to learn of other important discussions that occurred during the meeting. Please check the DIZ webpage for information on two

meetings of potential interest - the North American Echinoderm Conference (20-25 July 2008) and the 1st International Congress on Invertebrate Morphology (17-21 August 2008) http://www.sicb.org/divisions/diz.php3. If you haven't checked your member information on the DIZ web page in awhile, please make sure everything is current. Also, if you'd like to post a picture and paragraph describing your research on the Researchers Database, please send them to me at rbrodie@mtholyoke.edu.

We are electing a new DIZ Chair. The biographical sketches for the two candidates, Dianna Padilla and David Wethey, are below. Finally, stay tuned for more proposed changes to the DIZ Bylaws in the spring newsletter.

Minutes of the January 2008 Business Meeting

The larva in Calabash Bay, Jamaica, shortly after the SICB meeting.

Message from the Graduate Student - Postdoctoral Affairs Committee Representative

Jann Vendetti

Dear graduate students and post-docs,

Kudos to all who participated in another enlightening and successful SICB meeting. I hope that you enjoyed SICB San Antonio and in addition to attending talks, poster sessions, and socials, had a chance to visit the Alamo and discover or re-discover Tex-Mex cuisine.

Congratulations are in order for 2008 DIZ student award winners; Lindsay Waldrop, UC Berkeley for Best Student Oral Presentation, Joerg Hammel, FSU Jena, Germany for Best Student Poster, Nicholas Alcorn, Bowdoin College for the Adrian M. Wenner Strong Inference Award, and Daniel L. Curtis, University of Nevada, Las Vegas, for a Grant-in-Aid of Research (GIAR). Nicely done! If you have not applied for or

received a GIAR, mark your calendars for this year's deadline of November 18th.

Also, on behalf of the DIZ graduate students and postdoctoral fellows I would like to thank Dr. Larry Riley for organizing the student/postdoc workshop, "I Have a Great Idea, But Who Will Fund Me?" Panelists Drs. Davidowitz, Mykles, and Halanych provided practical and valuable advice to a packed room of students, touching on topics including how to recover from a rejected grant proposal and what NSF guidelines mean by "transformative."

For 2009's Boston meeting, please consider attending the DIZ business meeting if you have not already. It is a great way to learn about the division's goals, meet its officers, and learn the inter-workings of the society. Also, I welcome your feedback on the San Antonio meeting and encourage any suggestions for student/postdoc activities that you would like to see at future meetings. SICB has a long history of responding positively to student society member's requests-this is your society, make the most of it!

Best wishes and hopes for a productive year of research.

Message from the Student Awards Committee Chair

Ben Miner

We had a great meeting in San Antonio this year, and there were many excellent student presentations. Thank you to all the students who presented! I would also like to thank the 16 volunteer judges for their time and commitment to the students. This year 23 students competed from for best student paper. The winners were:

Best oral presentation

Winner

Lindsay Waldrop for her talk entitled, "Fluid dynamics of antennule flicking of the blue crab, *Callinectes sapidus*"

Runner up

Pauline Yu "Extended starvation resistance and subsequent growth recovery in sea urchin larvae: Implications for lifespan in the plankton"

Best poster presentation

Winner

Joerg Hammel "Morphogenesis during asexual bud-formation and growth in the poriferan *Tethya wilhelma*: silica skeleton, aquiferous system and the mesohyle"

Runner up

Dawn Vaughn, "Attack on the Clones: Predator-Induced Cloning in Echinoderm Larvae"

Adrian M. Wenner Strong Inference Award

Winner

Nicholas Alcorn "How do changes in parental investment influence larval development in Gulf of Maine echinoids?"

Runner up

Sylvia Lewis "Tests for palatability and feeding deterrence in egg masses of nine species of opisthobranch gastropods"

Please join me in congratulating these outstanding students. I look forward to seeing you all at the next meeting in Boston.

Elections: Candidates for DIZ Chair-Elect

Diana K. Padilla

Present Position: Professor, Department of Ecology and Evolution, SUNY Stony Brook; Adjunct Professor, School of Marine and Atmospheric Sciences, SUNY Stony Brook (1998 - present)

Education: Postdoctoral Fellow, Cornell University, Ithaca, NY 1987-89, PhD Zoology The University of Alberta, Edmonton 1987, MS Zoology 1982 Oregon State University, Corvallis, BA Zoology 1978 University of Washington, Seattle, BA Biological Oceanography 1978 University of Washington, Seattle

Previous Positions: Program Director, Integrative Organismal Systems, Biology, National Science Foundation, 2006 - 2007, Associate Professor, Department of Zoology University of Wisconsin-Madison, 1996 -1998; Assistant Professor, Department of Zoology, University of Wisconsin-Madison, 1989 - 1996; Oceanography and Limnology Graduate Program, U Wisconsin-Madison, 1989 - 1998

SICB Service: Member of SICB (formerly ASZ) since 1981. Chair, Division of Ecology and Evolution 1997 - 1999, Member at Large, Executive Committee 2001-2004, DEE member of the editorial board, Co-Organized Workshop to increase Diversity in SICB and Integrative Biology, Co-Organized Society-wide Symposium Plant-Animal Interactions, Co-Organized DIZ-DEE Symposium - Legacies in Life Histories, past Chair and present member of Committee to Increase Diversity - now Committee for Broadening Participation. I have also served several times on the nominating committee for society-wide officers, nominating committee for DIZ and DEE, and judge for the best student presentations in DIZ and DEE.

Other Society Memberships: American Association for the Advancement of Sciences, American Malacological Society, American Microscopical Society, Ecological Society of America, National Shellfisheries Association, Sigma Xi, Western Society of Malacologists

Research Interests: Functional morphology and functional ecology of aquatic invertebrates and algae, phenotypic plasticity, invertebrate life histories, freshwater and marine invertebrate invasion biology and ecology, marine invertebrate restoration and conservation, marine protected areas.

Statement of Goals: My recent experience at the NSF reinforced the notion that integrative organismal biology, especially of invertebrates, is experiencing a renaissance. I will not only encourage symposia at the leading edge of this renaissance, but I will also work with the program director and other divisions to explore and highlight new integrative research, that could be the leading edges of the future. I am also dedicated to broadening participation in integrative invertebrate zoology as a field as well as within SICB. I will work to make sure that our division not only grows and stays vital, but also encourages diversity.

David Wethey

Current Position: Professor of Biology and Marine Science, University of South Carolina

Education: B. A., Yale College (1973); M.S. University of Michigan (1976); Ph.D. University of Michigan (1979); Postdoctoral Fellow: 1979-80, University College of North Wales and University of Leeds, UK

Professional Experience: Assistant through Full Professor, University of South Carolina 1980-present.

SICB Activities: Member since 1974; DIZ Nominating Committee 1985; DIZ and DE student paper judge various years; Chair, ASZ Nominating Committee 1995; SICB Student Support Committee 2006, 2007

Other Memberships: AAAS; American Society for Limnology and Oceanography; American Society of Naturalists; British Ecological Society; Ecological Society of America; Estuarine Research Federation; Marine Biological Association of the United Kingdom; Sigma Xi; Society for the Study of Evolution

Research Interests: Population and community ecology in the intertidal zone; biophysical ecology - heat, mass, and momentum transport in rocky and sedimentary intertidal systems; marine biogeography and climate change.

Statement of Goals: The breadth of SICB and DIZ have always appealed to me, and the annual meetings provide an excellent way for students and faculty to interact with researchers in a wide range of fields. I see the chairs of divisions as instrumental in this process, in fostering the interdisciplinary flavor of the society through collaborative symposia, workshops and meeting sessions among divisions of the society.

The Society for Integrative & Comparative Biology
SICB Newsletter

Volume Spring 2008

Division of Neurobiology (DNB): 2008 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary

Message from the Chair

James A. Murray
The annual meeting in San Antonio went very well. Our symposium on Recent Advances in Neurobiology, focused on the gonadatropic axis, was successful and well attended.

The DNB met and discussed the perpetual issues of recruiting and funding. We would like to receive input from a wider selection of the membership, so please contact Duane, Tom, or me.

If you have an idea for a late-breaking symposium for Boston 2009, we need to submit a proposal for funding by April, so please send ideas today! If you make use of local Boston scientists, we can keep the cost low. I will be contacting local members of other neuroscience societies so they are aware of our upcoming meeting and encourage them to attend and join SICB.

For 2010 symposia, we need to send in a proposal to SICB in August, so please send ideas for those in the coming couple of months.

We would also like to solicit pictures and research program descriptions to add to the website. Please contact our divisional secretary Tom Pirtle. Send him a brief paragraph and a photo that depicts your research. These are the photos features in the upper left hand panel on the SICB web page that change when the screen is refreshed. These can help to draw eyes to the SICB website, and to DNB, and hopefully increase recruiting. As with all divisions, we need to increase membership so please recruit your students and colleagues and tell them what an enjoyable annual meeting we have. Also, please encourage your libraries to carry ICB.

In the future, we may try to stagger the election of division officers so we don't all start at the same time (as did Tom, Duane, and I this fall).

We look forward to Boston and the symposia Sensory Biomechanics and Psychoneuroimmunology Meets Integrative Biology. See you all there.

Message from the Program Officer

Duane McPherson
We are looking forward to the meeting in Boston, and hope you will attend and present a talk or a poster. There is plenty of room for the neurobiology division to expand! And please encourage your neuro colleagues to come to the meeting, too. Along with that, we also need more participation by DNB members in chairing oral presentation sessions and judging student presentations. These are relatively easy tasks, and you're probably going to be at those sessions anyway. We'll provide all the training you need.

Message from the Secretary

Thomas Pirtle

Greetings to all members of the Division of Neurobiology and other interested readers. This year's meeting in San Antonio was a great success and we look forward to next year's meeting in Boston. At the San Antonio meeting the DNB had contributed 38 abstracts - 22 posters and 16 oral presentations. The best student poster and oral presentation are as follows:

Jessica L. Fox of the University of Washington was awarded The Best Student Oral Presentation for her presentation: Encoding characteristics of haltere mechanoreceptors.

Two students tied for the Best Student Poster Presentation. Rebecca M. Calisi of UC Berkeley was awarded The Best Student Poster Presentation for her presentation: Capture-handling stress and its effect upon hypothalamic EGR-1 and GnIH expression in house sparrows (*Passer domesticus*) and Kyle Willingham of Abilene Christian University was awarded the Best Student Poster Presentation for his presentation: The effect of the hyperpolarization-activated inward current antagonist, ZD7288, on the locomotor rhythm of *Clione limacina*. Please visit the SICB website to read the abstracts for these presentations.

Preparations for the 2009 meeting in Boston, recruitment and future meetings need to be addressed. This includes funding, proposals for late-breaking symposia, and updating SICBs website to include more information on DNB as explained above in the Program Officer's report.

The Society for Integrative & Comparative Biology
SICB Newsletter
Volume Spring 2008

Division of Systematic and Evolutionary Biology (DSEB): 2008 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary
- Minutes of the January 2008 Business Meeting
- Elections: Candidates for Chair-Elect and Secretary

Message from the Chair

Anne Maglia

The San Antonio meeting was a great success, with many excellent talks and posters, including (as usual) several outstanding presentations by our divisional students.

Congratulations to this year's DSEB best student presentation award winners:

Best Student Paper (tie): Ka Yan Ma, Chinese University of Hong Kong: Molecular phylogeny of Dendrobranchiata inferred from two nuclear markers; **Annie R. Lindgren**, Ohio State University: Evolution of recent squids (Cephalopoda: Decapodiformes) inferred from molecular data.

Honorable mention goes to Elizabeth Borda, for her talk (co-authored with Mark Siddall): Systematics and diversity of Arhynchobdellida (Oligochaeta: Hirudinida), with a focus on the evolutionary history of bloodfeeding terrestrial leeches.

Best Student Poster: Johanna T. Cannon, Auburn University: Hemichordate relationships and insights into ancestors.

We owe many thanks to Don Swiderski who stepped down as chair of DSEB at the conclusion of this year's meeting. Don represented us on the executive committee through the arduous process of overhauling the

society and divisional budgets. Thanks Don, we appreciate all of your hard work!

It is not too early to start thinking about upcoming meetings! If you have ideas for symposia or topics for the Phylogenetics for Dummies series, please contact one of the divisional officers.

Message from the Program Officer

Rachel Collin

This year's SICB meeting in San Antonio was a great success with excellent dining opportunities offered by the river walk and a compact venue. As usual there were many great student talks and posters, and it was a difficult job for us to choose the winners of this year's best student oral and poster presentations (see Anne's message for the winners!). The DSEB division continues to promote and encourage students to participate in the meetings, and this award recognizes those young scholars who have demonstrated excellence in their research.

It's hard to believe, but it's time to start thinking about the 2009 meeting in Boston (January 3-9). DSEB sponsored symposia on "Decapod Phylogenetics" and "Teaching Evolution" at San Antonio, both of which were well attended. We can sponsor several symposia next year, so please feel free to lobby me for your favorites. The Phylogenetics for Dummies workshop is still in the planning phase. There is a current call for late-breaking symposium for 2009. Please contact the SICB Program Officer Eduardo Rosa-Molinar (ed@hpcf.upr.edu) with any ideas. Please have ready a title and a list of 7 speakers for 30 minute presentations in the AM or 4-5 speakers for 30 minute presentations in the PM. Shorter presentation slots are also possible.

The deadline for receipt of symposium proposals for the 2010 meeting is in August. The divisions will discuss and decide on funding at the program officers meeting in September, so please start developing your ideas and talking with your colleagues and program officers of your divisions. I have already heard one interesting idea for a symposium; DSEB has the funds to sponsor more than one symposium as well as Phylogenetics for Dummies. DSEB is interested in expanding this workshop to include comparative methods, or even focus on topics such as phylogeography. Again, ideas are welcomed by all the DSEB officers.

Message from the Secretary

Marta deMaintenon

Aloha! It was good to see everybody in San Antonio! As usual, the presentations were excellent, and San Antonio provided a really nice venue in terms of dining and shopping options.

The primary issue I need to mention, as in previous years, has to do with the DSEB web site; it has changed a great deal, and Lou Burnett (SICB Secretary) and Ruedi Birenheide (SICB Webmaster) would like input on

the structure, pictures from the divisions, and a researchers' database. Please do send in any input you have to make our web site more interesting and informative! And please send me a photo of some aspect of your research along with a paragraph explaining it.

And finally, please note we do have an election this spring and by-laws amendments this fall to vote on, so don't forget to put in your two cents on those. Thank you!

Upcoming Meetings of Interest to the Division

Evolution 2008, the joint annual meeting of the Society for the Study of Evolution (SSE), the Society of Systematic Biologists (SSB), and the American Society of Naturalists (ASN), will be held June 20-24, 2008, hosted by the University of Minnesota, The Bell Museum of Natural History and its College of Biological Sciences. More info: http://www.cce.umn.edu/conferences/evolution/

SMBE 2008, the annual meeting of the Society for Molecular Biology and Evolution (SMBE) will be held June 5-8, 2008 in Barcelona, Spain, hosted by the Universitat de Barcelona. More info: https://smbe2008.com/

Hennig XXVI, the Annual Meeting of the Willi Hennig Society, will be held October 28-31, 2008, at Hotel Sol San Javier, Tucuman, Argentina. More info: http://www.cladistics.org/meetings.html

Proposed Change to DSEB By-Laws - Division Chair's Term

A proposal was made to adjust the term length of the Divisional Chair to be consistent with lengths of terms of our other officers and officers in other divisions.

The current by-laws read, in Article III section 1:

"The Chair-Elect shall be elected before one annual meeting and serve for a term of one year, and shall then successively and automatically become Chair for a term of two years and then successively and automatically become Past Chair for two years."

It is proposed that this sentence be changed to:

"The Chair-Elect shall be elected before one annual meeting and serve for a term of one year, and shall then successively and automatically become Chair for a term of three years and then successively and automatically become Past Chair for two years."

This proposal and others to change the divisional bylaws will be published in the fall newsletter along with an accompanying ballot.

Minutes of the January 2008 Business Meeting

Elections: Candidate for Chair-elect

Patrick M. O'Connor

Current Position: Assistant Professor, Ohio University (since 2003)

Education: B.S., Anthropology, Michigan State University; M.S., Health Sciences, Stony Brook University, 1999; M.Phil., Anatomical Sciences, Stony Brook University, 1999; Ph.D., Anatomical Sciences, Stony Brook University, 2003

Professional Experience: Instructor, Ohio University, 2001-2003; Research Associate, Natural History Division, Michigan State University Museum, 2003 - present

SICB Activities: Judge for DEE Student Paper competition

Other Memberships: Society of Systematic Biology, Society of Vertebrate Paleontology, Paleontology Society, International Congress of Vertebrate Morphology, American Association of Clinical Anatomy

Research Interests: Vertebrate Paleontology, Comparative and Functional Morphology, Systematics, Paleobiogeography. My research broadly addresses topics in archosaurian (birds, crocodyliforms, dinosaurs, pterosaurs) evolutionary morphology through laboratory and field studies. I use living and extinct archosaurs to examine a variety of issues related to functional inference, character evolution, the development of integrated anatomical systems, and the anatomical basis underlying trends in body size evolution.

Goals Statement: My initial goals as an officer in DSEB fall within two main areas. **Goal #1:** Continue efforts initiated by our current officers in raising awareness of DSEB within SICB, particularly among student and junior faculty members. One way of achieving this goal would take the form of a new series of symposia revisiting the topic of phylogenetically-informed functional morphology and physiology, emphasizing the importance for critically evaluating the first step of this process (i.e., phylogeny reconstruction). New and revised comparative approaches continue to be a major area of growth in biology, as reflected in the many recently developed techniques for examining character evolution under different evolutionary models. However, many of these new approaches are computationally complex (even at the entry level) and often remain of limited utility to those unfamiliar. A symposium series such as this could serve to bridge this gap, providing reciprocal illumination on the process of phylogeny reconstructing and different ways of using those phylogenies once hypothesized. **Goal #2:** Continue efforts to inform and engage Division and Society members about initiatives for public science education. For those of you who attended the recent (2008) annual meeting in San Antonio, the symposium entitled âβ Evolution vs. Creationism in the Classroom: Evolving Student Attitudes' represented a good starting point for this initiative. Not only does science education remain an important topic on the domestic scene, it will become more important globally as information access continues to become easier (e.g., with the advent of open access journals). DSEB, as one

of three SICB divisions with *Evolution* as part of its name, has a responsibility to play a role in this ever present and unfortunately still lingering 'debate.' Working with Society-level outreach efforts, DSEB members are acutely situated to convey topics related to evolutionary biology, whether in the form of Society Resolutions, as part of seminar series aimed at the general public, or in having a better understanding how to interact with the media for conveying the evolutionary significance of their research.

Elections: Candidates for Secretary

Todd H. Oakley

Current Position: Assistant Professor, University of California-Santa Barbara (Since 2003)

Education: BS (1993) and MS (1996), Biology, University of Wisconsin-Milwaukee; PhD, Biology Duke University (2001)

Professional Experience: Postdoctoral Fellow, Ecology and Evolution, (2001-2003) University of Chicago. Associate Editor Systematic Biology (2005-present)

SICB Experience: Member (2000-present); Symposium Co-Organizer (2003); Best Student Paper Committee, DSEB (2005, 2008)

Other Memberships: Society of Systematic Biologists, Sigma Xi, NERE (Network for Experimental Research in Evolution)

Research Interests: My research involves comparisons of independent evolutionary transitions such as convergence, parallelism, duplication, and homoplasy. Such transitions provide an element of replicability within the singular history of life, and can yield insight into the most general evolutionary questions. For example, when and why do the same molecular or developmental changes underlie similar - though independent - evolutionary changes? What are the fates of duplicated genes, and what causes them to diversify or retain old functions? How can we even determine what is an independent evolutionary event? These questions have driven my research on diverse subjects in evolution. Current topics include the evolution of complex traits, like eyes and nervous systems, and the phylogeny and evolution of ostracod crustaceans.

Goals Statement: My goals as a DSEB officer would be to help maintain the strengths of DSEB, including the systematics for dummies workshop. In addition, I would strive to help DSEB grow by promoting visibility

of SICB to other organizations, like the Society of Systematic Biologists. Especially by targeting early-career systematists, and spreading the word that SICB is a student-friendly meeting, I envision strengthening DSEB even further.

C. Tristan Stayton

Current Position: Assistant Professor, Bucknell University (since 2005)

Education: B.S., Solid Earth Sciences, Purdue University University, 1999; Ph.D., Evolutionary Biology, The University of Chicago, 2005

Professional Experience: Postdoctoral Associate, 2000-2002, Natural History Museum and Biodiversity Research Center and Division of Biological Sciences, University of Kansas

SICB Activities: Chair for paper sessions; Judge for DSEB (and DVM) Student Paper and Poster Competitions

Other Memberships: Society for the Study of Evolution; American Society of Ichthyologists and Herpetologists

Research Interests: My research focuses on the joint evolution of morphology, function, mechanics, behavior, and ecology in the feeding systems of reptiles, formerly lizards and currently turtles. I am also interested in the mechanical properties of turtle shells, as regards a number of different functions. Finally, I am interested in developing methods to study convergence within and among multivariate traits. I am also involved in a project investigating the population genetics and morphology of vernal pool amphibians (*Ambystoma maculatum, A. jeffersonianum,* and *Rana sylvatica*). My students have worked on projects involving turtle swimming, turtle tail function, salamander ecology in vernal pools, and navigational learning in Eastern painted turtles (*Chrysemys picta picta*).

Goals Statement: T he Division of Systematic and Evolutionary Biology is in a unique position to serve as a central division within the Society. I would like to encourage the development of symposia and workshops in concert with other divisions, to promote the integration the systematic and evolutionary research with the wide variety of studies seen at SICB. The Phylogenetics for Dummies workshops are excellent opportunities to present such synthetic studies, but I would also encourage the development of symposia focused on the comparative study of many types of data (biomechanical, morphological, or developmental data, for example) within a phylogenetic framework. Finally, I would like to increase student participation and awareness of our division through the promotion and advertisement of graduate student awards, and through the development of activities designed to promote or support undergraduate involvement in the division.

The Society for Integrative & Comparative Biology
SICB Newsletter

Volume Spring 2008

Division of Vertebrate Morphology (DVM): 2008 Spring Newsletter

In this newsletter:

- Message from the Chair
- Message from the Program Officer
- Message from the Secretary
- Minutes of the January 2008 Business Meeting
- Elections: Candidates for DVM Program Officer-Elect and Secretary-Elect

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Message from the Chair

Kurt Schwenk

Just once I'd like to write one of these newsletter entries and not sound like a PR hack or SICB shill. I'd tell you how terrible the meetings were, how atrociously bad the science was, what a bunch of jerks our colleagues are, how DVM is moribund, and how there is no hope for the future generation. Alas, I cannot. The San Antonio meetings were great, the papers and posters were excellent, the venue comfortable and convenient, the vast majority of our colleagues are *not* jerks, and our students are bright, dedicated and flourishing. Perhaps Boston will finally give me the opportunity to break out of this Pollyannaish mold and start using some new and negative adjectives-so much more fun to write! So dust off those old, failed projects that weren't worth publishing, try out those hare-brained schemes that paled in the light of sobriety and figure out how to put greasy thumbprints on PowerPoint slides in time for Boston-or I'm going to have to pull out the thesaurus to find new ways of saying 'great,' 'excellent,' 'fantastic' and so on. What a bore! I'm sure that if we all pull together we could have a truly sucky meeting and a great newsletter!

Speaking of the next generation, I'd first like to congratulate our student prize winners. As usual the judges had a hard time deciding among many excellent competitors. The D. Dwight Davis Award for best oral presentation went to **Andrew Farke** of Stony Brook University for his talk entitled, "Evolution of the frontal sinuses in Bovidae." The award for Best Student Poster Presentation was split this year between **Leah Brown-Wilusz***, an undergraduate student at the University of Connecticut, and **Brad Chadwell** of Wake Forest University. Leah's poster (with Tobias Landberg) was entitled, "Ontogenetic effects of hatching

plasticity in spotted salamanders due to larval and egg predators." Brad's poster (with B.W. Hunter and Miriam Ashley-Ross) was entitled, "When Designing Rays, Function Matters." For additional information see Secretary Gillis' report, below.

I thank Nominating Committee chair Adam Summers and his "crack nominating team," Mason Dean and Dan Huber for identifying an outstanding slate of candidates for our upcoming spring elections (see Secretary's report). I understand from Adam that, although permitted by DVM bylaws, water-boarding was not necessary this year to convince candidates to run (although classified DVM documents reveal that "inappropriate tickling" was needed to get Kris Lappin to commit).

New SPAC rep, Tobias Landberg

A final word of thanks to Russell Main, who has completed his stint as DVM's representative to the SICB Student/Postdoctoral Affairs Committee. Russ did a great job representing our interests at this important committee and communicating its work. Thanks Russ! I was asked by President Pearse to nominate a new DVM rep to this committee, so, in an egregious act of nepotism, I asked my own senior graduate student, Tobias Landberg, to serve on the committee for the next three years. Tobias agreed and has been duly appointed by President Pearse.

With regard to the DVM business meeting in San Antonio, which I am happy to report was very well attended, I need to clarify some confusion that I created because of my faulty memory. I raised the subject of the D. Dwight Davis Award and specifically, the number of times a student can compete. There was some heated discussion about the issue from all sides, but as it happens, I erred in opening the topic for discussion at all. The facts: at the urging of former Program Officer David Carrier two years ago, the issue had already been discussed at the previous business meeting, changes to the bylaws were proposed by the DVM Executive Committee during early 2007, the proposed changes were posted on the web for comment by membership and subsequently approved by a nearly unanimous vote. *The revised bylaws governing the Davis Award competition state that a student can compete no more than two times*. The spirit of the change is to enforce the existing bylaws that state only exceptionally strong work is to be entered in the competition - and to make judging physically practicable. Unfortunately, the changes to the bylaws were made during the transition phase between the Brainerd and Schwenk regimes and I failed to recall the outcome of the deliberations. I apologize for wasting the time of the membership who attended the business meeting. Since this issue was obviously new to many people at the meeting, we are always free to re-open the discussion in the future. In the meantime, please visit the following link to read the current DVM bylaws in regard to the student prizes (scroll to the bottom of the page): http://www.sicb.org/about/constitution.php3#dvmbylaws.

Given the confusion I caused at the business meeting with regard to the Davis Award competition, and in consultation with the Divisional Executive Committee, I have declared a general amnesty for students who have already competed - obviously there has not been time for the word to get out. Therefore, the two-paper rule will be enforced starting at the Boston annual meeting in 2009. As such, if you competed in San Antonio (or at a previous annual meeting), it will not count toward your limit of two competitions. Please get the word

out to your friends, students and colleagues. Forewarned is forearmed.

Note that there is no restriction on the number of times a student can compete in the poster prize competition. We had only ten DVM student posters entered in the San Antonio competition and we'd like to see more.

In conclusion, I look forward to seeing many of you in Boston. I don't have to tell you that Boston is a great town - and even though we're all going to do our best to make it a lousy meeting, we'll have fun doing it. This is the second time that the SICB meetings have been in Boston since I've been faculty at UConn. This suggests to me that I am, indeed, getting old (as if I needed more evidence).

**In the interests of transparency, I note that Leah Brown-Wilusz is an undergraduate student working in my laboratory with graduate student Tobias Landberg. Neither I, nor Margaret Rubega (also of the University of Connecticut), was involved in the poster prize decision.*

Message from the Program Officer

Jeff Walker

Kudos to all for a most excellent San Antonio meeting. Great organization, great site, great science, great seeing old friends and meeting new ones. We should all extend our sincerest appreciation to the organizers of the three DVM-sponsored and two late-breaking symposia, including Gabriel Rivera, Rick Blob, Shigeru Kuratani, Thomas Schilling, Thomas Kunz, Nick Hirstov, and Eric Lovely, Mike Alfaro, Nicolai Konow, and Shannon Gerry. The many, many concurrent sessions with DVM-related talks kept our minds (and bodies) busy, but this is good as it highlights the strength of our division at these meetings! Again, the poster sessions were a huge success and I would strongly encourage everyone to consider this format. At our next annual meeting in balmy Boston, there will be several symposia that should be of broad interest to DVMers, including:

1. Jerry Husak's "Hormonal Regulation of Whole-Animal Performance: Implications for Selection"
2. Matt McHenry's "Sensory Biomechanics"
3. Brook Swanson's "Biomaterials: Properties, Variation and Evolution"
4. Darrin Hulsey's "Genomics and Vertebrate Adaptive Radiation: A Celebration of the First Cichlid Genome"

These titles alone highlight DVM members' strongly integrative research programs. It is also time to organize creative, integrative symposia for our 2010 annual meeting. Think: what is the cutting edge of my field? What are the common themes that my field is pursuing and how are we pursuing these? What developments have occurred in the last few years that have advanced my field into new directions? Or maybe, how have these disparate fields come together to form a new discipline? Remember to seek both internal and external sponsorship for your proposed symposium. Internal sponsorship is easy; simply talk to the program officers of the relevant divisions. External support is well worth the effort as the society will waive registration fees for symposium organizers that actively seek external support for symposia. More importantly, all of the symposia in 2008 successfully secured external support, five of these from NSF. Be creative with external sources of support. And remember that certain external sponsors, such as NSF, strongly encourage diversity among symposium speakers. Given that a typical, full-day symposium has only eleven speakers, symposium organizers should consider contacting colleagues to submit a contributed paper to a complementary session.

Finally, if your symposium idea is simply too cutting edge to wait until 2010, then you can submit it as a late-breaking symposium for 2009 Boston. But you must defend its edginess! I hope everyone has a productive spring and summer and look forward to seeing the abstracts for Boston.

Gary's reason(s) for missing San Antonio

Message from the Secretary

Gary Gillis

I had two very good reasons, each weighing in at about 6.5 pounds, for missing the San Antonio meetings. Don't worry, they won't stop me next year, in fact, my current plan is to bring Ben and Matt, to Boston next year! Mark Westneat graciously filled my role at the meeting, and much of what is written below is thanks to him.

2008 Student Award Winners

Davis Award

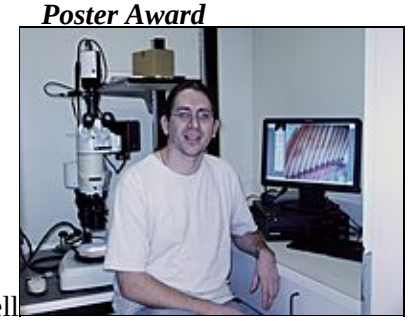
Andrew Farke 

Poster Award

Leah Brown-Wilusz

(Tie)

Poster Award



Brad Chadwell

This year's D. Dwight Davis award winner is **Andrew Farke** from Stonybrook University whose work on the functional morphology and evolution of the frontal sinuses of bovids impressed all the judges. Andrew is particularly intrigued by his results suggesting that phylogenetic factors rather than mechanical loading conditions seem to have the strongest impact on sinus morphology in this clade of horned mammals. The DVM poster award is being shared between two students: **Leah Brown-Wilusz** from the University of Connecticut and **Brad Chadwell** from Wake Forest University. Leah's work with Tobias Landberg on hatching plasticity in spotted salamanders in relation to predation revealed trade-offs in which early hatching in response to egg predators led to a reduced ability to respond to larval predators. Brad's work with Brad W. Hunter and Miriam Ashley-Ross on the functional anatomy of median fins in bluegill sunfish demonstrates morphological variation among rays at different positions in the fin that may be linked to differences in the forces experienced at the different locations. On behalf of the entire division, I want to extend a sincere congratulations to our award winners and all the other DVM students who consistently present excellent work and raise the quality of our meetings!

Minutes of the January 2008 Business Meeting

This year we will have elections for both Program Officer-Elect and Secretary-Elect. Please vote!

Candidates for DVM Program Officer-Elect

Richard W. Blob

Current Position: Associate Professor, Department of Biological Sciences, Clemson University, http://people.clemson.edu/~rblob/

Education: Ph.D. 1998: University of Chicago (Evolutionary Biology); B.A. 1992: University of Pennsylvania (Biology, Individualized Studies - Paleobiology)

Professional Experience: 2007-present: Associate Professor, Department of Biological Sciences, Clemson University (courses taught include Vertebrate Biology, Comparative Vertebrate Morphology, Animal Biomechanics, Vertebrate Paleobiology; Tropical Biodiversity); 2002-2007: Assistant Professor, Department of Biological Sciences, Clemson University; 1999-2001: NIH Postdoctoral Fellow, Field Museum of Natural History (Zoology); 1998-1999: Senior Assistant Collections Manager, Field Museum of Natural History (Fossil Mammals)

Awards and Honors: 2007: Mentorship Award, National Scholars Program, Clemson University; 2006: Teacher of the Year (under ten years experience), Clemson University, College of Agriculture, Forestry, and Life Sciences; 2004: Outstanding Young Researcher, Sigma Xi Clemson Chapter; 1998: Best Student Poster, SICB-DVM; 1997: Society of Vertebrate Paleontology Predoctoral Fellowship; 1992: Henry Darwin Rogers Award in Geology, University of Pennsylvania; 1992: Phi Beta Kappa; 1992: NSF Predoctoral Fellowship

SICB Activities: 2008: symposium co-organizer (with G. Rivera), "Going with the Flow" Symposium for San Antonio annual SICB meeting; 2008: Judge, DVM Davis Award committee and DCB Best Student Presentation committee; 2003: Chair, DVM Davis Award committee; 2002: DVM Davis Award judge; 2001: DVM nominating committee

Research Interests: Evolutionary morphology and biomechanics of the vertebrate musculoskeletal system, with a primary focus on locomotion in reptiles, amphibians, and fishes. Other areas of interest include the evolution of bone mechanical properties, evolution of aquatic/terrestrial habitat transitions, fish and reptile feeding, ontogeny of musculoskeletal function, and biomechanical modeling of functional capabilities in fossil taxa.

Other Memberships: American Society of Ichthyologists and Herpetologists, Herpetological Association of Africa, Herpetologists' League, International Society of Vertebrate Morphology, Sigma Xi, Society for Experimental Biology, Society for the Study of Amphibians and Reptiles, Society of Systematic Biologists, Society of Vertebrate Paleontology

Goals as Program Officer: This is an interesting time for DVM, with opportunities and challenges stemming from the same recent trends and developments: (1) continued growth of interest and participation in the fields DVM represents, and (2) the founding of the Division of Comparative Biomechanics. As Program Officer, I will work to ensure coordination with the other Divisions, particularly DCB, so that the organization of meeting programs and symposia maximize access to the exciting research produced by our members and related Divisions. This is the best way to ensure that we all leave the meetings fired up to act as advocates for

the field of Vertebrate Morphology, promoting the importance of research and teaching in morphology at our home institutions and in broader venues. This is critical for the future of the discipline as funding support for basic research continues to be limited. I will also work to promote DVM's excellent tradition of fostering student participation and development. These efforts can range from providing constructive feedback for student presentations, to promoting existing regional meetings (and instigating new ones!) as a forum for students to present research and get to know each other. Even though vertebrate morphology is a more exciting field than ever, we need to work integratively with other fields and engage the next generation of morphologists if we are going to keep our future strong.

Alice C. Gibb

Current Position: Associate Professor, Department of Biology, Northern Arizona University, http://jan.ucc.nau.edu/~acg/

Education: 1997. Ph.D. Biological Sciences, University of California, Irvine; 1989. B.A. Biological Sciences, Mt. Holyoke College

Professional Experience: 2005-2008. Associate Professor, Department of Biology, Northern Arizona University; 1999-2005. Assistant Professor, Department of Biology, Northern Arizona University; 1997-1999. NSF Postdoctoral Researcher, California State University, Fullerton

Awards and Honors: 1986. Abby Howe Turner Award from Mount Holyoke College for excellence in the Biological Sciences; 1987. Bernice MacLean Award from Mount Holyoke College for excellence in the Biological Sciences; 1989. Graduated *cum laude* with Highest Honors in Biological Sciences from Mount Holyoke College; 1993. D. Dwight Davis Award for Best Student Paper in Vertebrate Morphology from the American Society of Zoologists; 1994. F. Earl Durham, Jr. Award for Best Student Paper in Vertebrate Morphology from the Southern California Academy of Sciences; 1995. Jules M. Crane Award for Best Student Paper in General Biology from the Southern California Academy of Sciences; 1996. Storer Award for the Best Student Poster in Ichthyology from the American Society of Ichthyologists and Herpetologists; 1996. Edward A. Steinhaus Teaching Award from the School of Biological Sciences, University of California, Irvine; 1996. Best Student Poster from Sigma Chapter of Graduate Women in Science

SICB Activities: 1999. Committee Chair, D. Dwight Davis Award for Best Student Paper in Vertebrate Morphology, Society of Integrative and Comparative Biology; 1999-2002. Panel member, Student Grants-in-aid-of-Research, Society of Integrative and Comparative Biology; 2001. Organizer and participant: "Molecules, Muscles, and Macroevolution: Integrative Functional Morphology" for the Society of Integrative and Comparative Biology; Proceedings published in *Int. and Comp. Biol.*

Research Interests: I am interested in the morphological and physiological basis of behaviors critical to individual fitness, especially prey capture and locomotion. Although I am broadly interested in functional morphology, animal behavior, and the comparative method, my research focuses on several specific aspects of these disciplines. (1) Developmental morphology and physiology: the development of animal behaviors and their associated morphological and physiological systems. (2) Environmental functional morphology: the relationship between animal behavior, performance and survival in the wild. (3) Biomechanics: the study of the physical constraints that intrinsic and extrinsic factors place on animal behaviors.

Other Memberships: American Fisheries Society; Sigma Xi

Goals as Program Officer: A continuing challenge facing the Division of Vertebrate Morphology is to retain our visibility and identity in the face of cross-divisional sessions and symposia at the annual meetings and the addition of new divisions to the society. These relatively recent changes to the society may be best perceived as new venues in which we can demonstrate the strength and flexibility of a morphological approach for understanding evolutionary patterns and animal behavior. To this end, as program officer, I will advocate that we retain the current format whereby DVM students compete for best student paper (the D. Dwight Davis Award) during cross-divisional sessions that are comprised of students, faculty and other professional scientists. This allows our students to receive exposure and feedback on their presentations that will enhance both their research and their future career opportunities. Second, I will follow the tradition of previous program officers and work with the societal program officer to create focused, balanced, cross-divisional sessions that facilitate our ability to reach out to individuals outside of our discipline and potentially allow us to form new collaborations. Finally, I will work with the other divisional program officers to revise and refine the keywords and processes used to organize talks and posters into sessions in an ongoing effort to increase the cohesion and focus of each session at the annual meeting.

Candidates for DVM Secretary-Elect

Lara Ferry-Graham

Current Position: Research Faculty, California State University/Moss Landing Marine Laboratories, http://ecomorphology.mlml.calstate.edu/ferry.htm

Education: 1998. Ph.D. Ecology and Evolutionary Biology, University of California, Irvine; 1994. M.S. Marine Science, San Francisco State University/Moss Landing Marine Laboratories; 1991. B.S. Biological Sciences, California Polytechnic State University, San Luis Obispo

Professional Experience: 2003-2008. Research Faculty, Moss Landing Marine Labs; 2006, 2008. Visiting Assistant Professor Summer Session, Friday Harbor Labs, University of Washington; 2005. Visiting Assistant Professor, Universidad de Catolica Norte, Coquimbo, Chile; 1999-2002. Postdoctoral Researcher, Center for Population Biology; U.C. Davis; 1998-1999. Postdoctoral Researcher, Comparative Physiology Group, U.C.

Irvine

Awards and Honors: 1998, 1999. Excellence in Teaching, U.C. Irvine; 1997. Durham Award for Best Student Paper in Vertebrate Zoology, So. Cal. Academy of Sciences; 1996. Stoye Award/Best Student Paper in Genetics, Development and Morphology, ASIH; 1995. Best Student Paper, AES; 1994. Stoye Award/Best Student Paper in Ecology and Ethology, ASIH

SICB Activities: 1999, 2007. Judge, DVM Best Student Paper Award; 2001. DVM Symposium Co-Organizer, "Molecules, Muscles, and Macroevolution"

Research Interests: 1) the diversity of form (muscle + bone complexes) and consequence, if any, of that diversity from a simple biomechanical perspective; 2) the evolution of novel and/or specialized forms, and; 3) how form, typically by interacting with other physiological, behavioral, or genetic variables, affects and can be used to predict ecological relationships.

Other Memberships: American Society of Ichthyologists and Herpetologists (ASIH), American Elasmobranch Society (AES), American Fisheries Society (AFS), Western Society of Naturalists (WSN), Society for the Study of Evolution (SSE)

Goals as Secretary: The central issue for DVM in the past few years, and the years to come, is Membership and our place within a changing SICB. I think we have seen already that the new Division of Comparative Biomechanics has not hurt our overall numbers, but provided a mechanism for the morphologically inclined, such as we are, to interact with those that think about similar issues in those creatures without vertebrae (and even the occasional autotroph). DCB was a successful addition to SICB, just as Evo Devo was before that, because we are integrative biologists at heart. Yet, for many of us, DVM remains our home - we started here as graduate students, and we will always list this division as our primary association within SICB. The job that lies ahead is (re)defining DVM, and its unique contribution, in the presence of many complementary divisions. The study of vertebrate morphology will always be a central part of SICB as much of the research that is conducted by its members can be traced to, at its core, this very discipline. Therefore, DVM will always have its place within SICB, so long as we continue to highlight this centrality. The key to our future, I believe, is communication and collaboration with the other SICB divisions in a way that highlights our strength as an individual division, but also personifies why we are part of a society that embodies the name "integrative". Our message - Vertebrate Morphology is a field that manages to be simultaneously both "old school", thanks to our honored tradition in anatomical study, and cutting edge, due largely to the integration of fabulous new tools and techniques - both facets are essential for making scientific progress, even today. I believe as Secretary it will be my job to help ensure our vitality as a division by maintaining communications with the SICB-wide membership and leadership, as well as other divisions; to encourage such collaboration; and to invite membership in DVM.

A. Kristopher Lappin

Current Position: Assistant Professor, Biological Sciences Department; California State Polytechnic University, Pomona, http://www.csupomona.edu/~aklappin/

Education: 1999, Ph.D. (Integrative Biology). University of California, Berkeley; 1991, B.S. (Zoology). University of California, Davis

Professional Experience: 2006-2008, Assistant Professor of Biological Sciences. Biological Sciences Department. California State Polytechnic University, Pomona; 2004-2006,Research Associate. Department of Biological Sciences. Northern Arizona University; 2000-2004, Post-doctoral Associate. Department of Biological Sciences. Northern Arizona University

Awards and Honors: 1996: D. Dwight Davis Award for Best Student Paper Oral Presentation; 1995: ARCS Scholar; 1995: Regentsâβ Fellowship (UC Berkeley); 1993: NSF Pre-doctoral Fellowshipâβ Honorable Mention

SICB Activities: Member since 1994; DVM Poster and D. Dwight Davis Prize Judge, 2008

Research Interests: Evolutionary and functional morphology of feeding, combat, and display; evolution of sexual dimorphism; biomechanics and muscle mechanics involved with ballistic movements.

Other Memberships: American Society of Naturalists; **International Society of Vertebrate Morphologists**

Goals as Secretary: I am honored to be nominated for DVM Secretary. I have been attending SICB meetings for over a decade, and the DVM has always been my home. Of all academic meetings I have attended, these have played the most significant role in my professional development. It is time that I give something back. Vertebrate Morphology has a rich history that must be preserved. At the same time, our field continues to rapidly evolve. My goal as DVM Secretary would be to make the DVM as accessible and appealing as possible to students, both at the undergraduate and graduate levels. As scientists and teachers, we are trained to do just this. After all, the future of the Society and the DVM rests on the attraction and retention of new student members.