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**EXPERIENCES—A
PERUVIAN ADVENTURE
AND THE START OF A
RESEARCH CAREER**

*By David B. Wake
President, SICB 1992*

I was in my second year of graduate school at the University of Southern California when my adviser Jay M. Savage told me that he wanted me to have some tropical experience. I was already a devoted student of salamanders and had enjoyed a wonderful summer literally immersed in these seductive animals at the Highlands Biological Station, and I would have been content to focus on North American species.



David Wake hunting salamanders in a Mexican cloud forest.

But I was aware that one family (Plethodontidae) had invaded the New World tropics. Although still little known, tropical salamanders had been studied in Costa Rica the previous year by my fellow graduate student Arden H. Brame, Jr. (sadly, deceased in 2004). Jay's plan was for me to accompany two other students driving to Costa Rica in the summer

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HAPPY SPRING!

by Billie Swalla, SICB President

I hope that you all enjoyed the SICB meetings as much as I did in San Francisco! It was our largest meeting ever and showcased the breadth and depth of research and education done by our wonderful members. I loved seeing many friends there and making new ones. There were some hits – the specially designed SICB mugs – and some misses – the SICB cell phone app that will definitely be improved next year, but everyone I talked to had a good time and learned a lot.

I hope that you are all planning on coming to Austin, Texas next January. Austin is an amazing city – the Texas Legislature, UT Austin, and a vibrant music scene make it a bustling metropolis. However, don't forget to have some barbeque while you are there, or one of their legendary margaritas. We have already selected some awesome symposia for next year ([click here](#)) and will be planning an excellent meeting for you all to enjoy.

One of my goals as SICB President is to speak out about the science on current political and educational topics. When we have a request, we send the letter to the SICB Executive Committee, ask for comments, thoughtfully consider the discussion and then vote. This way when you hear that SICB backed an issue you know that it has been thoroughly considered and vetted by your Executive Officers. We've had two such letters sent out since the meetings in January. One of them was a letter to

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SICB Executive Officers**Billie Swalla**

President 2013-15
U. of Washington

Ken Sebens

Past President 2013-15
U. of Washington

Peter Wainwright

President-Elect 2013-15
U. of California, Davis

Karen Martin

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Secretary 2012-15
College of Charleston

Jon Harrison

Program Officer 2012-14
Arizona State Univ.

Sherry Tamone

Prog. Officer-Elect 2013-14
U. of Alaska Southeast

Brett Burk

Executive Director
McClellan, VA

**Educational Council Activities**

The San Francisco meeting was a time of great excitement for the Educational Council as we inaugurated one new educational event/tradition and announced the establishment of another. First, Dr. Bram Lutton of Endicott College led our first annual **TALX Workshop**, entitled "Teaching and Learning: Vision and Change in Introductory Biology." The workshop involved about 70 participants who were asked in roundtable discussions to address five fundamental misconceptions prevalent in making the pedagogical transition to meeting the goals of the Vision and Change initiative. In addition to giving an excellent Moore Lecture presentation on promising practices in STEM education, Dr. Susan Singer of Carleton College also participated in the TALX workshop. Bram will be summarizing the outcome of the work-

shop for inclusion on the SICB website. We are currently planning a second TALX in Austin focused on "teaching evolution across the curriculum." Second, we were proud to announce at the introduction of the Moore Lecture the establishment of the **M. Patricia Morse Award for Innovation and Excellence in Science Education**, which SICB plans to award annually. Look for details in the call for nominations in this edition of the newsletter and online, and please consider nominating a SICB member for this prestigious new award. Finally, a reminder to please add your teaching information to the bottom of your member profile! (<http://sicb.org> > Directory > Login > "Update your record.")

Bob Podolsky, Chair
Educational Council
Chair.EdCouncil@sicb.org

SICB News Stories by Student Journalists**...from the San Francisco Meeting**

The Public Affairs Committee provided opportunities last year for SICB student journalists to show their stuff. SICB Science News Stories, written by SICB student members, were featured on the society web site. These Stories by Student Journalists have a home on the SICB web site under the Media and Publications tab.

A total of six articles were featured from the 2012 annual meeting in Charleston. The brief articles highlight some of the research presented at the annual meeting through the eyes of a student journalist. The journalist program continued at the 2013 San Francisco meeting. The students are supported by SICB as a regular part of the ongoing student support program.

Two stories are highlighted here from the 2013 San Francisco meeting. More stories from that meeting will become available in the coming months. [Click here.](#)

Earliest Legs Weren't Made for Walking, by Karina Jones highlighting a talk given by Dr. Stephanie Pierce.

Bacteria Allow Wood Rats to Eat Poison, by Anne Madden highlighting a talk given by Kevin Kohl.

This journalism program is hosted by the SICB Public Affairs Committee. Students interested in applying for this program for the 2014 annual meeting in Austin, Texas should consult the upcoming fall newsletter.

SICB is especially interested in boosting donations to the John A. Moore Lectureship Fund. The Moore Fund supports the John A. Moore Lecture, a major presentation on education at each annual meeting.

DONATING TO SICB IS IMPORTANT

SICB is very pleased to recognize the financial contributions of the following individuals to the special funds that make our society work, supporting its many programs. **The following individuals made financial contributions to the SICB in 2012:**

- James Archie
- George Bakken
- Ruediger Birenheide
- Charles Booth
- Mark Chappell
- James Clegg
- Thomas Daniel
- Joan Davis Levin
- Ken Dial
- Kathy Dickson
- Robert Druzinsky
- Judith Grassle
- Thomas Hahn
- Jon Harrison
- Diana Hews

- Donald Jackson
- Darwin Jorgensen
- Alan Kohn
- Scott MacDougall-Shackleton
- Duncan MacKenzie
- James McClintock
- Duane McPherson
- Jasmine Nirody
- Sara O'Brien
- Dianna Padilla
- John Pearse
- Donald Ramsey
- Bernard Rees
- Lynn Riddiford
- Michael Romero
- Eric Schultz
- Kenneth Sebens
- Jarid Simons
- Stacia Sower
- Billie Swalla
- Sherry Tamone

Thanks to everyone for supporting SICB.

NEW AWARD IN SCIENCE EDUCATION

M. Patricia Morse Award for Excellence and Innovation in Science Education

This new award, approved by the SICB Executive Committee in 2013, will be given to a SICB member at

any career stage for significant achievement in science education. The Educational Council will accept and evaluate applications and nominations for this award. Nominations

should include a one page description and any supporting material related to significant achieve-

ments in science education, a curriculum vitae, and three letters of support. Nominations must be submitted to the Chair of the Educational Council (Chair.EdCouncil@sicb.org).

No special address by the award recipient will be expected. Each year's winner will be recognized prior to the introduction of the Moore Lecturer, and the Chair of the Educational Council may also authorize support for the winner to attend that year's meeting.

This award honors the achievements and contributions of M. Patricia Morse, President of SICB in 1985, to the Society especially in the area of education. Please see the article written by Trish in the SICB Newsletter, Spring 2009 on "[John Moore, SAAWOK and the SICB.](#)"





The Company of Biologists generously supported the session honoring the works of Bruce Sidell, held at the meeting in San Francisco.

Starting this year, the membership year will begin April 1 instead of January 1.



SOCIETY'S FINANCES CONTINUE TO BE STABLE— TREASURER'S REPORT, KAREN MARTIN

Assets, Revenues, and Expenses in FY 2012

Thanks to Bob Roer, outgoing Treasurer, who kept a careful watch on the finances of the Society for the past years. As of June 30, 2012, the net assets of SICB were \$1,650,445.18, an increase of \$38,629.42 over the end of FY 2011. Of this, \$1,052,615 is invested in stocks and bonds, and \$50,550 is invested in money market funds.

A big change in the administration and dues of the society will take effect in 2013. Starting this year, the membership year will begin April 1 instead of January 1. This aligns the membership year with the times for submittal of abstracts and attendance at subsequent meetings, so that a person paying dues to the society to submit an abstract will still be a member when the meeting occurs in January. In the past few years, because the meeting occurs at the start of a new year, people had to join for two years in order to be a member at the time of abstract submission and also the time of the meeting. Of course the hope is that you will consistently support SICB with a membership every year and enjoy the excellent journal, as well as attend the annual meetings as often as possible. Now, how does this change affect you? If you have already paid your SICB dues for 2013, congratulations! Your current membership is good through February 28, 2014. This means you can register and attend the 2014 meeting in January in Austin, TX on your 2013 membership.

Dues are not sufficient to pay the expenses of the Society. However, because of excellent meeting attendance in Charleston in early 2012, and strong demand for the journal Integrative and Compar-

ative Biology, the society finished FY 2012 in the black, with \$40,158.77 of revenues in excess of expenditures.

The annual meeting continues to be popular and well supported by the membership. Full reporting from the San Francisco 2013 meeting is not complete but revenues were in excess of \$411K, which is a 16% increase over the revenues from the 2012 Charleston meeting. Expenses were also higher so we will need to examine the final tally to see whether this was sufficient to break even or come out ahead.

Student Support

At the 2012 meeting in Charleston, student support for travel and registration was budgeted at \$45K and actually cost \$53,792. The endowment from the Charlotte Mangum fund provided \$4,643.50 for this. The meeting registration fee for students is heavily subsidized by the full members. Considerably more students applied for assistance to the 2013 meeting in San Francisco, and the budgeted amount also increased to \$60K, but the final expenses likely will be higher. SICB is strongly committed to student support and career development. In recent years, all students that applied for travel awards and met the criteria were given support. If demand continues to increase, a different approach may be necessary in the future.

In FY 2012, \$21,255 was given to students for Grants In Aid of Research (GIAR). The GIAR endowment provided \$3,240 of this. Over \$1,300 was given by the Hyman Scholarship Fund for research or coursework on invertebrates. The Fellowship of Graduate Student Travel (FGST) provided \$8,967 for graduate student travel to field

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“SICB is committed to broadening participation in SICB and the life sciences.”

SICB 2013 BROADENING PARTICIPATION

On January 3, 2013, the regular, grant, and ex-officio members of the Broadening Participation Committee met and discussed several items regarding members, travel awards and workshop topics. Regular members present were Cheryl Wilga, Greg Florant, Susan Williams, Kendra Greenlee. Grant committee members present were Cheryl Wilga, Michele Nishiguchi, and Brian Tsukimura. *Ex officio* members present were Billie Swalla and Jon Harrison; Brian Tsukimura Past SICB Program Officer and Sherry Tamone, incom-

fund the Travel Award Fellows with some reserved to fund the Mentor-Mentee Meeting and the BP social.

The travel award program was very successful again this year. As part of the application process, Travel Fellows provide information for the committee to guide future efforts, such as suggestions for workshops and stating some challenges to being a scientist from an underrepresented group. We were able to provide funding to 22 of the applicants. The third cohort of BP Travel Fellows are Christine Bedore, Amanda Kelley, Alyssa-Marie Cur-



ing SICB Program Officer were also present. Many thanks to members rotating off this year: Greg Florant, Nora Espinoza, and Cheryl Wilga. We welcome new members Susan Williams, Kendra Greenlee, and Andrew Clark.

A budget of \$15,000 was approved for the 2013 meeting, and again for the 2014 meeting. The majority of the budget is used to

fund the Travel Award Fellows with some reserved to fund the Mentor-Mentee Meeting and the BP social. The travel award program was very successful again this year. As part of the application process, Travel Fellows provide information for the committee to guide future efforts, such as suggestions for workshops and stating some challenges to being a scientist from an underrepresented group. We were able to provide funding to 22 of the applicants. The third cohort of BP Travel Fellows are Christine Bedore, Amanda Kelley, Alyssa-Marie Cur-

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*Broadening
Participation
Workshops in San
Francisco*

- 1. Effective presentation skills*
- 2. How to negotiate your first job*

BROADENING PARTICIPATION IN SICB—CONT.

(Continued from page 5)

This year's meeting opened with a social get-together held before the Plenary talk, and introduced most of the travel awardees to the committee members as well as the purpose of the Broadening Participation Committee at SICB. The committee members also queried the students/postdocs who were present, and asked what areas they were interested in being mentored, and whether they were traveling with a mentor or other lab members. This information will be used to initiate the mentor-mentee "match.com" portion of the SICB

delivering scientific presentations. The workshop consisted of two parts: a demonstration of software followed by tips and a Q&A session with Manny Azzizi, Patricia Hernandez, and Andrew Clark. The workshop was attended by about 100 members, who engaged the speakers with questions for the duration of the workshop.

Our second Broadening Participation Workshop, "How to negotiate your first job" was on Sunday Jan 6th from Noon-1:00 pm. Finding your first faculty position can be difficult, particularly in this economic climate. But once you have applied and received an interview, you can be assured that you are doing very well. If you are offered a faculty position you need to negotiate the best possible deal that will help you achieve success. It is at this point in time that YOU are in a position of strength—they have decided that they want YOU in their department. And they are now willing to make a tremendous investment in your career. In this workshop, Gregory Florant and Billie Swalla discussed several topics

including: salary range, lab space, start-up funds, office space, leave time, teaching requirements, and service assignments. Having done your "homework" about the position ahead of time can help you to negotiate an agreeable contract with the department chair. Your goal is make sure you give yourself all of the resources you need to be

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The Diversity Social in the Cityscape Room in San Francisco.

website, so that our committee can better serve those members who seek mentors at the meeting and hopefully beyond.

Our first Broadening Participation Workshop, "Effective presentations skills" was on Friday January 4 from Noon-1:00 pm. The purpose of this workshop was to present students/postdocs/faculty with various strategies for effectively preparing and



BROADENING PARTICIPATION IN SICB—CONT.

(Continued from page 6)

successful. The workshop was attended by about 100 members, who engaged the hosts with many questions for the duration of the workshop.

The Diversity Social was again wildly successful again this year. The Social was in the Cityscape room, a beautiful room at the top of the Hilton tower with extensive windows revealing a breathtaking view of San Francisco. A wonderful spread of tasty appetizers and soft drinks, kept the attendees happy and chatting with fellow SICB members well into the night. Cheryl Wilga offered a welcome and thanked the fellows for their thoughtfulness in providing the committee with information that will guide future activities. Of course the highlight of the evening was handing out the

checks to the Travel Award Fellows, who were very appreciative of the support. The committee was touched again at the heartfelt thanks from the travel fellows, many of whom would not otherwise be able to attend, and we look forward to seeing them again at future meetings. The social was attended by members of the BP Committee, many NSF program officers, SICB presidents, SICB Executive Committee members, travel award fellows, and many members. Our sincere thanks to everyone who attended and helped make this annual event a success.

Cheryl Wilga, past Chair, thanks everyone who helped make our plans for increasing participation within the SICB a success.

*Michele Nishiguchi, Chair
Broadening Participation*

*Remarkably, a
bidding war erupted
over the four sets of
Libbie Hyman
volumes,
adding greatly to the
total auction proceeds
of \$5,677!*



DIZ AUCTION—A SUCCESS

Every so often we have the opportunity to enjoy a special fund-raising event at a SICB annual meeting. This past January we witnessed another one of those events in the form of an auction hosted by the Division of Invertebrate Zoology. Earlier in the year SICB members were asked to rummage through their closets and bookshelves to find various “invertebrate” trinkets, books, and what-have-you to sell at an auction to raise money for the Libbie H. Hyman Memorial Scholarship fund. The auction was a great success. The donations included such items as books, clothing, stuffed marine invertebrates, clay model larvae, glass art, and assorted weekends at lovely homes on the coast. The auction netted \$5,677! See the spring 2013 DIZ newsletter for more complete details.



Deadlines:*Symposium**Proposals for 2015**West Palm Beach**Meeting —**Aug 30, 2013**Abstracts for 2014**Austin Meeting —**Aug 26, 2013***Strong Meeting Programs & Responses to Survey—Jon Harrison SICB Program Officer**

The San Francisco meeting was fantastic. In addition to being our largest meeting ever, the member survey rated the meeting very high and the quality of symposia and workshops was outstanding.

I want to promote the outstanding set of symposia we have planned for the Austin meeting. It promises to be a wonderful set of diverse and forward-looking symposia, set in a great town. Put this meeting on your calendar today (Jan. 3-7, 2014)! Here's the symposium list:

Society-wide

The cell's view of animal body plan evolution. Organizers: Deirdre Lyons, Mansi Srivastava and Mark Martindale

Epigenetics: molecular mechanisms through organismal influences. Organizer: Warren Burggren

Sponsored by divisions

DEE, DAB, DCPB: Stress, condition and ornamentation. Organizer: Geoffrey Hill

DCPB: The micro and macro of nutrient effects in animal physiology and ecology. Organizer: Robin Warne, Dan Hahn

DEDB, DCE, DAB: Adaptation or developmental constraint? Uniting evolutionary th2.5

eory and empirical studies. Organizer: Haruka Wada, Kendra Sewall

DCE, DAB, DCPB: Methods and mechanisms in ecoimmunology. Organizers: Cynthia Downs, Jim Adelman; Greg Demas

DCB, DIZ, DVM: Shaking, dripping and drinking: surface-tension phenomena in organismal biology. Organizers: David Hu, Rachel Levy, Lydia Bourouiba

DVM, DNB, DCB, DAB: Terrestrial locomotion: Where do we stand, where are we going? Organizers: Richard Blob, Tim Higham

DCE: Endocrine Disruption in the Ecosystem: Linking Anthropogenic Causes and Effects in Natural Settings. Organizers: Kevin Kelley, Stephen McCormick, Tara Duffy

DAB, DIZ, DNB: Parasitic manipulation of host phenotype, or how to make a zombie. Organizers: Kelly Weinersmith, Zen Faulkes

Post-meeting survey

The society conducted an extensive on-line post-meeting survey. There were 490 total responses. Here are a few highlights.

Overall, respondents rated this meeting very highly; 84% rated the meeting very good or excellent, about the same as last year. 56% rated this meeting better or much better than other societies, again, an identical response to last year. An interesting result was that 54% indicated that they would not be willing to pay more to have free wifi available. Reading the comments, it was clear that many people appreciated the quality of the presentations and symposia, as well as the diversity of the program. Multiple people commented that the meeting was well-organized and student-friendly.

Changes for the Austin meeting made by the SICB Executive Officers in response to the survey:

After consultation with the Program Committee we will seriously consider changing oral presentations from 20 to 15 minutes in length. This change was supported by 60% of the 490 survey respondents, with 12% being neutral, and 29% disagreeing. An important benefit of making a change would be better synching of the contributed sessions and 30 min symposium talks. Another is that it would reduce our need for space.

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We will work with our AV providers to improve support for Mac users, sound and video files, and high quality timers and laser pointers.



STRONG PROGRAM & SURVEY RESPONSES

(Continued from page 8)

We are going to group two or five five-min talks together with five min sessions at the end for questions for the authors. We are going to provide more guidance for five-min talk presenters.

We will ensure that no changes to the scheduling will be made after the program is printed.

We hope to have a greatly improved app for Austin that includes good maps and the ability to link with the on-line personal scheduler.

We will create an on-line schedule grid showing all concurrent sessions.

Several of many items suggested by the survey still to be discussed by the Program Committee:

- ◆ Only allowing one presentation

per individual.

- ◆ Ways to allow speakers to be more interactive with the audience.
- ◆ Increased break/lunch times and/or easier access to food at lunchtime.
- ◆ Improved laser pointers/timers.
- ◆ Outreach to the SICB LGBT community.
- ◆ Better venues for socials.
- ◆ Improving childcare quality and usage.

Call for Symposia for West Palm Beach (2015): It is time to start planning! **The deadline for submission is August 30, 2013.** Here is the link to the application guidelines and form: <http://sicb.org/meetings/2015/>

HAPPY SPRING!- CONT.- BY BILLIE SWALLA

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the Chicago Museum, urging them to reconsider the financial refocusing that they were considering, cutting research and education. The other was an open letter to President Obama, urging him to reject the tar sands pipeline, in light of concerns about Global Climate Change. This was spearheaded by the SICB Advisory Committee, made up of our smart and talented past SICB Presidents. We have also decided to reverse our decision to boycott New Orleans as a meeting site, due to New Orleans City Council May 2011 unanimous vote to reject the teaching of creationism as science and the December 2012 Orleans Parish School Board's decision to prohibit the teaching of creationism or intelligent design in classes designated as science classes.

One of the highlights of the 2013 meetings for me was serving as auctioneer to raise money for the Libbie Hyman Memorial Scholarship

fund. It was a friendly and boisterous affair, with some very fun and memorable things sold. For example, I ended up with some expensive custom knit sea star pot holders, but everyone had a wonderful time. Read more about the auction and the money raised in the DIZ newsletter.

We love our donors, who support the many SICB funds, but we've found that donations have been down the past couple of years. Please consider giving some extra to your favorite fund when you renew your dues. Your contributions are carefully managed and used to support SICB activities, and we are grateful for them. We would like to concentrate on increasing donations to our Moore fund this year, in order to sponsor educational speakers for the John A. Moore Lecture on the last day of each annual meeting. If you would like to get involved with this aspect of SICB, please let me know, we can use your help.

We did an on-line survey after the San Francisco meetings, in order to

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*Gans and Bart
Awards*

Nomination

Deadline

23 August 2013

Member Benefit:

25% Discount on

Oxford University

Press Books

Go to the SICB

Home Page



NOMINATIONS FOR AWARDS NOW OPEN

Carl Gans Award Nominations for 2014.

The Division of Comparative Biomechanics is pleased to announce this year's competition for the annual **Carl Gans Award**. This award is given annually either to an outstanding young investigator (eligible candidates are those who have completed their doctorate within the past seven years) for distinguished contributions to the field of comparative biomechanics, or to an investigator at any level for the single most significant contribution published in the past (2012) calendar year to the literature of comparative biomechanics, including research papers, review articles, and books. For either type of award, candidates may apply directly or be nominated, and must be members of SICB. Past winners of the Bartholomew Award are ineligible to compete for the Gans Award. Application materials shall be submitted to the Award Committee, chaired this year by Dr. Emily Carrington, and comprise either 1)

a short description of their work together with selected reprints (outstanding young investigator), or a copy of a research paper, review article, or book (best contribution to the literature); 2) a curriculum vitae; and 3) three letters of support. Nominators must arrange for these materials (two additional letters of recommendation are required) to be submitted to Chair of the Division (Dr. Mark Denny). The Award Committee will recommend for approval one candidate to the Division Chair, who will authorize reimbursement of appropriate expenses incurred by the winner in attending the annual SICB meeting. The awardee will be presented with a plaque, and according to available funds, the Chair may also authorize a research award. Please send applications/nominations for this award to Dr. Mark Denny at Chair.DCB@SICB.org to be forwarded to the Award Committee. **The deadline for nominations is 23 August 2013.**

Bartholomew Award Nominations for 2014

Each year the Division of Comparative Physiology and Biochemistry awards a prize to a young investigator for distinguished contributions to comparative physiology and biochemistry or to related fields of functional and integrative biology. The formal title for this award is "The George A. Bartholomew Award." Eligible candidates are those who have completed their doctorate within the past seven (7) years (2006 or later) and who are members of the SICB. Candidates for this award may apply themselves or they may be nominated; all candidates will be evaluated equally. Applicants should submit a short description of their work, selected reprints, and a curriculum

vitae to the Art Woods, Chair of the Award Committee (art.woods@mso.umt.edu). Three letters of recommendation should be solicited from colleagues who know of the nominee's work. Nominators must arrange for these same materials to be sent to the award committee chair, except with only two additional letters of recommendation. The person chosen as the recipient of this award will be invited to present a special address at the 2014 SICB Meeting in Austin, TX. In addition to a cash prize, the recipient will be reimbursed for expenses incurred while attending the meeting. Again, send your materials to Art Woods (art.woods@mso.umt.edu). The deadline for nominations is Friday, **23 August 2013.**

*“Experiences—Part 14
in a series
of articles about the
research experiences
of members of SICB.*

*“SICB members
like a good story about
an expedition,
a field experience,
a lab experiment
or another
researcher.”*



A PERUVIAN ADVENTURE AND THE START OF A RESEARCH CAREER— DAVID B. WAKE

(Continued from page 1)

of 1961. Planning was well underway when, about 10 days before departure, everything changed. Another fellow graduate student, Arnold Kluge, had received a Fulbright Fellowship to spend a full year in Australia; accordingly he had had to give up the opportunity to join a joint USC – Los Angeles County Museum expedition to the upper Amazon drainage in south-central Peru, and a place had opened up. I knew there were salamanders in Costa Rica and had wanted to go, but now a more exotic destination beckoned.

My flight from Los Angeles to Lima via Panama was my first on a jet plane – a PanAm Boeing 707. I was thrilled. We had been delayed on our way down and we missed the once-a-week plane from Lima to San Ramón, in the interior. So we rented a cab equipped with a turbocharger and with a “La Oroya” address on the side off the streets of Lima and off we went on the “Great Central Andean Highway.” My companions were well senior to me – postdoc herpetologist Richard Etheridge and Curator of Entomology at the LA County Museum Fred Truxell. We were headed for an oil exploratory camp and our goal was to reach San Ramón in time to catch a late afternoon plane to our destination. Amazingly, everything worked. The road trip over the Andes on a good, mainly unsurfaced, road was exciting. One pass was 4700 m and the next was over 5000 m. The car blew a tire (it was heavily loaded) at the very top and we all got out. The driver advised us to sit, but of course we all got out our cameras and started clambering about. Al-

most immediately both Richard and Fred fainted! Our driver did all the work and soon we were off, arriving in San Ramón just as the sun was setting. Luck was on our side and we got our gear aboard the small plane for the short hop to our destination, Iscozazín, where the pilot also spent the night.

The next six weeks were filled with adventure, starting with our 8 km journey, in a long dugout equipped with a powerful outboard motor, up the Rio Iscozazín to the base camp, a roughly 3 hour journey. This was my first experience in the tropics –everything was new and exciting. The ostensible reason for Richard and me to be on the trip at all was that this was to serve as a launching point for Richard’s planned research on anoline lizards, which he had studied extensively in the Caribbean and in trips to Mexico. He told

many stories about the high diversity of anoles, both in terms of numbers and species, on Puerto Rico and Hispaniola, and we were excited to begin work. I also fully expected to find salamanders, but my background work had not been encouraging. One species, *Bolitoglossa peruviana*, was known only from the holotype. The only other species recorded from Peru, *Bolitoglossa altamazonica*, was known from a long-lost holotype and three other specimens. But I was hopeful and confident that I could find them.

Accommodations were relatively luxurious, with plenty of room for us for sleeping and for a lab. Meals were prepared for us. The only problem was access to the forest,

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A PERUVIAN ADVENTURE AND THE START OF A RESEARCH CAREER— DAVID B. WAKE

(Continued from page 11)

because there were very few trails. Without GPS in those days, we could get lost quickly, especially at night. One night Richard and I became separated. I made it back to camp rather late, to discover Richard was missing. He appeared for a late breakfast the next day, having spent the night out when his lights failed.

We expected to find anoles, but for all our efforts we only found two nondescript brown females that we could not identify to species. No one saw a single salamander! So, we studied frogs, which were varied and abundant. It was the dry season and we eagerly awaited rain. When it started we found lots of frogs. One small pond partly connected to the river yielded a new frog on average every day for 28 days. The frogs were fascinating, and the highlight for me was my discovery of a spectacular large female hylid frog of the genus *Hemiphractus* with 13 large eggs glued

to its back, each egg containing a developing embryo with two eyes looking at me!

Late in the trip we went downriver to the junction with the Rio Palcazu. There was a tiny village there and a school with a very weary and disillusioned young male teacher from Lima. He was desperate for companionship and conversation and urged us to visit him at home, which we did once we had finished collecting for the day. His abode was exceedingly humble and yet he offered us all that he had – a glass of lemon water, which he as-

sured us was safe because everyone knew that lemon killed pathogens. Richard and Fred managed to empty their glasses without drinking, but I made the near-fatal mistake of drinking some. We had a long, trying journey back to the base camp and the next day I was unwell. But it was another 24 hours until I was really hit. I quickly became extremely dehydrated and my companions realized that I needed help. By an amazing coincidence we were visited by a former member of the Nazi military who was residing in a village about 20 a km walk from our camp at a town named Pozuzo, founded by Tyrolean immigrants in the 19th century. He walked out of the trailhead and announced that he was a former military medical doctor. He examined me and insisted that I get to

Lima as soon as possible. The weekly plane was to leave the next day, and by some amazing feats I made the plane, collapsed, and woke up in the Anglo-American Hospital in Lima.

There I spent a week recovering from what was diagnosed as cholera. It was extremely fortunate that I got there so quickly because I had lost 1/6th of my weight in 24 hours. The moral of this story is, if you only have lemons, **don't** make lemonade!

We were nearly at the end of the trip anyway, and when I got out of the hospital Fred and Richard joined me. We flew together to Panama and then went our separate ways. On the spur of the moment I decided I was feeling sufficiently well to

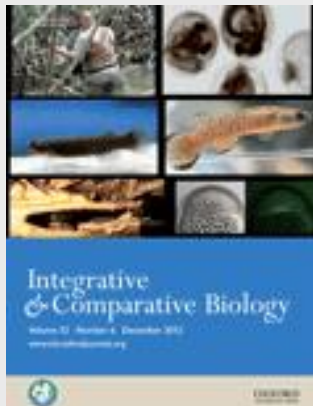
(Continued on page 13)



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A PERUVIAN ADVENTURE AND THE START OF A RESEARCH CAREER— DAVID B. WAKE

(Continued from page 12)

try to accomplish my initial goal of going to Costa Rica, where Jay Savage and his family and several of my fellow graduate students were working. It was a great decision. Bill Bussing and another graduate student, Jim Vial, had rented a house complete with cook and maid and there was a room for me. The lectures in a summer institute run by Jay Savage at the uni-

versity were just starting, and I was able to sit in on several, including one by the legendary tropical ecologist Leslie Holdridge. At last I found tropical salamanders! Jim Vial was conducting his dissertation research on *Bolitoglossa* on Cerro de la Muerte, and salamanders were abundant. I also saw specimens of the only other genera in Costa Rica, *Oedipina* (which superficially resembles *Batrachoseps*, the slender salamanders of California) and the diminutive moss salamanders *Nototriton*. I met many people in Costa Rica, ventured into the field to get the flavor of the country, and was determined to return.

In the end my adventures that summer had great influence on my future career. Importantly, while I was determined to study tropical salamanders in the future, as I indeed did, it became clear to me that it was time for me to get busy in lab work, develop lab skills and establish a foundation on which I could build that might include tropical studies in the future.

When I did begin my studies of tropical salamanders it was at another juncture point in my career. I was in my fifth year as a faculty member at the University of Chicago doing mainly laboratory morphological research when, without applying for the job, I was offered an assistant professorship and assis-

tant curatorship at Berkeley, in the Department of Zoology and the Museum of Vertebrate Zoology. I balked, and Berkeley upped the ante to a tenure-level position that I could not resist. Now was the time to initiate my tropical studies, and I did so, but I opted for Guatemala instead of Costa Rica. This was in the Spring of 1969, just before heading to Berkeley. I went back to Costa Rica, accompa-

nied by my wife Marvalee, in 1971 and again in 1973, and many times since. But, I never managed to get back to Peru. I became engrossed with tropical salamanders and determined not to venture into South America again until I had accomplished my goals in Middle America. I am still working on them.

While the Peru adventure did not directly impact my future research, it was nevertheless a wonderful experience that contributed significantly to my maturation as a person and as a scientist. It served as a break in my headlong determination to be a successful scientist. I never published a word about that summer, and yet it had a lasting influence on me. Strangely enough, it gave me confidence, it resolved some indecision, and it encouraged me to focus on both short and long term goals. The experience also was very important in enabling me to develop a research and teaching program in integrative biology, in which I merged laboratory and field components of my work and developed an organismal-focused program that extended from molecules to communities and from functional and developmental morphology to geographic ecology and biogeography. As our heros of the past from Humboldt to Darwin to Wallace, Bates, and many others, so clearly

*...if you only have
lemons, DON'T make
lemonade!*

(Continued on page 14)

A PERUVIAN ADVENTURE AND THE START OF A RESEARCH CAREER— DAVID B. WAKE

(Continued from page 13)

showed, travel and exposure to new places, peoples, and biological communities have lasting impacts on young minds. I hope young scientists of the future will be able to experience some of the stimulation

I received from my youthful adventures. I made the correct decision in not going directly into research in the tropics, but I have long wondered what might have happened had I chosen a different route.

HAPPY SPRING!- CONT.- BY BILLIE SWALLA

(Continued from page 9)

see how we're doing. The first one was done last year and provided us with many good ideas. Thanks to

them into future meetings. We are also meeting with each of the Chairs of the standing committees to see how we can best help them and what their plans are for the year. We've got a lot of terrific leaders in SICB, and the society is thriving due to the efforts and energy of many people. I especially want to thank the SICB Officers for their input as they are a terrific and insightful group.

The SICB annual meetings are very student-friendly and we love supporting our students to come to the meetings to present their work. One of our concerns this year was that we received so many requests for student support, that students were housed 4 per room, rather than three per room as usually done. By housing students in this way we were able to accommodate financially all of the students that requested support. When surveyed about this, 86% felt that it was a good compromise if we received extra requests for a meeting. 72% of students are willing to pay a higher co-pay to keep the number of meetings a student is supported at three. This kind of feedback is very important when we are juggling budgets and student wishes to find a win-win solution.

Enjoy the SICB Newsletter and warmer, sunny weather!



Billie Swalla—"A spring rainbow view from my office window as Acting Director of Friday Harbor Laboratories, while Ken Sebens is on sabbatical in Italy.

those of you that filled it out, we received 490 responses, which contained great feedback. The SICB officers meet once a week by Skype and go over these comments and ideas to incorporate the best of

Researchers Database

Ever notice the images on the upper left corner of the SICB web page? Submit your photos and brief paragraphs to your **division secretary**.

SICB FINANCES—CONT.

(Continued from page 4)

sites and laboratories for research in FY 2012.

Endowment Report

Endowments are paid out at a rate of 4% of a running 5-year average. For example, a \$25K endowment can pay out \$1K per year of support.

This conservative approach protects the fund from the ups and downs of the market. Therefore many of the named endowment accounts are not able to fully support the programs for which they were created. The remainder comes from directed donations and from the unrestricted endowment general funds.

Name of Fund	Current Amount, Apr 2013	Amount at end of FY 2012	Amount available for current year
Charlotte Mangum	279,117	269,807	10,774
Grants-In-Aid of Research	187,463	186,088	7,399
Symposium Enhancement	125,214	124,945	4,688
George Bartholomew	121,813	120,663	5,028
Carl Gans	35,310	35,210	961
C. Ladd Prosser Symposium	28,302	28,227	1,131
Libby Hyman Scholarship	43,105	28,078	1,500
Dwight D. Davis	10,374	9,324	358
Dorothy M. Skinner	10,306	9,976	178
Adrian M. Wenner	9,187	9,187	370
Howard Bern Lecture	8,949	8,719	0
John A. Moore Lectureship	1,636	1,611	0
TOTAL Named Endowments	851,874	831,835	32,387

Researchers

Database

Send a short paragraph and a photo representing your research to your divisional secretary.

The photos appear on the SICB homepage and change each time the page is refreshed.

This is a great way to recruit students into your laboratory.

A TRIP TO THE WINE COUNTRY

A trip to the California Wine Country was in store for attendees of the annual meeting in San Francisco. The SICB Development Committee offered attendees this very special field trip to two wineries in Napa and Sonoma on January 3. Proceeds from the trip were used to support the SICB Symposium Fund. The photo shows some happy SICB members!



Brooke Flammang Wins Dorothy Skinner Award

The 2013 Dorothy M. Skinner Award was presented to Brooke E. Flammang. Brooke is a postdoctoral research fellow in the Dept. of Organismic and Evolutionary Biology at Harvard University. She received her B.S. degree at Farleigh Dickinson University, an M.S. degree at Cal State University Monterey Bay, and her Ph.D. from Harvard. In San Francisco she presented a paper on "Backwards swimming by bluegill sunfish requires multifin coordination."



*Candidates for
Secretary:*

- *Kathy Dickson*
- *Gary Gillis*

*Ballots will be
issued later in the
spring.*

CANDIDATE PROFILES—SPRING ELECTIONS

Kathryn A. Dickson

Current Position: Chair and Professor of Biological Science, California State University Fullerton, Fullerton, CA.

Education: B.A. Connecticut College (1977); Ph.D. Scripps Institution of Oceanography, University of California at San Diego, CA (1988).

Professional Experience: Assistant Professor, Bucknell University, Lewisburg, PA (1985-1988); Assistant Professor to Professor of Biological Science, Califor-

Other Memberships: Member of the American Institute of Fishery Research Biologists (AIFRB) since 2000, and Secretary since 2008. Vice Director of the Southern and Baja California, Mexico, District of AIFRB in 2004-2009. Member of the American Society of Ichthyologists and Herpetologists. Member of the Southern California Academy of Sciences (SCAS) since 1990. SCAS Board of Directors member in 1996-2001, and SCAS annual meeting organizer and poster session chair.

Research Interests: Comparative Physiology and Biochemistry of Fishes. Evolution, Development, and Consequences of Endothermy in Marine Fishes. Locomotion and Metabolism in Fishes. Functional morphology of larval fishes.

Goals Statement: The Society for Integrative and Comparative Biology (SICB) is a vibrant organization whose strengths are the large number of student and postdoctoral members and its ability to bring together scientists that bridge diverse disciplines to exchange ideas and move the field forward. If elected Secretary, I would hope to continue the improvements that the current secretary has implemented, to ensure effective communication among the membership, and to help guide the Society into the future. I will work to inform others about news of the Society and its members, as well as important issues related to Integrative and Comparative Bi-

ology. I would be honored to give back to a society with which I have been affiliated for most of my academic career, to which I have introduced numerous students via participation in annual meetings, and to work with the Executive Committee in pursuing the SICB mission and goals.



nia State University Fullerton, CA (1988-2013).

SICB Activities: Member of Division of Comparative Physiology and Biochemistry (DCPB) almost continuously since 1980. Also a member of the Division of Vertebrate Morphology. Program Officer of DCPB in 2009-2011. Judge of DCPB Best Student Papers at three meetings.

*Candidates for**Secretary:*

- *Kathy Dickson*
- *Gary Gillis*

Ballots will be issued later in the spring.

CANDIDATE PROFILES—SPRING ELECTIONS

Gary B. Gillis

Current Position: Associate Professor of Biology, Mount Holyoke College, South Hadley, MA.

Education: B.A. History, B.S. Biology, *magna cum laude*, Pacific Lutheran University (1990); Ph.D. University of California, Irvine (1997); Postdoctoral Fellow, Concord Field Station, Harvard University (1998-2002).

Professional Experience: Assistant Professor (2002-2008), Associate Professor (2008-present) Mount



Holyoke College; Half-time Program Director, Physiological and Structural Systems, National Science Foundation (2012-2013).

SICB Activities: Member of the Division of Vertebrate Morphology (DVM) since 1991 and currently also a member of the Division of Comparative Biomechanics and the Division of Comparative Physiology and Biochemistry. Served as Secretary of DVM from 2006-2010, as a member on the SICB Nominating Committee in 2011, and as a judge of student papers/posters most years since becoming a faculty member.

Other Memberships: Society for Experimental Biology

Research Interests: Biomechanics and neuromuscular control of vertebrate locomotion; morphology and evolution of the musculoskeletal system.

Statement of Goals: As attendance at any annual meeting will demonstrate, our Society is rife with impressive scientists at various stages in their career working within and between the major disciplines that still hold organisms as central players in the study of biology. Because of this organismal connection, and because I've been a member for over 20 years now (yikes), SICB feels like my intellectual home. Like any home, SICB requires maintenance and occasional major projects to keep things running smoothly. I see the role of secretary as working to meet those routine maintenance needs and also helping to develop and implement the sorts of changes we'll want to make to remain attractive to potential and current members and to continue to be a strong, national voice for integrative and comparative biology. The stewardship of Lou Burnett over the last 5-6 years has greatly streamlined the maintenance functions of this job, and I look forward to performing and continuing to streamline these functions. But I am especially interested in finding ways to continue to help the society appeal to and nurture young scientists, expand and improve its online presence, experiment with meeting formats and modes of interaction, and find more ways to contribute to STEM education here and abroad. In short, SICB has made great strides in the areas mentioned above over the last five years, and I will do what I can to continue this trajectory.



CANDIDATE PROFILES—SPRING ELECTIONS

Candidates for

Member-At-Large:

- *L. Patricia Hernandez*
- *Scott McWilliams*

Ballots will be issued later in the spring.

L. Patricia Hernandez

Current Position: Associate Professor of Biological Sciences, George Washington University, Washington, DC.

Education: B.Sc. Eckerd College (1987); M. Sc. University of South Florida (1994); Ph.D. Harvard University (1999); Postdoctoral Fellow Wesleyan University (1999-2002).

Professional Experience: 2008-present: Associate Professor, George Washington University; 2002-2008: Assistant Professor, George Washington University; 1999-2002: Postdoctoral Fellow, Wesleyan University; 2001: Visiting

Committee; 2006- Participant in Symposium "Zebrafish in Comparative Context"; 2007-2008 Chair Broadening Participation Committee; 2005: Chair of Nominating committee for DEDB; 2004: Organized roundtable discussion on increasing minority representation within SICB for the Membership Diversity Committee; 2003: Nominating Committee, DEDB; 2002-2005: member of the Membership Diversity Committee; 2001: Chair of Nominating committee for DEDB; 2001: Participant in Symposium "Molecules, Muscles, and Macroevolution"; 2000-2002: Graduate Student/Postdoctoral Representative-DEDB

Other Memberships: International Society for Vertebrate Morphology; Society for Developmental Biology; American Society of Ichthyologists and Herpetologists

Research Interests: vertebrate morphological evolution; evolutionary developmental biology; comparative anatomy; craniofacial development; cypriniform fishes

Statement of Goals: The strength of SICB is found in its interdisciplinary approach to science. Some of our greatest meetings have been characterized by symposia that encompass the interests of a seemingly disparate group of researchers. As SICB Member-at-Large I will strive to foster this tradition of truly interdisciplinary investigation. Representing the entirety of our society requires that a researcher be aware of the work within many divisions. Having strong allegiance to several divisions within the society as well as having served as program officer where I gained much knowledge about the research presented in many other divisions will allow me to perform my duties as Member-at-Large much more effectively.



Professor, University of Washington Friday Harbor; 1999-2000: Visiting Professor, Wesleyan University; 1992-1993: Adjunct Instructor, Eckerd College

SICB Activities: 2010-2013- Program Officer for the Division of Evolutionary Developmental Biology; 2007-2009- Student Support

CANDIDATE PROFILES—SPRING ELECTIONS

Candidates for Member-At-Large:

- *L. Patricia Hernandez*
- *Scott McWilliams*

*Ballots will be
issued later in the
spring.*

Scott McWilliams

Current Position: Professor of Physiology and Ecology, University of Rhode Island, Kingston, RI.

Education: B.Sc. with Honors. Hiram College (1980); M.Sc. Iowa State University (1986); Ph.D. University of California at Davis (1993); Postdoctoral Fellow (1994-97) University of Wisconsin at Madison.

Professional Experience: Faculty Associate (1997) University of Wisconsin at Madison; Assistant Professor (1998-2003) University of Rhode Island; Associate Professor (2003-2008) University of Rhode Island; Professor (2009-now) University of Rhode Island.

SICB Activities: Member of Division of Animal Behavior (DAB), Comparative Physiology & Biochemistry (DCPB), and Ecology & Evolution (DEE) since 1990s. Regular participant as invited

speaker in various SICB Symposia at annual meetings. Served regularly on Student Awards Committees for various Divisions, served on workshop panel for the Broadening Participation Committee, and this past year served on the SICB DEE Nominations Committee. I faithfully attend as many social functions as provided at SICB annual meetings.

Other Memberships: Fellow of the American Ornithologist's Union, and AAAS. Member of the AOU, Cooper Ornithological Society, The Wildlife Society, Ecological Society of America, and The Nature Conservancy. Regular co-organizer of symposia at

the North American Ornithological Congress, International Ornithological Congress, American Physiological Society, among others. Editorial Board for *Zoology* (2003-10), *Physiological and Biochemical Zoology* (2008 – present), *Auk* (2006-09), *Oecologia* (2009 – present).

Research Interests: Nutritional and Physiological Ecology, Exercise Physiology and Energetics, Stable Isotope Ecology, Behavioral Ecology, Conservation Biology.

Statement of Goals: The Society for Integrative and Comparative Biology (SICB) has a tradition of excellent student-friendly and stimulating annual meetings, and has played a critical role in communicating our brand of science to a broad audience of our peers, colleagues at key funding agencies, and to the public at large. Leadership within SICB should strive to continue these traditions while looking forward – this includes ensuring that stimulating symposia remain the backbone of our annual meetings, that students and early-career scientists from our diverse divisions are encouraged to attend the meetings and engage with more established scientists in as many ways as possible, and that our science is shared in stimulating ways to as many as possible. We should also strive to be the go-to society for innovation in science at large – the recent Grand Challenges initiative is a great example of what we should be doing on all fronts (i.e., future research, teaching, and outreach). In short, I am committed to strengthening SICB through excellent national meetings, outreach and education, and building our future through support and engagement with our student and early-career colleagues in science.

