Director’s Corner

Here we stand at the end of another SCAS cycle looking forward to summer. I hope the summer season will be productive and restful for all of you. As the President for the last two years, I would like to thank all of you for your support of the Academy, and I would like to thank the Board of Directors for their hard work and many efforts on behalf of the Academy. These folks have worked hard to prepare this and each annual meeting, which I always enjoy and has been for many years a great success and tribute the quality of scientific research and fellowship within the Academy and its members and friends.

I would like to take this opportunity to announce to you that the Board of Directors has elected several members as Fellows of the Academy in honor of their long and outstanding service. I am very please to announce that the new fellows are Dr. David Soltz, Dr. Robert Grove, Dr. David Huckaby, Dr. Dan Pondella, Dr. Ralph Appy, Dr. John Dorsey, Dr. Dan Guthrie, and Dr. Robert Phalen. Please join me in congratulating them. Well Done!

And a personal thank you to all the members of the Board of Directors: Dan Guthrie, Gloria Takahashi, Robert Grove, Jim Allen, Judy Lemus, Philipa Drennan, Jon Baskin, Darren Sandquist, Andrea Murray, John Dorsey, Sabrina Drill, Julienne Kalman, Kathy Keane, Dan Pondella, Edith Read, John Roberts, Jerry Schubel, and Sue Yoder; for making these last two years as President enjoyable and successful. All the credit for the last two years goes to all of these folks.

Next, I would like to share some ideas based on my opinion that the Bulletin should function as an organ for the provision of information to the SCAS membership, the scientific community at large, and the interested public. Specifically, the Bulletin should report on research activities of SCAS members, scientific research performed in Southern California, and research that is generally of interest to the membership. Additionally, the Bulletin should report on public policy and regulations that affect science and the application of science as practiced by the membership. This is exactly where you, as a member of the Academy, can make an impact. If you have a research article, I urge you to submit that article to the Academy for publication in the Bulletin.

SCIENCE SPOTLIGHT

New Zealand Mudsnaills Invade Southern California

The New Zealand mudsnail, *Potamopyrgus antipodarum*, is an aquatic invasive species that was first found in the United States in Idaho in the 1987, and has since spread to every Western state except New Mexico. They appeared in California in the late 1990’s in the Owens River, and were found in southern California in samples collected by Heal the Bay’s Malibu Creek Stream Team at several sites in the Malibu Creek watershed in September 2005. In January of 2006, a field crew from the California Department of Fish and Game’s Heritage and Wild Trout Program found the snails in Piru Creek in the Santa Clara River watershed while searching for another invasive species, the parasite that causes whirling disease. Rapid surveys were conducted in Malibu Creek and nearby watersheds in the Santa Monica Mountains in July 2006 and again in July 2007 by Heal the Bay, Santa Monica Baykeeper, and the Santa Monica Bay Restoration Commission (available at www.healthebay.org). They found that snails spread to several sites in the Malibu Creek watershed in 2006 and 2007, and to nearby Solstice Creek by 2007. Recent visits to the Santa Clara watershed only found New Zealand mudsnails at the previously identified location in Piru Creek, but a more detailed monitoring program is being established.

New Zealand mudsnails are tiny, with adults only reaching 3-5 mm and juveniles even smaller, about the size of a grain of sand. They are usually light to dark brown, and may appear black when wet. They have coni-
The best way to manage New Zealand mudsnails and other invasive species is to try and prevent them from spreading. Stay out of infected streams and do NOT go from one stream to another in wet gear. If you need to go into an infected stream, consider having dedicated clothes and gear that you don’t wear anywhere else. Scrub all gear with a stiff brush before you leave an infected site; mudsnails are experts at hiding, so you can’t trust a visual inspection. Let all gear dry completely between visits, or freeze for a minimum of six hours between uses. Copper sulfate and chlorine bleach can be used for chemical decontamination, see the California Department of Fish and Game’s New Zealand mudsnail web site, below for detailed instructions.

If you think you have seen New Zealand mudsnails in a southern California stream please contact Sabrina Drill at sldrill@ucdavis.edu. There are local lymnaeid snails that appear similar, but usually have four whorls as opposed to five.

For more information about New Zealand Mudsnails, visit

http://www.dfg.ca.gov/fishing/html/Administration/MudSnail/Mudsnail_0.htm

http://www.esg.montana.edu/aim/mollusca/nzms/

and for general information about Aquatic Nuisance Species, see http://www.anstaskforce.gov/
The American Junior Academy of Science (AJAS) Annual convention was held in conjunction with the American Association for the Advancement of Science in Boston during February 13 – 17, 2008. Five of the current Southern California Junior Academy of Sciences (SCJAS) Research Training Program (RTP) students attended the meeting. These included Julie Guerin (Palos Verdes Peninsula HS), Brian Li, and Swati Yanamadala (Chadwick School), Jingyi (Jenny) Wang (Arcadia HS), and Timothy Wu (University HS, Irvine). Their investigations included topics in mathematics, molecular biology, marine biology, computer simulation and ecology. As always, Boston during early February was cold with snow and ice on the ground, but our students had a memorable and educational time.

The first day (Thursday) in Boston began with a full day of visiting the Massachusetts Institute of Technology and a talk from Dr. Eric Landers (Human Genome Project) of the Broad Institute. The evening was spent at Boston’s Museum of Science. On Friday, the students attended the AJAS Breakfast With Scientists, where they received insight on various science disciplines. During the afternoon, they displayed their posters and discussed their projects at the AJAS Poster Session which was held at the Hynes Convention Center. Saturday morning was the time for the AJAS Orals Presentations where each of the students attending shared their research findings with other students from throughout the nation. One session focused on the discussion of the creativity aspect of the students’ research. Saturday night concluded the AJAS Meeting with the NAAS/AJAS Awards Banquet and dance which was held at the Marriott Copley in Copley Square.

During the meetings, we had several chance meetings with past RTP students. One was Madhvi Venkatesh (2006-07), who was in attendance representing UC Berkeley in the college poster sessions. A second student was Jason Hui, and his wife and baby, who represented the SCJAS in 1993 (also in Boston). Jason is now an electrical engineer (PhD UCLA) working in the New Hampshire area. Our final chance meeting was with Carol Suh (2006-07) who is a freshman at Harvard. She gave a quick tour of Harvard for our students before their departure in the late evening. All in all, it was a great and rewarding experience for our research training students. Funds from L’Oreal, the Cal Poly Pomona HHMI outreach program and SCAS helped defray some costs of attending the meeting. Let’s hope we have another great group of students representing the SCAS next year in Chicago, again in February… brrrrhhh!

Four participants in the AAAS Meeting held in Boston Feb. 13-17, 2008. The gentleman on the left is unknown; the remaining three are Jenny Wang (Arcadia HS), Timothy Wu (University HS) and Julie Guerin (Palos Verdes Peninsula HS).

Director’s Corner, continued

would further urge you to present the results of that research at the Academy’s annual meeting. After all, the Academy and the Bulletin are only as good as its active membership. So, my first challenge is to ask each of you to submit one article this year to the Bulletin.

Finally, I challenge each of you to find and recruit one new member for SCAS. As a scientist in Southern California and as a SCAS member I am sure you have benefited from your membership in the Academy and have enjoyed the annual meetings. I am certain that there are many potential members out there who would also benefit from membership. I urge you to go to your students, your colleagues, your mentors, and encourage them to participate in the Academy. The more active members we have, the stronger and more vigorous our Academy will be, which will foster greater benefit to all.

--Brad Blood
On November 6, 1891, a group of people gathered to form “The Science Association” of Los Angeles. Later the name was changed to “Southern California Academy of Sciences.” In January 1901 the first issue of the Bulletin appeared. Originally it was hoped that the Bulletin could be published monthly but after publishing ten issues in volume 1 and nine issues each in volumes 2 through 4, the number was reduced for financial reasons. The number of issues per year fluctuated from one to six from volumes 5 through 23. The subject titles for papers published in the Bulletin have been summarized in an Index to the Bulletin of the Southern California of Sciences. As the 21st century is still a relatively new concern, it might be interesting to revisit what topics were of interest to the natural scientists exploring new horizons at the dawn of the 20th century. What follows is a listing of paper titles published in Volume 1 of the Bulletin of the Southern California Academy of Sciences, 1901.

Davidson, A. -- A New Zauschneria.
Parish, S.B. -- Aster Greatai.

In future issues of The Smilodon, we’ll plan to publish excerpts from some of these papers as a means of inspiring the creative juices of our current crop of scientists. If you have any questions regarding these titles, or would be interested in obtaining copies of one or more of these papers for your own edification, articles published in the Bulletin are searchable on the BioOne online search engine.

Cambridge University has made the bulk of their holdings of the collected papers of Charles Darwin available online at no charge to the public. Darwin Online contains 43,869 searchable pages and 148,867 page images (not including 400 PDFs & 2800 illustrations). The site contains everything from diaries and field notes to Emma Darwin’s recipes for pea soup. Access the site at http://darwin-online.org.uk/. 