

Sigma Xi Today

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Jaime Parada Avila Joins Speakers for Sigma Xi Forum in Los Angeles

For complete program and registration information, visit <http://sigmaxi.org/meetings/forum/>

Jaime Parada Avila, director general of Mexico's National Council for Science and Technology (CONACYT), has joined a stellar list of speakers for Sigma Xi's 2003 Forum, *Science & Engineering: Keys to International Understanding*, to be held November 12-13 at the Hyatt Regency Macy's Plaza in Los Angeles.

The conference will focus, in part, on scientific capacity and collaboration with Mexico, featuring participation from organizations such as CONACYT, the United States-Mexico Foundation for Science (FUMEC) and the California-Mexico Commission on Education, Science and Technology.

It's not too late to register for what promises to be an exciting meeting. The forum is open to the public, and Sigma Xi members receive a substantial registration discount. Secure online registration is available on the Society's Web site.

As one of the forum's keynote speakers, Parada Avila will present an overview of Mexico's science and technology policy, research partner-

ships and the North American Free Trade Agreement (NAFTA).

All forum sessions will tie into the role of scientific and engineering communication and collaboration as an enabler for international understanding.

Other forum speakers and moderators include Nobel laureate **Norman Borlaug**, Texas A&M University; **Mary T. Kalin Arroyo**, University of Chile; **Francisco Ayala**, University of California, Irvine; **Mohamed Hassan**, Third World Academy of Sciences; and **José A. de la Peña**, Instituto de Matemáticas, Universidad Nacional Autónoma de México (UNAM).

They will be joined on the program by Sigma Xi President **Peter Raven**, Missouri Botanical Garden; **José Sarukhán**, Instituto de Ecología, UNAM; and **Gerson Sher**, U.S. Civilian Research and Development Foundation.

Additional speakers include **Michael Crosby**, National Science Foundation; **Lisbeth Fog**, Colombian Association of Science Journalism; **Phillip Griffiths**, Science Institutes Group; **Susan Hackwood**, California Council on Science and Technology; **Linda Mantel**, Association for Women in Science; and **Nelson Torto**, Southern and Eastern Africa Network of Analytical Chemists.

This year's forum will provide a variety of networking opportunities with a networking lunch, concurrent sessions and social events.

The 2003 Sigma Xi Forum will serve as the culmination of Sigma Xi's Packard International Science Networking Initiative and the bridge to the Society's future international programs.

Calling All Postdocs!

The Sigma Xi Postdoc Survey offers a great opportunity to contribute to the first multi-institutional, comprehensive collection of information about the postdoc experience.

The core mission of the survey is to collect data that can be utilized by institutions, policy makers and funding agencies in order to enhance and optimize the post-doctoral research experience.

To this end, we seek to survey a majority of the 50,000 postdocs currently working in academia, government and industry. Surveys will be administered to postdocs at registered institutions and will include locally-designed questions as a supplement to the core questionnaire.

Sigma Xi conducted the pilot study with great success this fall at Georgetown University, National Institute of Environmental Health Sciences, University of California at San Diego, University of North Carolina at Chapel Hill and University of Pittsburgh.

The main survey will launch in early 2004. This research is funded by the Alfred P. Sloan Foundation. The National Post-doctoral Association, *Science's Next Wave*, and The Bureau of Economic Research are Sigma Xi's partners in the project.

For more information, please contact principal investigator Geoff Davis or project manager Jenny Zilaro at 800-243-6534, by e-mail at postdoc@sigmaxi.org or through the project Web site at <http://postdoc.sigmaxi.org/>.

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Honoring Others with Your Gift to the Sigma Xi Center

The new Sigma Xi Center is scheduled to open in December in Research Triangle Park, North Carolina. But it's not too late to honor someone with a gift to the building fund.

The opportunity to honor those who have inspired and guided others has special significance for Sigma Xi members, as companions in research. Those making tax-deductible gifts of \$100 or more to the building fund in honor of someone have the option of writing a brief tribute that will be linked online with the honoree's name.

A donation or pledge of \$1,000 or more will be acknowledged by inscribing your name and that of your honoree on a paving stone in the plaza near the entrance. Pledges are payable over three years if preferred. The second installation of plaza paving stones will be completed this spring.



*In honor of
Ernst Cleveland Abbe...*

University of Minnesota botanist Ernst Cleveland Abbe was recognized with fondest regards for demanding one's best performance as well as for his great compassion and nurturing skills. Many students paid him a high honor by copying his noteworthy teaching style.

--Richard L. Meyer

The Sigma Xi Center plaza has been designed for informal gatherings and, like the building itself, will be a popular venue. Benches installed around the open-air patio will invite visitors to linger in this place of honor.

Make a contribution online through a secure capital campaign contribution form at www.sigmaxi.org, or mail your building fund donation to the Office of Development and Communications, Sigma Xi, P.O. Box 13975, Research Triangle Park, NC 27709.

Further details about the building campaign and up-to-date construction photos also are available online.

For information about naming opportunities within the building, write to the address above, contact development@sigmaxi.org or call 800-243-6534.

Car Insurance Discount Added to Member Benefits

A new money-saving benefit was recently added to the growing list of discounts and other perks available to active, dues-paying Sigma Xi members. The Society has arranged through GEICO to give Sigma Xi members an 8 percent discount on car insurance.

"We are constantly looking for ways to increase the value of Sigma Xi membership," says Pam Blondin, director of membership and chapter programs. "This car insurance discount through GEICO could be of benefit to a great many Sigma Xi members."

To find out how much you could save with GEICO, call 800-368-2734, and be sure to mention that you are a Sigma Xi member. If you already have a GEICO policy, call to discuss whether you qualify for the Sigma Xi member discount.

GEICO Auto Insurance has been saving drivers money since 1936. The 8 percent discount for Sigma Xi members is available in 42 states plus the District of Columbia.

In addition, GEICO offers money-saving discounts such as multi-car, five-year good driver, 50 plus, anti-lock brake and anti-theft device. The company also offers convenient payment plans, 24-hour access for sales, service and claims, as well as a nationwide network of claims adjusters.

Among other Sigma Xi membership benefits are the Wells Fargo Capital for Knowledge student loan program, subscription discounts on *Nature* and *Annual Reviews*, Hertz rental car discounts, a Sigma Xi credit card, guided tours to exotic destinations through Sigma Xi Expeditions and free daily Science in the News e-mail bulletins.

"Increasingly, Sigma Xi members are taking advantage of services and benefits via our members-only Web site," Blondin says. "You can pay dues, register a change of address, sign up for free e-newsletters and nominate new Sigma Xi members--all online."

For more details on these and other Sigma Xi membership benefits, services and programs, visit www.sigmaxi.org or contact memberinfo@sigmaxi.org.

Researcher Develops New Method of Identifying Great White Sharks

This is one in a series of profiles on recent Sigma Xi Grants-in-Aid of Research recipients. Application deadlines are October 15 and March 15 annually. Visit www.sigmaxi.org for more information.

When Swiss-born Michael C. Scholl first arrived in South Africa in 1997, he had never seen a great white shark. Before long, he started working with a couple of commercial diving companies as a dive master and shark guide for tourists.

But it was just a way to earn a living, for his true reason for coming to South Africa was to conduct research on these mysterious animals. Then, he managed to purchase a boat and embarked on his life's work, based out of the small fishing village of Gansbaai between Cape Town and Cape Agulhas, the southernmost point of Africa.

"I used the first few months to look at potential research projects," the zoologist recalls, "and soon realized that tagging these sharks just did not represent a viable method of identifying them over the long run."

As he discovered in the waters around Dyer Island, tags were soon overgrown by algae or torn off. It was in late 1997 that he first attempted to use photographs to identify individual sharks.

More than five years and 40,000 photographs later, Scholl has established an efficient means of identifying great white sharks. "Most of these images have to be scanned in and analyzed," he says, "and a Sigma Xi Grant-in-Aid of Research made this procedure much faster."

The University of Cape Town graduate student used his grant to

purchase an adapter for a film scanner that automatically scans an entire roll of film. This saves a lot of time that can be used in more productive ways.

So far, Scholl has identified more than 700 sharks, which constitutes the largest white shark database in the world. His work has drawn interest from scientists internationally and is aiding investigations of shark movements along the South African coast.



Shark researcher Michael Scholl

Scholl's passion for sharks has led him to work with one of the best-known

species, at least in terms of the popular imagination. But the great white remains a mystery. "Very little is understood about its ecology, its biology and its behavior."

To advance research, education and conservation, Scholl founded the non-profit White Shark Trust, which last year began offering field research assistantships for biologists, students and shark enthusiasts. For more information, visit www.WhiteSharkTrust.org.

"Working with and observing this wonderful animal in its environment is a real honor. I enjoy every minute of my work," Scholl says. "The project is constantly evolving in new and different directions."

Since 1922, Sigma Xi has made an investment in the future of science and engineering by providing grants to student researchers. Often, Sigma Xi grants provide the "seed money" that enables young scientists to gather the initial data they need to launch their careers and compete for larger grants. Receiving a Sigma Xi grant has been an early milestone in many distinguished research careers.

Sigma Xi Partners with MentorNet

Mentoring the next generation of researchers has long been a priority for Sigma Xi members. The Society is expanding opportunities in this area by partnering with MentorNet, the award-winning e-mail mentoring network for students in science and engineering.

Founded in 1997, non-profit MentorNet is the first and largest program of its kind to address the retention and success of students in engineering, science and mathematics.

The online service was begun as a "women in science" project, but its success has led to interest among men, and especially minority scientists, who are seeking a sense of community and support while studying.

Visit www.sigmaxi.org to learn more about this program and to sign up as a prospective mentor, student or postdoc.

MentorNet pairs community college, undergraduate and graduate students and postdocs with mentors in industry and academia for e-mail-based mentoring relationships. Participants say e-mail facilitates an efficient and productive exchange that makes mentoring easy to work into fast-paced schedules.

In addition, the MentorNet E-Forum offers Web-based discussion groups for anyone interested in such topics as work/life balance, job searching and graduate school.

"One of our goals is to see if there is enough interest among minority scientists and engineers in developing an e-mentoring program like MentorNet dedicated to minority science and engineering students," says Linda Schmalbeck, Sigma Xi manager of education programs. "We are hoping to work on this in the future with MentorNet, the JustGarciaHill Web site and *Science's Next Wave's* MiSciNet."

Sigma Xi News Briefs

Keep Up With Science News

Looking for an easy, free way to stay abreast of interesting science and engineering news? As a Sigma Xi member, that resource is already at your fingertips-literally.

Sign up by sending an e-mail to listserv@listserver.sigmaxi.org. In the body of the e-mail message, type: subscribe science-in-the-news (making sure not to include a period).

That's it. Each weekday you will receive an e-mail with links to science-related stories appearing in the mainstream media. You can also opt for Sigma Xi's new "Science in the News Weekly" service, produced in conjunction with *American Scientist Online*.

"Weekly" provides a recap of the previous week's "Science in the News," as well as highlights from weekend coverage not normally included in the daily version.

Sample both the daily and weekly bulletins by visiting the "Science in the News" link at www.sigmaxi.org.

"Science in the News" is designed to help Sigma Xi members keep up with advancements in science and technology, and also gain a better understanding of which advancements or science-related policies typically garner the most news coverage, and the way they are portrayed by the general media.

Is it effective? Here's what our readers say:

A young faculty member juggling new obligations: "I love your service! I'm always up-to-date, even though, as a new faculty member, I don't have time to peruse the daily press myself. Thanks millions!"

An industry researcher: "Just wanted to thank you for this invaluable service. I look forward to it every day and have learned a great deal

from it, despite the fact that I read regularly over 20 journals!"

A professor teaching both career- and non-career-track college students: "'Science in the News' is consistently the most welcome item in my Inbox-timely and interesting and especially amenable to dissemination among friends involved in science education. For my purposes as a teaching scientist, it couldn't be better!"

Raven Wins Cosmos Prize

Sigma Xi President Peter H. Raven, director of the Missouri Botanical Garden, has received the 2003 International Cosmos Prize, one of the world's top environmental awards, presented annually by the Expo '90 Foundation of Japan.

Raven was honored for his "outstanding research work and achievement concerning all life phenomena on Earth embodied in flowers and greenery."

An advocate of sustainable living and biodiversity, the distinguished botanist has written extensively about plant extinction and ways to avert it.

A Sigma Xi member for 45 years, Raven has led the Missouri Botanical Garden for more than three decades.

In Memoriam: Fred Robbins

Nobel laureate Frederick C. Robbins, who served as 1995-96 president of Sigma Xi, will long be remembered for his work on growing polio virus in culture, a key research breakthrough that led to the development of both the Sabin and Salk vaccines.

Robbins was medical dean emeritus at Case Western Reserve University. He died August 4 of congestive heart failure at a hospital in Cleveland.

A former president of the Institute of Medicine in Washington, D.C., Robbins served on its board of international health, co-chairing the vaccine action program between the U.S. and India.



High School Science Fair Teams Receive Sigma Xi Awards

More than 1,300 young scientists from nearly 40 countries participated at this year's Intel International Science and Engineering Fair in Cleveland, Ohio. Three team projects, judged to best exemplify the interdisciplinary aspects of scientific and engineering research, received Sigma Xi awards. Shown (from left) are second place winners Lee Perry, Frank Block and Satish Mahalingham of Little Rock, Arkansas; first place winners Kyle Marsland, Blair Kowalinski and Wesley Fuller of Chandler, Arizona; and third place winners Jillian Beaufeaux and Kirsti Hakala of Cloquet, Minnesota. The teams received prizes of \$1,000, \$450 and \$300 respectively.