

# Sigma Xi Today

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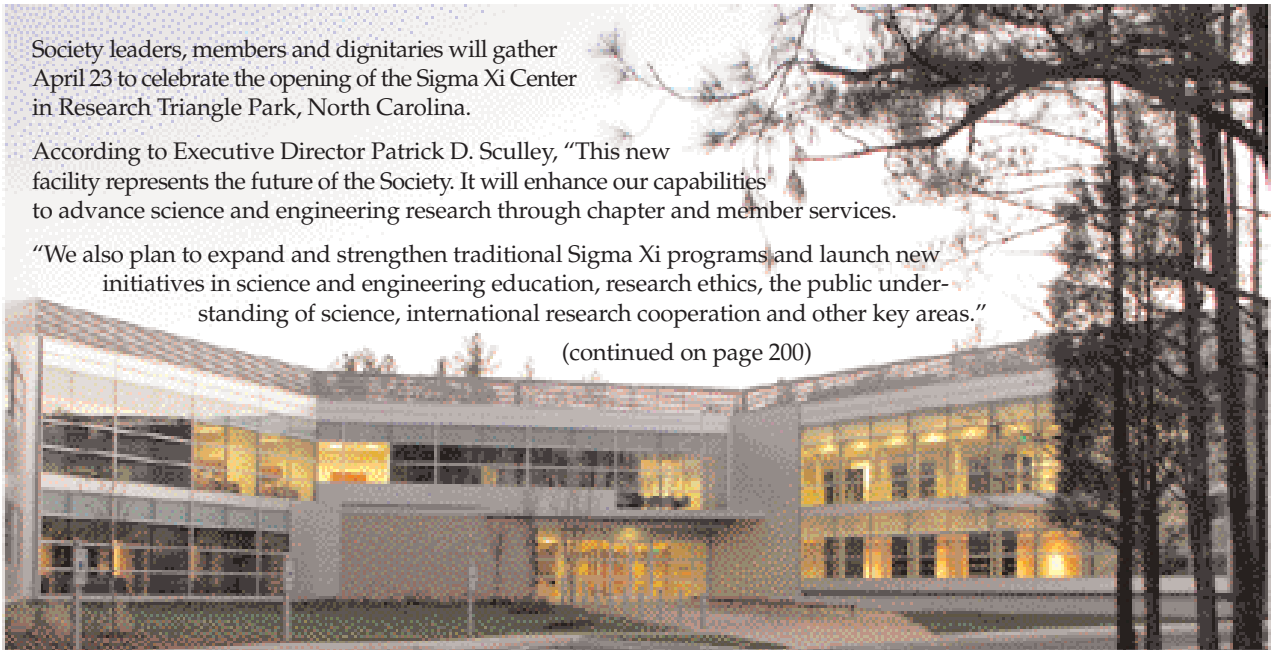
## Sigma Xi Center Opening Celebration Set for April 23

Society leaders, members and dignitaries will gather April 23 to celebrate the opening of the Sigma Xi Center in Research Triangle Park, North Carolina.

According to Executive Director Patrick D. Sculley, "This new facility represents the future of the Society. It will enhance our capabilities to advance science and engineering research through chapter and member services.

"We also plan to expand and strengthen traditional Sigma Xi programs and launch new initiatives in science and engineering education, research ethics, the public understanding of science, international research cooperation and other key areas."

(continued on page 200)



The Sigma Xi Center (clockwise from top) at sunset, entrance with honoree pavers, lobby stairway, wooded entry and *American Scientist* library. Photos courtesy of Phyllis M. Fuller



### I N S I D E

Hawthorne Wins Ferst Award	198
Packard Initiative Concludes	198
Student Conference Update	199
E-Mentoring Opens Doors	200

## Hawthorne Receives Monie Ferst Award



University of California at Los Angeles chemist M. Frederick Hawthorne will be honored at a symposium at UCLA this spring as the recipient of the 2003 Monie A. Ferst Award.

Presented annually by the Georgia Institute of Technology Chapter of Sigma Xi, the Ferst Award is a national honor that recognizes those who have made outstanding contributions to research through teaching and supervising graduate students.

Hawthorne was born in Fort Scott, Kansas, graduated from Pomona College and received his Ph.D. in organic chemistry at UCLA.

Following postdoctoral work at Iowa State University, he joined the Rohm and Haas Company, Redstone Arsenal Research Division in Huntsville, Alabama, as a senior research chemist.

In 1956, Hawthorne launched his career in borane cluster chemistry by organizing and leading the Organometallic Chemistry Group at Rohm and Haas, Redstone. He later served as a laboratory head with the company in Philadelphia.

In 1962, he became a full professor at the University of California, Riverside, transferring to his present position at the Los Angeles campus in 1969. In 1998 he was appointed University Professor of Chemistry.

Hawthorne is the author or co-author of more than 510 research papers, 32 patents and nine book chapters that reflect the joint efforts of approximately 200 Ph.D. students and postdoctoral associates and 11 Ph.D. co-workers at Rohm and Haas, Redstone.

His students and postdoctoral associates represent 25 different countries, and 35 of them now occupy academic positions. One of them, Anna Lee Fisher, was a space shuttle astronaut.

A member of the National Academy of Sciences and the American Academy of Arts and Sciences, Hawthorne has received the UCLA McCoy and Seaborg Awards for Contributions to Chemistry and numerous awards from the American Chemical Society (ACS). He is also a fellow in the American Association for the Advancement of Science.

In recognition of his seminal contributions to borane cluster chemistry, Hawthorne was the first recipient of the Boron USA Award for Distinguished Achievements in Boron Chemistry.

In 1988, he was the recipient of the ACS Award for Distinguished Service in the Advancement of Inorganic Chemistry. He has also received a Chemical Pioneer Award from the American Institute of Chemists and the Willard Gibbs Medal and the Basolo Medal from the Chicago Section of the ACS.

Hawthorne has served and continues to serve on many boards and committees associated with the National Academy of Sciences and its National Research Council.

Hawthorne serves on the editorial advisory boards of *Bioconjugate Chemistry* and the *Bulletin of the Chemical Society of Japan*. During his many years of service as editor of *Inorganic Chemistry* (1968-2001), the journal grew into a biweekly publication with an unsurpassed international reputation.

Sigma Xi's Monie A. Ferst Award is named for an outstanding engineer and businessman who was a graduate of Georgia Tech. Nomination guidelines are available under the Programs section of the Sigma Xi Web site [www.sigmaxi.org](http://www.sigmaxi.org).

## Sigma Xi Forum Concludes Packard Initiative

Individuals from 18 different countries convened in Los Angeles for Sigma Xi's 2003 Forum, *Science & Engineering: Keys to International Understanding*, on November 12-13.

Six plenary talks and 12 concurrent sessions addressed scientific outreach of global organizations, regional efforts and scientific development, and scientific capacity and collaboration with Mexico. The proceedings will be published on the Sigma Xi Web site.

The 2003 Forum brought the Packard International Science Networking Initiative to a close. Sponsored by a grant from the David and Lucile Packard Foundation, the Packard Initiative was designed to facilitate interaction between scientists in developing/transitional countries and research colleagues around the world.

Eighteen groups in 14 different countries received awards for student awards and research grants, the creation of Web sites, initial membership dues, lecture programs, science fairs and research symposia.

In addition, funds were allocated for Grants-in-Aid of Research and special Distinguished Lectureships.

Sigma Xi partnered with several organizations to hold an international workshop in Tbilisi, Georgia.

An International Resources Web site, an International Newsletter and a full-text online archive were created to make information more accessible. A pilot program provided researchers an affordable model for establishing local Sigma Xi groups called Sigma Xi International Partners.

Over the next few months, Sigma Xi will continue to evaluate the Society's role in the international arena, form partnerships and seek support to work on additional programs.



Robert Lee Hotz, Sigma Xi President Peter Raven and Edwin H. Kiester, Jr.

## Hotz, Kiester Become Honorary Members

Two distinguished science journalists, Robert Lee Hotz and Edwin H. Kiester, Jr., were inducted as honorary life members of Sigma Xi at the 2003 Annual Meeting in Los Angeles.

Hotz covers science, medicine and technology for the *Los Angeles Times*, where, in 1995, he shared a Pulitzer Prize with colleagues for spot news coverage of the Northridge earthquake. He was a Pulitzer finalist in 1986 for his coverage of genetic engineering issues. Hotz is the author or editor of several books on biological topics, including *Designs on Life: Exploring the New Frontiers of Human Fertility*.

His career has included stints at the *Atlanta Journal-Constitution* and the *Pittsburgh Press*. Among his many honors are the Walter Sullivan Award from the American Geophysical Union and the American Association for the Advancement of Science-Westinghouse Science Writing Award.

Hotz serves on the advisory board of the Pacific Center for Health Policy and Ethics at the University of Southern California and is treasurer of the National Association of Science Writers. He received his B.A. in English and M.A. in theater history from Tufts University.

While pursuing a journalism degree at the University of Pittsburgh, Kiester worked as a reporter for the *Pittsburgh Sun-Telegraph*. During military service in 1946-47, he was assigned to the Armed Forces Radio Network station in Frankfurt, Germany.

He returned to the University of Pittsburgh to complete his degree and then joined the staff of *Parade Magazine* as a reporter and editor. In addition, Kiester's lively and enlightening freelance science articles have been widely published in such magazines as *Discover*, *Smithsonian* and *Reader's Digest*, among many others.

His books include *The Complete Guide To Child Care From Birth to 6*, which he wrote in collaboration with his wife Sally. He has also edited *Better Homes and Gardens' New Family Medical Guide*.

Kiester has made important subjects in natural science understandable and accessible to the general public. After living in California for many years, he now resides in Pittsburgh.

Since 1983 the Sigma Xi Board of Directors has bestowed honorary life membership for distinguished service to science or to the Society.

## Student Conference Has Outstanding Research Posters

Undergraduate students from more than 90 institutions participated November 14-15 in the 2003 Sigma Xi Student Research Conference, sponsored by the National Institute of Environmental Health Sciences.

The conference in Los Angeles, California, drew students from across North America, Puerto Rico and one foreign nation. More than 350 students, parents, mentors and exhibitors attended lectures and workshops and networked at a variety of social events.

Conference speakers included Darleane Hoffman, National Medal of Science winner and 2003 Sigma Xi Procter Prize recipient; *Los Angeles Times* science writer Robert Lee Hotz; and freelance science writer and editor Edwin H. Kiester, Jr.

Also on the program were Sigma Xi Distinguished Lecturer Alison Galloway and 2003 Sigma Xi Young Investigator Award-winner Alexandra Basolo.

Sigma Xi Annual Meeting delegates and local members served as judges for the poster competition.

Ratings of "Superior" were given to 24 presentations, which were acknowledged with a blue ribbon, certificate and award money provided by NIEHS and the General Motors Research & Development Chapter of Sigma Xi.

The remaining posters were acknowledged with a gold ribbon for a rating of "Excellent" or a white ribbon for a rating of "Good."

The 2004 Student Research Conference will be held November 12-13 at LeCentre Sheraton in Montreal, Canada. For more information, visit [www.sigmaxi.org/meetings/student/](http://www.sigmaxi.org/meetings/student/).

## E-Mentoring Opens Doors in Academics

Sigma Xi is partnering with MentorNet, which offers non-profit online mentoring programs, to focus on the retention of women in science and engineering at the collegiate level.

With support from the National Science Foundation, MentorNet ACE: Academic Career E-Mentoring for Women in Science and Engineering will partner women graduate students and untenured faculty pursuing academic careers as protégés with tenured faculty mentors around the country.

While women are the prime targets for this program, men are welcomed as either mentors or protégés. Thirty-five percent of the mentors in MentorNet's industry-focused e-mentoring program in 2000-2003 were men.

Top collegiate engineering and science programs today are missing a critical component: women professors.

Women hold less than 20 percent of faculty positions at four-year colleges and 22 percent of full-time senior faculty appointments in life sciences, a field that has graduated the highest percentage of women in science and engineering in many years, according to the National Science Foundation.

"Recent surveys have indicated that our members would like to participate in programs like this," says Linda Schmalbeck, manager of Sigma Xi education programs, "which we see as a natural outgrowth of longstanding mentoring efforts by Sigma Xi members."

According to Carol Muller, MentorNet's founder and CEO,

"Students really value the mentoring relationship because they are able to receive unbiased and objective advice about career choices."

Since 1998, MentorNet has matched more than 10,000 students at more than 100 colleges and universities with mentors in its industrial one-on-one mentoring program. Nine hundred and fifty companies provided mentors in the one-on-one program.

The new ACE program is specifically designed for graduate students who are considering academic careers, and next year will also incorporate tenure-track faculty as protégés. Mentors must be tenured faculty.

Through self-evaluation, MentorNet has found that the majority of students and mentors are happy with their e-mentoring experiences. E-mentoring eliminates distance barriers and is convenient for all the participants.

Special training programs, coaching curricula and pertinent daily topics have been developed for the launch of MentorNet ACE.

"With the success we've seen in our program," says Muller, "we are hopeful that MentorNet ACE will positively impact the development of academic careers for women students and faculty for years to come. We're pleased to have Sigma Xi as a partner in this effort."

MentorNet actively recruits mentors and students throughout the year. For information about becoming a mentor, visit [www.sigmaxi.org](http://www.sigmaxi.org).

## Sigma Xi Center

(continued from page 197)

As part of the celebration, the Sigma Xi Center will host a Sally Ride TOYchallenge™ Regional Showcase on April 25, featuring toy design projects by teams of fifth- through eighth-grade students.

Sigma Xi is a sponsoring organization for this year's national TOYchallenge, with members volunteering as team sponsors and coaches.

"We can think of no better way to help commemorate this historic occasion," says Sculley, "than by nurturing the next generation of scientists and engineers through the TOYchallenge."

In other programmatic areas, Webcasts of conferences and panel discussions from the Sigma Xi Center are among plans to engage chapters and members on important issues.

The new building is also a place to honor the accomplishments of scientists and engineers, Sculley says.

Those contributions or pledges received by March 5 will be included in the next installation of commemorative pavers in the Sigma Xi Center plaza in time for the grand opening.

Contributions to the capital campaign of \$1,000 or more made in honor of mentors or others are being acknowledged with paving stones engraved with the names of donors and their honorees.

In addition, those chapters making gifts of \$1,000 or more to the campaign are being recognized with a paving stone that bears the chapter's name.

Commemorative pavers will be installed in spring and fall throughout the campaign. Gifts of any size to the building fund will be acknowledged on a Roll of Honor displayed via an interactive plasma screen in the lobby.

Visit [www.sigmaxi.org](http://www.sigmaxi.org) for details about the Sigma Xi Center celebration, the capital campaign, commemorative pavers and the TOYchallenge. Additional photos of the new building are also online.



Sigma Xi Executive Director Patrick D. Sculley (right) has visited a number of chapters over the past year. He is shown here inducting Major General Paul Nielsen, commander of the Hanscom Air Force Research Laboratory, into membership. Nielsen was the keynote speaker at the Hanscom Chapter's annual banquet, at which Sculley spoke about Sigma Xi and inducted new members. Additional photos from his chapter visits are online at [www.sigmaxi.org](http://www.sigmaxi.org).