

## Report of the Committee on Diversity for the Year ending June 30, 2002

In FY2002, the Committee on Diversity contributed substantively to the development of the scope and message of the 2003 Sigma Xi Forum, Changing the Face of Science and Engineering. The appointment of Sigma Xi's new Executive Director brings with it the promise of a strategic plan, so the committee and supporting staff have proceeded cautiously until that plan is announced. Members of the committee were asked to contribute content ideas for inclusion in a broad-based survey of Sigma Xi members during the summer of 2002.

### **I. Meetings of the Committee**

The Committee on Diversity met once by conference call on March 13, 2002, 2:00-4:30pm EST.

### **II. Activities and Business of the Committee**

During this meetings and various e-mail exchanges, the committee focused primarily on advising the process of planning the 2002 Sigma Xi Forum, Changing the Face of Science and Engineering.

- A. 2002 Sigma Xi Forum The Committee on Diversity was very pleased to contribute to the development of the program for the 2002 Sigma Xi Forum, Changing the Face of Science and Engineering, November 14-15 in Galveston, Texas. The forum addresses issues in the science and engineering workforce and has a particular focus on diversifying the workforce and the educational pipeline. Members of the committee served on the forum steering committee, recommended many speakers and session topics and served as presenters and moderators. The committee also worked with staff to compose an introduction to the forum topic that will be published in the Forum program.

As part of the preparations for the 2002 Forum and Annual Meeting, the Committee on Diversity was pleased to make recommendations for the McGovern Lecturer who was ultimately selected by the Committee on Awards. Dr. Mario Molina, Nobel Laureate, will present the lecture in 2002.

- B. Just Garcia Hill Web Site for Minority Scientists Sigma Xi sponsored a proposal to the National Institutes of Health to support the continued development of the Just Garcia Hill Web site for Minority Scientists. The program was funded during the summer of 2001 for a period up to five years and a total of approximately \$1,000,000. The goal of the proposed program is to broaden the scope and impact of the site, located at [www.justgarciahill.org](http://www.justgarciahill.org), housed at Hunter College and managed by outgoing Committee member Robert Dottin and his staff. Other organizations will participate as collaborators. This Web site will also support efforts to build mentoring activities. Sigma Xi has promoted the Web site through articles in Sigma Xi Today (in American Scientist) and inclusion in all-member e-mail 'blasts.' Dottin has agreed that a member of the Sigma Xi staff and the chair of the Committee on Diversity will be invited to attend meetings of the Web site's executive committee, of which former Sigma Xi President, Peggie Hollingsworth, is a member.
- C. 2001 Student Research Conference & Mentoring The Committee on Diversity supported activity at the 2001 Student Research Symposium, held in conjunction with the 2001 Sigma Xi Annual Meeting in Raleigh, North Carolina. The Symposium attracted 125 undergraduate and high school students and more than 50% were from underrepresented groups. During the one-day conference, two members of the committee and several other individuals acted as mentors for students who requested them. Their discussions focused on career planning and on issues faced by students and researchers from underrepresented groups. Later in the year, the committee reviewed the conference activities and expressed their support for continued attention to this program, with a focus on minority students.
- D. Mentoring Tools In an effort to continue development of a mentoring program for young faculty, staff worked on behalf of the committee to develop a strong array of tools for managing a mentoring program. Past research indicated that tools, training and a manageable program scope will be essential for a mentoring program to succeed. Staff have worked with interns at the Shodor Education Foundation, Inc. to develop and test some online tools for managing a mentoring program.

### **III. Chapter Diversity Program Awards**

The 2001 Annual Meeting marked the first presentation of Sigma Xi's Chapter Diversity Program awards. In an effort to raise the visibility of diversity issues within Sigma Xi, the Committee on Diversity elected to offer an award to chapters that have organized outstanding programs that promote diversity within the science, engineering and research communities. A review of chapter annual reports revealed that many chapters are hosting outstanding programs that address issues impacting women and minorities of all ages from elementary school through entry into the professional world. The committee selected three chapters that were particularly outstanding to receive this award, but several were also cited as honorable mentions when committee chair Sue Kilham presented the awards at the 2001 Annual Meeting in Raleigh, NC.

- A. Honorable Mentions
- o The Alaska Chapter for its long-standing science, math and engineering mentoring program for native students and other minorities.
  - o The Barry University Chapter for its Bridges Program, which provides an opportunity for minority graduate research students to enter Vanderbilt University's combined M.D./Ph.D. program.
  - o The Howard University Chapter for challenging the minds of more than 100 middle school minority students from the metropolitan Washington area during its annual Science Discovery Day.

- o The Kansas State University Chapter for working cooperatively with the faculty at Haskell Indian Nations University to develop environmental programs that serve the needs of Native American tribal communities.
- o The Middle Tennessee State University Chapter for co-sponsoring an annual conference called Expanding Your Horizons in Science and Mathematics to introduce several hundred young women to careers in science, technology and mathematics.
- o The Natick Chapter for honoring Hispanic Heritage Month by sponsoring a talk by Nobel laureate Mario J. Molina for Hispanic and other minority high school students.
- o The Washington State University Chapter for co-sponsoring awards for outstanding women in graduate/professional study.

#### B. Chapter Diversity Program Award Winners, With Citations as Read by Sue Kilham

- **The Academy of Natural Sciences:** Women in Natural Sciences, one of the Academy's longest running programs, brings young minority women in the first years of high school to the Academy for a weekly program designed to encourage them to pursue science. Sigma Xi members provide tours of their departments and laboratories and also present lectures.

A second program, called Science Enrichment Expansion Curriculum, serves minority students in the later years of high school who come from disadvantaged backgrounds. The students work in laboratories on independent research projects with scientist mentors, almost all of whom are Sigma Xi members.

Chapter members also serve as mentors in the summer Research Experiences for Undergraduates program, funded by the National Science Foundation. Students work with scientists on independent research, and one of the goals of the program has been to recruit minorities.

- **California State University Dominguez Hills:** This chapter sponsors numerous seminars throughout the year in conjunction with the National Institutes of Health Minority Biomedical Research Support Research Initiative for Scientific Enhancement Program and Minority Access to Research Careers Undergraduate Student Training in Academic Research, among others. More than 70 minority science students attend these seminars.

In addition to sponsoring student research awards, the chapter invites a minority scientist as the guest speaker for its annual awards banquet. The chapter is also a co-sponsor of the university's Students Trained in Academic Research (STAR) Symposium held each spring. All of the students that presented this year were from minority groups.

- **San Diego:** The San Diego Chapter added an entire subchapter in Ensenada, Mexico, and is encouraging that group to become a full-fledged chapter.

In addition, a grant from the Quart Foundation helped the chapter set up a program to encourage students from junior high and high schools not traditionally known for science achievement to enter projects in the San Diego Science Fair. The aim was to recognize students with good projects from a greater selection of schools, especially those with large populations of underrepresented students.

The organization Girl Power, which encourages scholarship and science education among middle school girls, was included in this effort. The winners and their teachers (or the directors of Girl Power) were guests at the chapter's annual banquet; their parents also attended. The students displayed their work, and everyone enjoyed talking with them about their projects.

### IV. Five-Year Action Plan

During its 2001 retreat, the Committee on Diversity developed the following plan of action. The fundamental goal of the five-year action plan is to identify fundable approaches to tackling the issues of importance to the Society and this committee. The major elements of the plan are outlined here.

#### A. Revisiting Issues from the Last 5-Year Plan

- o Collect and disseminate demographic data on Sigma Xi members to underscore the need for diversity activities within Sigma Xi.
- o Monitor and work to increase diversity within the Sigma Xi leadership and among award recipients.
- o Support professional success for minority scientists.
- o Build connections with other organizations to form a strong coalition addressing these issues.

#### B. New Avenues for Activity and Impact

- o Grow and nurture chapters at minority serving institutions.
- o Develop chapter-based programs that relate to and support diversity.
- o Identify specific sources of external funding to develop and implement these programs.
- o Recognize chapters that have exceptional diversity programs, disseminate information about successful programs, support development of programs.
- o Use the Committee structure to develop relationships that allow the Diversity Committee to promote agenda throughout Sigma Xi and with other organizations.
- o Use the 2002 Forum as an opportunity to promote diversity, develop programs and a network.

**V. Members of the Committee for FY2002**

Susan Kilham, Committee Chair  
John Alderete, Univ. of Texas, San Antonio  
Ben Cuker, Hampton University  
Carol Daniels, Florida A&M  
Robert P. Dottin, Hunter College  
Regina McClinton, Univ. of Southwestern Louisiana  
Donna Nelson, Univ. of Oklahoma  
Geraldine Twitty, Howard University

**Staff Liaisons for FY2002:**

Pam Blondin, Director of Membership and Chapter Programs  
Lisa Rhoades, Manager of Chapter Programs  
Linda Schmalbeck, Manager of Education and Ethics Programs

**VI. Comments from the Chair**

I would like to thank all of the members of the Diversity Committee and the Sigma Xi staff for their dedicated service. Two members, Ben Cuker and Robert Dottin, completed their terms of service on the committee. Each of them contributed insightful and useful input as advocates for underrepresented groups in science and engineering. They are richly deserving of thanks from Sigma Xi and from me personally for all of their many contributions.

Respectfully submitted,  
Susan S. Kilham  
Chair