

**American Chemical Society
Request to ACS Regional Boards
To Support Project SEED**

Abstract: The American Chemical Society (ACS) requests that the ACS Regional Boards support one of ACS's flagship programs: Project SEED. Recognized as a successful model in cultivating the scientific literacy of our nation's talented but economically disadvantaged youth, Project SEED provides stipends of \$2,500 (first year) and \$3,000 (second year) to low-income high school students to participate in real-life summer research experiences. Donations from the ACS Regional Boards would be used to support stipends for SEED students in each corresponding region.

Project SEED Overview:

For more than forty years, Project SEED has offered high school students from economically disadvantaged families the opportunity to experience a career in chemistry-related sciences. The program places students in academic, industrial, or governmental laboratories for 8 to 10 weeks during the summer to engage in hands-on scientific exploration under the supervision of a volunteer mentor. Each year, hundreds of volunteer scientists around the country contribute their time to mentoring our students, opening their eyes to new educational and career possibilities. Individualized attention is guaranteed, as each mentor may supervise only one or two students. Working in a laboratory with valuable scientific equipment, meeting the highest standards of safety and professional behavior, and engaging in college-level research, with the guidance of dedicated volunteer mentors, SEED students experience the enormous power of this unique program. To emphasize the importance of their work, students receive a stipend for participating. Students are eligible to participate for one or two summers. Those who decide to continue in a science major are eligible to compete for a first year college scholarship.

Since 1968, Project SEED has served 9,000 students in more than 100 communities from 38 states. For the past several years, almost 80% of students have been from minority groups and 60% have been female. Project SEED has been proven effective, as recent exit surveys show that 90% of SEED participants plan to go on to college, compared to the national rate of 20% of all black students and 16% of all Hispanic students who leave high school college-ready. A twenty five-year comprehensive survey of the program shows that of the 75% of SEED college students who have majored in science, 7% have earned Ph.D. degrees, 13% have earned MS degrees, 63% have earned BS degrees and 9% have earned other degrees. Project SEED alumni are successful, contributing adults in all walks of life. Whether or not they choose scientific careers, they are part of the fabric of a community that is more scientifically literate and has an educational level not previously predicted based on their economic demographic.

As an indication of its success, Project SEED has received significant recognition:

- National Science Board Public Service Award in 2009 for increasing the public understanding of science and engineering;

- Acknowledgement as a Best Practices Model of Secondary Education by Bayer Corporation in 2006;
- Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring in 2001; and
- Citation as an exemplary effort to improve access to and preparation for science education for members of minority groups by the BEST Initiative, a Congressionally-mandated study to broaden the base of the U.S. scientific workforce.

While these measures of effectiveness are impressive, it is the personal stories of our graduates that provide the most powerful testimony of Project SEED's success. For example, in the summer of 1998, Anita Hurtado-Strok was a Project SEED student researching ground water contamination at auto salvage yards. Nine years later, she was a chemical engineer who was part of the Merck team that brought the first cervical cancer vaccine to the world. In the words of Hurtado-Strok, "I am truly making a difference . . . and it all started with Project SEED."

Budget and Request for Support:

The current annual operating budget for Project SEED is \$1,327,000. The majority of this expense, \$1,160,000, is for student stipends for 445 students. \$560,000 of the annual revenue for Project SEED is generated from donations from individuals, corporations and foundations. The remaining revenue consists of \$600,000 from the SEED Endowment Fund and \$167,000 from ACS to cover all administrative and operating expenses. In addition, volunteer scientists donate over 165,550 hours of support to this program each year, which provides supplemental in-kind revenue valued at \$8,277,500 per year. (This amount is conservatively calculated at \$50 per hour for the scientists' time.)

A grant from the ACS Regional Board will support Project SEED students across the country and in your region at a cost of \$2,500 per first year student and \$3,000 per returning second year student.

Conclusion: Project SEED has been able to achieve remarkable success in such a cost-effective manner because of the synergy created by partners committed to ensuring the future vitality of the chemical enterprise through our country's pool of highly talented, but economically disadvantaged, young people. ACS is keenly aware that by exposing more students to the sciences through the highest academic curriculum, the United States will be able to generate a pool of highly qualified professionals for the global work force. Project SEED addresses this challenge by proactively and innovatively opening doors for low-income young people to experience a career in chemistry-related sciences, and ultimately, hope for a better future.