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> Cover: In Alzheimer's disease, the untimely death of nerve cells leads to dementia. Here, scientists watch potentially damaging calcium ions build up (yellow) in a nerve cell exposed to a protein fragment implicated in this disorder. But to this day, the real cause of Alzheimer's remains a mystery. (Photo: Mark P. Mattson, University of Kentucky, Lexington)



Departments

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Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the Directory of Student Science Training Programs for Precollege Students. Training Programs for Precollege Students.

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Publisher's Letter

Too often, the great debates and grand discussions of science education ignore or downplay a fundamental point - the necessity for young students to participate in hands-on science projects.

Science is an adventure of the mind, a creative process as stimulating and rewarding as writing a great book or creating a magnificent work of art or music. And like the arts, science requires perspiration as well as inspiration. Scientists spend years learning the basics of research, honing their skills, experiencing failure as well as success.

But a student needn't become a scientist to benefit from the exhilaration of planning and completing a scientific experiment. The discipline, the organizational skills, and the logical thinking required by science will serve students well no matter what their career choice.

Science fairs provide a wonderful stimulus for students to undertake research projects and pursue scientific excellence. Science Service has promoted the establishment of local science fairs since 1950. Each year, we sponsor the International Science and Engineering Fair (ISEF), which last year drew 831 students to compete for prizes and scholarships.

They came from 46 states, the District of Columbia, Puerto Rico, American Samoa, Guam, and 16 European, Asian, African, and Latin American nations. All were winners at local science fairs affiliated with ISEF. This May, we expect more than 900 participants to gather in Birmingham, Ala., for the 45th ISEF.

Whether working alone or in a group, under a teacher's guidance or the direction of a mentoring scientist or parent, students preparing a science fair project gain invaluable insights into their subject matter and the scientific process.

Unfortunately, some communities still do not sponsor science fairs. Thus, a number of interested students miss the opportunity to pursue this enormously beneficial experience and the chance to compete for a trip to the ISEF.

So I ask you Science News readers for your aid. If your school, city, or region does not sponsor a science fair, urge the people and officials of your community to organize one. Advancing science literacy rests with all of us.

For information on administering a local science fair or to affiliate an existing fair with the ISEF, telephone Science Service at (202) 785-2255 or fax us at (202) 785-1243.

With your efforts, we can help our young people gain a greater understanding and appreciation of science.

- Alfred Scott McLaren

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