# *Science* in Its Second Century

A year after the special Centennial issue, the press briefings, and the 100-year birthday parties, *Science* is celebrating its 101st year a bit more quietly. But the magazine is hardly resting on its laurels.

*Science* is now more widely read than at any time in its past. Circulation is some 157,000 worldwide. The international circulation of *Science* is some 14,000. In addition to large numbers in Western Europe, it includes readers everywhere from the Azores to Zambia. Unfortunately, these foreign subscribers face an increasingly heavy postage charge. A 72 percent increase, effective 1 June, will cause foreign postage costs to escalate from $17 to $27 per subscriber.

Domestic postage rates, too, are cause for headaches at *Science*. The federal government may reduce its contribution for the distribution of scholarly materials; if that happens, it would likely mean a cost increase of 40 percent for the last several issues of this year. There is some fear that the Postal Service will do away with nonprofit rates altogether, thereby doubling the mailing cost to about $6 per year.

In addition to subscribers, millions more read of *Science* through the popular press. Because of its reputation for timeliness and accuracy, *Science* is widely used as a "source" by reporters writing for a general audience. A recent survey indicated that, over a 12-month period, items from *Science* were reported in newspapers with a potential audience of more than 230 million people. In fact, something from *Science* was reported five out of every seven days during the year.

Another indicator of an increasing readership for *Science* articles is the number of requests for permission to reprint *Science* material. These requests have been climbing steadily over the past few years, with approximately 6000 requests in 1978, 7000 in 1979, and 8000 in 1980.

The annual report prepared by the editors for the *Science* Editorial Board earlier this year reflects the range of the magazine's coverage. During 1980 the magazine published 194 articles, 30 dealing primarily with biochemistry, 30 having to do with biology and medicine, 26 on geology and geophysics, and 22 on physics. Other disciplines were also frequently represented, as well as science policy, energy, environmental science, history of science, and the impacts of science on society. In addition, 751 "Reports" and 67 "Technical Comments" covering the whole spectrum of scientific disciplines were published in 1980.

The selection mechanism for *Science* remains the peer review system, with some 6000 members of the scientific community participating each year in preparing and judging material for publication. The number of submissions is so great that *Science* can publish only about 20 percent of the manuscripts submitted to it.

An enlarged news staff reports not only the governmental actions affecting science and technology but also developments in industry, academia, and international science and technology. "News and Comment" frequently is the first publication to report controversial issues in any depth, while "Research News" records advances in scientific knowledge and their applications. Materials appearing in these news pages have been awarded recognition by the National Association of Science Writers and by the American Institute of Physics.

The publication of special issues was accelerated as a part of the Centennial year, with three special issues in 1980: High Technology Materials (23 May 1980), the Centennial issue (4 July 1980), and Recombinant DNA (19 September 1980). Special issues thus far this year have focused on sexual dimorphism (20 March 1981) and solid earth (3 July 1981). Another special issue will highlight electronics and computer technology. One issue will contain a special section on Canadian science and technology (based on presentations from the 1981 AAAS Annual Meeting in Toronto). Special issues will be a continuing feature for *Science*, with an average of two such editions each year.

In 1970 *Science* devoted an entire issue to the findings of the first lunar landing. Since then, special coverage of the U.S. space program has been a major endeavor for *Science*. Most recently, the 10 April 1981 issue featured Voyager I's mission to Saturn. These space issues were the first to use color photographs inside the magazine. The trend to more four-color photos has continued. It is likely that in addition to the cover, *Science* will increase its color illustrations inside the publication.

Philip H. Abelson, *Science* editor, does not anticipate a particular change in focus for the magazine in the foreseeable future. He does, however, point to a likely increase in coverage of industrial research and the industrial applications of research already in the pipeline. "With some 52 percent of research and development now being supported by industry, it necessarily becomes the area where the people and the research opportunities exist."

Other areas where Abelson sees a potential increase in *Science* reporting include agriculture and food science, neural biology, natural products, energy research and applications, and medical technology. The field of molecular biology, says Abelson, is growing so fast that *Science* will deal with it primarily through the publication of invited articles rather than individual reports.

The purpose of *Science* continues to be the dissemination of knowledge from all fields and on all aspects of the scientific endeavor.

JOAN WRATHER
*Office of Communications*

# Media Fellows at Work Reporting Science

Composing lines for a radio theatre script on the summer solstice, interviewing Nobel prizewinning scientists, conjuring up new ways to write the classic "weather story" (how hot is it?, what are people doing to stay cool?), or filming animals at the zoo for a mini-series on animal behavior: that's how the Mass Media Science Fellows are spending their summer. The 20 Fellows began their 3-month summer fellowships at newspapers, magazines, and radio and television stations around the country in June (see *Science*, 10 July 1981, page 198).

Administered by the AAAS, the Mass Media Science Fellows Program is sup-

ported financially by the Association, the National Science Foundation, and private foundations and corporations. Private funds for this year's program have been provided to date by the Atlantic Richfield Foundation, Dow Chemical Company, Exxon Corporation, General Electric Foundation, and IBM Corporation.

The program was established in 1974 as a part of the Association's public understanding of science activities. Its purposes are to help the media by providing scientific and technical expertise to their organizations, and to allow students in the natural and social sciences and engineering to see—and experience—firsthand how science and technology get translated to the general public.

The Fellows, chosen through a highly competitive nationwide selection process, are spending 10 to 12 weeks writing news and feature articles, helping to produce radio and television programs, and conducting interviews. Several of the Fellows are working on science and technology issues as daily reporters at general circulation newspapers.

Joan Graf (Tufts University), Science Fellow at the *Washington* (D.C.) *Star*, describes her activities: "Currently, I'm working on two pieces, one on the resetting of atomic clocks on 30 June (they're adding a leap second) and an article on Dutch Elm disease—a perennial concern in a city that treasures its street trees. I've proposed a piece on sun-related disorders (including light-sensitive reactions to sunlight and common drugs and foods that act as photo-sensitizers as well as sunburn, skin cancer, and so forth). It was given an enthusiastic go-ahead by the metro-editor. . . ."

Others are serving fellowships at magazines such as *Business Week* and *Newsweek*, while still others are working at commercial and public radio and television stations. Richard Brandt (University of Delaware) at *Business Week* writes: "I got to develop my telephone interviewing techniques as one of the 'reporters' for a cover story on trends in research in the next decade; it meant filing memos with the editors on integrated optics, ceramics in automobile engines, carbon fiber airplanes, synchrotron radiation studies of catalysts, the ability to forge ceramics like steel, remote sensing in geology, splitting hydrogen from water, and developing synthetic ligaments and tendons."

Craig Decker (Massachusetts Institute of Technology) at WOSU Radio (Columbus, Ohio) writes: "One of my goals for the summer is to select and prepare my stories so as to illuminate some general themes about science-society interactions. In particular, I hope to do stories and features which illustrate how values and politics influence science and vice versa, and which clarify the nature and role of value conflicts in local and national planning and policy making in technological areas. My first opportunity to get into these issues will be a four-part series I'm doing on local energy planning in Columbus."

The Fellows will reconvene at an evaluation meeting in Washington, D.C., in September to trade tales of their summer fellowships and discuss the media experience that the program provides.

Applications for the 1982 program will be available in the fall from the Office of Public Sector Programs at the AAAS address.

GAIL J. BRESLOW
*Office of Public Sector Programs*

## Fall Energy Seminars Planned

Regional Energy seminars have been scheduled in Colorado and Georgia this fall. "Oil Shale Development in the Western States: Risks and Opportunities" will be held in Boulder, Colorado, on 21 September. "Georgia's Energy Future: Issues and Alternatives for Policymakers" will be held in Atlanta on 1 and 2 October. These will be the third and fourth seminars in a series supported by the U.S. Department of Energy for 1981.

For further information contact Patricia S. Curlin, program administrator, Regional Energy Seminars, at the AAAS address, or call 202-467-4310.

## Eugene, Oregon, Hosts Annual Pacific Division Meeting

The University of Oregon at Eugene hosted the annual meeting of the AAAS Pacific Division, held 14–19 June. Two 1-day short courses opened the sessions, one for high school teachers on Mount St. Helens and the other for college teachers on passive solar heating of buildings. The solar course proved especially popular with community college instructors. Next year the Division and the AAAS Office of Science Education will offer a larger slate of short courses, this time with the option of college credit.

Several symposia drew substantial numbers of participants to the Eugene gathering. One centering on the biological effects of the Mount St. Helens eruption departed from the recent emphasis on the volcano's geological features. David Wagner of the University of Oregon organized the symposium in which scientists from the Forest Service, universities, and the timber industry reported on the reappearance of flora and fauna after the explosion. A frequent remark was the relative rapidity with which certain species had reestablished themselves. The Mount St. Helens symposium also included aerial reconnaissance of the mountain.

A popular symposium on health issues in air-quality control drew upon experts throughout the United States from a wide variety of workplaces and scientific disciplines. Put together by Russell Sherwin of the University of Southern California Medical School and Bernard Hanes of California State University at Northridge, the symposium featured speakers from medical, chemical, industrial, legal, and environmental fields.

Among the "firsts" at the Pacific Division meeting was the group of contributed papers offered by Section J (Psychology), the newest Section to be activated in the Pacific Division. Many of the psychology papers reported research on women and minority groups. There also is interest in starting an industrial section, possibly with the Santa Barbara meeting in 1982. The Division also initiated a public lecture in conjunction with the Eugene meeting and expects to offer other public speakers in subsequent years.

The presidential address by Beatrice Sweeney of the Botany Department at the University of California, Santa Barbara, was part of the Division banquet, where awards for superior graduate student papers also were announced. About 700 persons attended the Eugene meeting, and more than 300 papers were presented.

Robert Bowman of San Francisco State University will be Division president next year when the Pacific Division

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