

"fishing expeditions"—often because the hypothesis that drives the generation of a molecular database relates to the nature of information and its utility, rather than to biological specifics. That bias has been dissipating (although not rapidly enough) because of the growing realization that we will have to understand our favorite biological molecules in the context of many thousands of others and that a wide net must be cast to be sure that we have, in fact, found the important ones. In line with a point made by Hieter and Boguski (3), omic research should be viewed as synergistic with the more traditional studies of single molecules. The two approaches to science require similar creativity, judgment, and technical rigor. If one is going to fish, it is best to do so in teeming waters with the finest equipment and flawless technique.

**John N. Weinstein**

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#### References

1. Webster's Third New International Dictionary (Merriam-Webster, Springfield, MA, 1981), p. 1573
2. R. E. Edgar, H. F. Noller, R. A. Ludwig, R. L. Sinsheimer, paper prepared for the Human Genome Institute Workshop, Santa Cruz, CA, May 1985.
3. P. Hieter and M. Boguski, *Science* **278**, 601 (1997).

### Attracting Minorities to Science

The article "Wanted: A better way to boost numbers of minority Ph.D.s" by Jeffrey Mervis (News of the Week, 28 Aug., p. 1268) addresses a serious problem. Some programs have been successful in creating magnets of promise. One that Mervis mentions is the Leadership Alliance, with headquarters at Brown University. James Wyche, a microbial geneticist and Associate Provost, heads a consortium that links approximately 28 institutions, including major research universities and ethnic colleges. This project has, over the past 7 years, proved that a climate supportive of minority scientists can bind participating institutions and envelop students in an expanded network of encouragement and interaction.

We at Harvard are participants in the Consortium. In the graduate programs (Ph.D.) of the Graduate School of Arts and Sciences located at the Harvard Medical School, we currently have 35 members of underrepresented groups enrolled. This number does not include students enrolled in the M.D./Ph.D. program. For the years 1992-1996 (those covered by Mervis), we graduated an average of five such students per year.

At the high school level, the Macy High School Science Pro-

gram, now called "Ventures in Education," and the Meyerhoff program at the University of Maryland Baltimore County are both successful.

Why not follow the suggestion of Joel Oppenheim and mount a conference to promote an exchange of views among those whose programs are working?

**Harold Amos**

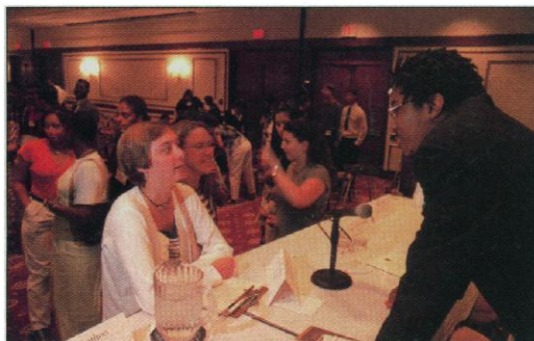
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As a white male recipient of a 1998 National Science Foundation (NSF) graduate fellowship, I have several observations on the ending of minority graduate fellowships

First, the political climate dictates that affirmative action will end, and we must find innovative new ways to recruit minority scientists. I believe that scientists are well positioned to do this: In a previous generation, scientists were leaders in opening university doors to foreigners. International cooperation was common in science even during the Cold War and remains strong today. American scientists are even leading our efforts to foster ties with Cuba by lobbying to ease restrictions on their first-rate scientific community (1). We diversified our profession internationally without affirmative action, and I believe that we can integrate our profession domestically in the same manner.

Second, I applaud suggestions to reduce the importance of scores on the Graduate Record Examination in awarding fellowships. This is a matter of common sense rather than equity: A multiple-choice test cannot measure the traits necessary for research success nearly as well as transcripts, résumés, and recommendations. Making allowances for candidates from smaller schools with fewer resources for advanced courses and research would also be a good step.

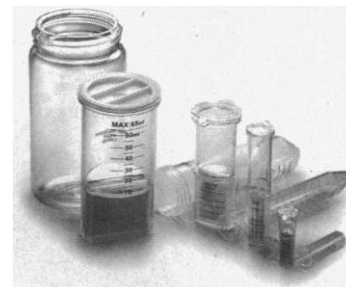
Finally, I think we should put the loss of minority fellowships in perspective: The decision to pursue a career in science begins at the undergraduate level, when NSF fellowships are not yet an issue for prospective sci-



Participants at a recent Leadership Alliance conference

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entists. Also, many talented white students who are not likely to receive NSF fellowships still apply for graduate study and work as teaching assistants; why should we assume that minorities will lack the same chutzpah? Finally, minority fellowships were never intended for marginal cases in need of encouragement to remain in science. They are instead for dynamic and talented minorities for whom no recruitment is necessary. These are the people we want in science, and the only way to increase their ranks is to cast our nets wider long before they reach graduate school.

**Alex Small**

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#### References

1. J. Kumagai, *Phys. Today* 51, 56 (August 1998).

### Let the Market Decide

Regarding the letter "Journal proliferation" from Peter T. Shepherd of Elsevier Science (*Science's* Compass, 21 Aug., p. 1143), it is a risible irony that Elsevier Science, publisher of *Tetrahedron Letters*, is complaining that competition from a new American Chemical Society (ACS) publication represents an un-

fortunate example of "journal proliferation." Surely it is up to contributors and customers, rather than the publisher, to decide whether the market is "well served" by a single dominant journal in a particular subject niche.

Research libraries are paying dearly for the near-monopoly that Elsevier has achieved in specific publishing areas. Expenditures for journals have increased in research libraries by more than 8% annually during the last decade. In the meantime, journal prices have increased by 12%, twice the annual rate of increase of health care and more than four times the general rate of inflation in the United States.

The ACS publishes quality, low-cost chemistry journals. The electronic versions of their journals are among the best digital products currently available. Every article that appears in the new ACS journal will be one that cannot be published in *Tetrahedron Letters* for more than double the cost.

Let the marketplace decide if this is journal proliferation or healthy competition.

**Ken Frazier**

Library Director, University of Wisconsin, Madison, WI 53706, USA, and Chair, the Scholarly Publishing and Academic Resources Coalition

#### Notes

1. Statistics for 1997 available from the Association of Research Libraries, [www.arl.org](http://www.arl.org)

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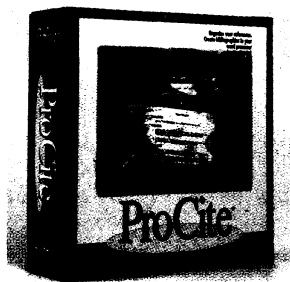
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