

SCIENCE

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LETTERS

NIH Support for Graduate Students

I believe the National Institutes of Health move to cut back on tuition aid to graduate schools (*ScienceScope*, 23 July, p. 415) is a step in the right direction. The ultimate goal should be to eliminate wholesale tuition waivers and stipends as a major incentive for entering graduate school. Such a course of action would be in the best interests of future scientists and perhaps the future of science. The present system tends to shield students from the prospects (or lack thereof) of eventual employment. In other words, it encourages students to enter graduate school for the wrong reasons. The supply of scientists should be driven by the demand for scientists, not the demand for graduate students.

Some people would argue that ending subsidies to graduate science education would lead to a shortage of scientists. I disagree. What it would lead to is a shortage of scientists at cheap wages—certainly not a catastrophe for anyone. After all, no one seems to worry about a shortage of doctors or lawyers because they have to finance their own education!

Graduate education in science should return to being what it purports to be: job training, not the job itself.

Jay Hegde

*Department of Neurobiology and Anatomy,
University of Texas Health Sciences Center,
Houston, TX 77030*

NCRR Funding Mechanisms

Donald D. Brown and *Science* readers should know that several of the suggestions to improve funding for the National Institutes of Health (NIH) that he makes in his Policy Forum "NIH funding mechanisms need appraisal" (2 July, p. 16) are currently supported by the National Center for Research Resources (NCRR).

His suggestion that "group grants should fund . . . the purchase of expensive, multi-user equipment that is shared by multiple, individually funded investigators in a single location" is an exact description of NCRR's Shared Instrumentation Grants, which fund equipment costing between \$100,000 and \$400,000 that is used by three or more Public Health Service-funded investigators.

His comment about the need for regional centers calls for transgenic mouse facili-

ties, such as the one proposed in the recently published NCRR Request for Applications; cell culture centers, such as those funded through NCRR's Biological Models and Materials Research Program; animal colonies, such as those supported by NCRR's Comparative Medicine Program; and synchrotrons and other expensive equipment, such as those in NCRR's Biomedical Research Technology Centers (BRTCs). These are all evaluated at least every 5 years, as Brown suggests.

Brown correctly cites the high costs of clinical trials. NCRR is combating these costs through a network of 72 clinical centers around the country that are available to researchers with approved protocols. By paying for a dedicated clinical research unit, including dietitians, nurses, and biostatisticians, NCRR is reducing the costs of the individual research grants while ensuring that patients and researchers have the best care available.

In short, NCRR's programs are designed to be cost-effective, multidisciplinary approaches to biomedical research. Readers who want more information about NCRR's resources and how to use them can write to the Office of Science and Health Reports, NCRR, 5333 Westbard Avenue, Room 10A15, Bethesda, MD 20892.

Judith L. Vaitukaitis

*National Center for Research Resources,
National Institutes of Health,
Bethesda, MD 20892*

Environmental Hazards: Real or Exaggerated?

Philip H. Abelson's 23 July editorial "Toxic terror; phantom risks" (p. 407) rightly decries the exaggeration and hysteria over toxic risk. Unfortunately, in taking the side of the strident critics, he falls into the familiar trap of painting in black and white.

Abelson quickly slides by the toxic agents that have had a demonstrably adverse effect on human health. Tobacco is the most notorious; but asbestos, diethylstilbesterol (DES), MER/29, thalidomide, and lead come quickly to mind. Asbestos workers and their families, for example, are surely justified in their concerns about the hazards of occupational toxins.

Abelson also does not confront the uncertainty endemic to toxicity assessments. Toxicologic evidence of carcinogenicity is