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LETTERS

The NIH Intramural Program

I was disappointed by the lack of political and historical perspective in Jon Cohen's Special News Report on the National Institutes of Health (NIH) intramural program (27 Aug., p. 1120), The real point is that the problems of the intramural program are a metaphor for the difficulties that are affecting the *entire* NIH-supported biomedical research community. Limited resources have brought out the knives among the intramural staff and between the intramural and extramural communities. A billion-dollar program is a particularly tempting target for new criticisms, despite detailed reviews as recently as 1988 in an Institute of Medicine report (*1*).

The critiques quoted by Cohen seem by and large self-contradictory. Unhealthy concentrations of power are ascribed to *both* the 21 scientific directors and the several hundred laboratory and branch chiefs. One observer wishes to transfer power to the Institute directors, while others would empower faculties or communes of bench scientists envisioned in the "Klausner report." The sizes of several large laboratories are criticized, but their accomplishments are (appropriately) praised. Several other large laboratories are criticized by implication because their publications did not make the latest "top 25 chart" of the Institute for Scientific Information, but elsewhere the imperative to pursue socially vital questions and not citation counts is recognized. The departure of a handful of superstars with large research programs is lamented, but so is the current lack of resources for young investigators to develop their own programs. And so it goes.

I venture that none of this is the real problem. Rather, as a result of the diffusion of biomedical leadership in recent years the research enterprise has lost its compass. The entire NIH program is being presented to the Administration and to Congress as a contributor to the increasing costs of medicine and not an investment for the future! We have not yet worked out mechanisms for controlling indirect costs, assuring public confidence in the integrity of research, enhancing technology transfer without subverting academic values, and conducting clinical trials without bankrupting basic research. Neither intramurally nor extramurally have we established a sufficient pipeline of very talented American recruits, especially women and minorities, so that we are not all competing for the same few individuals. There is little understanding in the biomedical community that we can prosper in steady state as well as in exponential growth phases.

It is unlikely that the annual calls of professional society lobbyists for more money and maneuverings for preferential allocations, or attempts to carve up the intramural program, will solve the accumulating Malthusian problems brought on by the successes of 50 years of NIH-funded biomedical research. At the end of World War II, Surgeon-General Thomas Parran, NIH Director R. E. Dyer, Vannevar Bush, and a few others led by their actions and their writings to the creation of our current institutions for the support and conduct of research. The times have changed, but these institutions have largely not.

It would be appropriate for the new Administration and the leading professional groups to reconsider these very institutions and the basis of the division of NIH-supported research among government laboratories, universities, other research institutions, and the for-profit sector. Perhaps the extramural community would be better served by long-term funding mechanisms, similar to those of the Medical Research Council units in the United Kingdom and INSERM in France, or the NIH intramural program itself, rather than the historically important but now struggling individual project R01 program. Obviously the post–Cold War era has required a rethinking of the support of the physical sciences. The likelihood of major changes in health care suggests an equal need for the redefinition of the biomedical research paradigm.

*Alan N. Schechter**
5405 Beech Avenue,
Bethesda, MD 20814

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1. Institute of Medicine, *A Healthy NIH Intramural Program: Structural Change or Administrative Remedies?* (National Academy Press, Washington, DC, 1988).

*The author is a laboratory chief at the National Institute of Diabetes and Digestive and Kidney Diseases, NIH, Bethesda, MD 20892.

As a 20-year veteran (1969–1990) of the intramural program at NIH, including stays in three different institutes, I would like to comment on the 27 August article by Jon Cohen. After the Soviet dissident scientist Zhores Medvedev was expelled from

the Soviet Union in the 1970s he visited NIH and commented that it was the nearest thing that he had seen in the West to how science was conducted in the Soviet Union. However, he thought that the reason NIH worked was that the scientists there had found creative ways of getting around the bureaucracy. In my experience this is no longer the case, and the increase of government regulations over the years, needed for conflict of interest, travel, and so on, is strangling the scientific endeavor.

In general, the need for bureaucratic control in a hierarchy is antithetical to free scientific enquiry. This urgent problem is not addressed at NIH because it goes to the very heart of how NIH is run. I feel that the British and French model of having government-funded research units that are spread throughout the country and located at universities or research institutes is preferable. It would reduce costs overall, allow cost-sharing with state and private agencies, and put the researchers where they belong, in an academic rather than a bureaucratic environment.

It had been a pious belief until the 1970s that "big" science could cure all. But basic research is not the same as putting a man on the moon. More recently the circus that former NIH director Bernadine Healy took around the country produced a lot of public relations and good intentions, but not much else. While tremendous scientific strides have taken place, it is not clear that amassing so much talent and resources in one place is the optimal way to obtain the best results.

Jack S. Cohen
Department of Pharmacology,
Georgetown University Medical Center,
4 Research Court,
Rockville, MD 20850

In Cohen's August article, I am quoted as saying that "There are labs [at NIH] that wouldn't be competitive at a university setting." Not included was the rest of the comment, which was, "On the other hand, there are many superb labs at NIH." Thus, my comments paralleled closely those of Rick Klausner, Lance Liotta, Sam Broder, and others who want to see NIH succeed.

Those of us who have spent significant time at NIH know that the system is not perfect. However, it is still a terrific place for young people to immerse themselves in research and a place that has enormous potential. Freed from some of its federal government–mandated bureaucratic burdens and with the appropriate strong leadership (which Harold Varmus will surely provide), I think that the future for NIH is bright.

Joseph B. Bolen
Bristol-Meyers Squibb,
Post Office Box 4000,
Princeton, NJ 08543–4000