

of the total basic research support your laboratory now has if you wrote only one annual report-proposal, and your funding became a complex, slowly adjusting function of the number of graduate degrees, the number of papers published (and possibly the amount of *mission agency* support you received)?” All of them said they would take the formula even at the cost of a 25 percent cut.

No one unfamiliar with the literature should dismiss the “formula” basis as unable to take care of most situations, including new investigators or playing into the old-boy network. Exactly the opposite is true in both cases. In an era when non-directed academic research support is quite unlikely to receive a significant increase in funding, science unions could, for a change, go to the bargaining table accepting even a 5 percent cut in (real) pay in exchange for a major change in “working conditions” for their members.

RUSTUM ROY

*Materials Research Laboratory,
Pennsylvania State University,
University Park 16802*

Quality of the Social Sciences

The excellent editorial by William D. Carey (20 Apr., p. 259) illustrates how far we still must go before the social sciences can achieve legitimacy. The congressman who said that philosophers and thinkers have been contemplating social phenomena for centuries without National Science Foundation support and have been able to reach far-ranging conclusions without wasting tax dollars is not alone. The political elites of the world, like their general publics, have only a dim understanding of what social scientists do. Worse yet, few appreciate that reliance on conventional wisdom contributes to many of our social disasters and that research-generated knowledge could appreciably reduce our error rate.

The most effective response to this widespread ignorance and disdain is a clear-cut improvement in the scientific quality of our research, as well as increased attentiveness to its social relevance. Books and journals in the social sciences are brimful of material that makes researchers shudder and laymen laugh, and it is high time that we pulled up our socks and got more serious about how we design, conduct, and write up our work. On top of that, we had better take our teaching more seriously, too. The people who run the world have all sat through social science courses in the

Chromatography insurance

To anyone who's ever had a thousand hours of work destroyed by malfunction during column chromatography, LKB's pump, fraction collector and recorder make good sense. Each alone offers outstanding performance. Together they provide an exceptionally reliable system.

The pump. The VarioPerpex® II pump links electronically with the system, automatically changing collection rate and chart speed whenever you change flow rate. When the pump stops at the end of a run, everything stops. No more chart paper piling on the floor.

The collector. The UltroRac® II fraction collector collects by drop, elapsed time or a unique precise volume method. You simply dial in the volume you want

to collect. That volume will be collected regardless of flow rate. Accuracy is assured.

The recorder. LKB's 2210 recorder lets you preselect one of 14 speed ranges from 0.1 mm/min to 10 mm/sec or select a chart speed that's synchronized exactly with flow rate. Clean fiber tip pens provide good, clear chromatograms. And 95% fsd in 0.4 sec matches it well to the fast response of the Uvicord® S monitor.

Pump, collector and recorder are fitting siblings for the Uvicord S monitor which never misses small peaks or lets large ones run off the chart. With its 206 nm capability, you can spot peaks you might never see at all with a 280 nm instrument.

How many hours did it take you to get to the point of applying your sample to a column? Does it make sense now to jeopardize your effort with less than LKB quality? Write today for full details on LKB's "chromatography insurance".

LKB

LKB Instruments Inc.
12221 Parklawn Drive Rockville, MD 20852
301: 881-2510

Circle No. 298 on Readers' Service Card

36A 307

1157

Announcing the 4th

AAAS Colloquium on R&D Policy

19-20 June 1979

Mayflower Hotel

Washington, D.C.

This highly successful colloquium, sponsored by the AAAS Committee on Science, Engineering, and Public Policy, will convene again this June in Washington, D.C. Leaders in Government, industry, and the scientific and technical community will address issues of

- **Federal R&D** • R&D issues in the FY 1980 budget • outlook for FY 1981 • problems in the budgetary process;
- **Industry R&D** • its impact on the economy • emerging federal policies on innovation;
- **International Aspects of R&D** • the role of R&D in international cooperation and assistance • R&D and U.S. foreign policy;
- **Science and Basic Research** • impact of federal R&D policies and practices on universities and academic science • public accountability vs. excessive paperwork • basic and long-term research in industry.

RESEARCH & DEVELOPMENT: AAAS REPORT IV by Willis H. Shapley and Don I. Phillips will be available in book form for the June 1979 Colloquium. Registrants will also receive the published proceedings of the conference.

To receive detailed program and registration information, please send your name and address to

R&D Colloquium

AAAS Office of Public Sector Programs

1776 Massachusetts Ave., N.W.
Washington, D.C. 20036

Copies of the preceding AAAS R&D Reports (FY'77, FY'78, & FY'79) are available at \$5.00 each (AAAS Members, \$4.50). Corresponding colloquium proceedings (FY'76, FY'77, & FY'78) are \$5.00 each (AAAS Members, \$4.50). Please write to AAAS Sales Dept. for ordering information.

universities, and it is reasonable to infer some connection between the quality of *our* teaching and the quality of *their* understanding. If we are cavalier about our methods, careless with our concepts, and condescending to our students, we can hardly expect rapt and reverent attention to our work later on.

Another factor that contributes, albeit less directly, is that of labeling. Too many of us still use such dichotomies as the exact sciences versus the social sciences, or the natural sciences versus the social sciences, thus acquiescing in the dubious propositions that our research is inherently less exact and our subject matter less natural. Why not use the more accurate and nonpejorative trichotomy of the physical, the biological, and the social sciences? Finally, we might want to use the word "theory" more carefully. If we fail to distinguish between a body of codified knowledge on the one hand and an ill-assorted set of hunches on the other, how can we expect the public to appreciate the difference?

J. DAVID SINGER

Department of Political Science,
University of Michigan, Ann Arbor 48109

East Is East . . .

In the debate on the future of the nuclear weapons laboratories, if the "changing conditions" described by Secretary of Energy Schlesinger include a move of the Livermore laboratory to a site 35 miles west of Berkeley, as reported (News and Comment, 4 May, p. 481), every effort should be made to find funds to keep the lab afloat.

STEPHEN C. HARVEY

Department of Biomathematics,
University of Alabama,
Birmingham 35294

Government-University Relations

The National Commission on Research was established in October 1978 to deal with mounting concern over the deterioration of the government-university relationship and its impact on research. Six national organizations assisted in establishing the commission: the National Academy of Sciences, the Social Science Research Council, the American Council of Learned Societies, the American Council on Education, the Association of American Universities, and the National Association of State

Universities and Land-Grant Colleges. We are, however, an independent, non-profit corporation financed primarily by private foundations. We work in cooperation with the establishing organizations but are administratively and financially separate from them. The membership is comprised of 12 leaders in education and industry who have accepted appointments as unpaid commissioners, with William H. Sewell as chairman. We have no federal officials on our commission, but we have instituted a network of liaison officials in the principal mission agencies responsible for carrying out university-based research programs and in the administrative agencies responsible for proper management of these federal activities. Through a process of hearings, review of existing studies and materials, limited data gathering, and extensive consultation with officials of universities, associations, and government, the commission will examine the means by which federal support of university research is conducted and propose changes to improve this system. The commission holds monthly meetings in Washington or on selected university campuses. It plans to issue a series of short reports on topics within its purview, focused particularly on recommendations. Advocacy for increased funding is not a direct role of the commission.

Comments on any aspect of the government-university relationship for support of research are invited. We have identified several areas of focus.

- Scientific, administrative, and fiscal accountability.
- Peer review and other selection criteria.
- Alternative funding mechanisms and instruments.
- Industry/university/government relationships.
- Development of research personnel, including young investigators and non-tenure track faculty.
- Extent of agency involvement in technical monitoring, control of research, and the publication process.
- Political and social factors affecting publicly supported research, and the environment required for research to flourish.

Any studies of these or related issues would be extremely useful to us. We are also interested in specific examples of difficulties encountered in these areas, and particularly suggestions for improvements of general applicability.

CORNELIUS J. PINGS

National Commission on Research,
2600 Virginia Avenue, NW,
Washington, D.C. 20037