tion, what roles do you see for physicists?

Well, I think the first responsibility of a physicist is to be a good physicist, to learn his subject, to learn the values and mechanisms and methods of research, to learn about the relations of his subject to other scientific disciplines, to pursue creative research and teaching, if he is in a university, or to pursue good research and development, if he is in industry.

Also, I think the further development of physical science is important to our social welfare in the future. We need much more knowledge about many things to help solve some of our social problems. We need to know more about even such mundane subjects as air and water pollution, and mechanisms for controlling pollution. Of all the engineering and technological tasks that need to be done, many can well be carried on by physicists who are willing to get into the applied-sciences area.

One matter of concern to many physicists, of course, is the science-funding situation. What are the prospects of a turnaround?

Overall, the Federal Budget situation appears to be tight for the next two or three years. That doesn't mean there can be no turn-around for science, but it means it is unreasonable to expect a resumption of the rapid rate of growth of the early 1960's. We must learn to live with restricted budgets; exactly how restricted, I think it's impossible to predict at this point. But major new sources of income for the Federal government do not seem to be immediately in sight, and this means that major new expenditures are not in sight. But there could still be some resumption of the growth of academic science, for example. I hope there will be but it's very hard to predict for more than fiscal 1971, for which the President has requested an increase.

At least compared with former years, there is now a large oversupply of science PhD's. Do you think that universities should aim to cut down their PhD output?

This is being carefully studied, and it's hard to get an easy answer. As research funding climbed at the rate of 21% a year, over the period of roughly 1957 to 1967, so did the support of graduate students. The sticky problem is just what should the rate of production of PhD's be today. The trouble is, if you decide how many PhD's you need this year, that doesn't tell you how many you'll need five years from now, and therefore how many students should be encouraged to enter graduate school.

The rapid increase in PhD production in the last few years is probably too high for the foreseeable future. Probably some reduction in the rate of rise of PhD production is justifiable. But we have not been able to find criteria that tell us just what that means in terms of the total number of graduate students there should be, or the total number of new ones each year. We are studying that and we hope to have some guidelines developed soon. —JBP

Congressional Study Advocates A Centralized Science Agency

The National Science Foundation should be reconstituted as a new and unified government science agency, the "National Institutes of Research and Advanced Studies" (NIRAS), according to the House Subcommittee on Science, Research and Development. The Subcommittee, chaired by Emilio Q. Daddario of Connecticut, would bring together into NIRAS science and educational activities, now spread through many government agencies and costing about $2.3 billion per year. The new agency could be initially established by Presidential executive orders without major Congressional action.

It seems unlikely that NIRAS or any "department of science" will be soon established in the government. But coming at this time it should help to focus debate on some pressing questions of US science policy: the "breakdown" in the pluralistic mission-agency support system; the need, especially when money is leveling off, for better management of federal science support; and the fundamental question of how much science US taxpayers are willing to pay for.

Initially, NIRAS would have three institutes. The Institute of Natural Sciences would include NSF, NIH and other research programs. The Institute of Education would absorb graduate-level education programs from several agencies, and various federal institutional support programs. The Institute of Arts, Humanities and Social Sciences would be comprised of the present National Foundation on the Arts and the Humanities, and a new National Institute of Social Sciences.

NIRAS would take up "basic research projects determined to be no longer relevant to agency missions." For now, national laboratories and applied R & D programs, such as those of AEC and NASA, would stay with their present agencies. NIRAS could absorb "other programs and parts of agencies" in the future.

Along with establishing NIRAS, the Subcommittee would strengthen the "science superstructure in the Executive Office of the President." The staff of the Office of Science and Technology (OST) should be substantially increased. The OST Director should have Cabinet status. OST should more thoroughly and continuously evaluate Federal research programs; it should "assume a planning, coordination and evaluation role" in Federal higher-education programs in the sciences, and it should probably be the executive-branch focal point for technology assessment. —JBP

THE PHYSICS COMMUNITY

APS Group Studies Job Problems; CPPS Proposes Permanent Group

A Committee on Economic Concerns has been appointed by the American Physical Society in response to the recommendation of its Committee on the Problems of Physics and Society, headed by A. M. Clogston of Bell Telephone Laboratories. CPPS also proposed the formation of a permanent group on physics and society, which would replace CPPS when it disbands in January 1971. These proposals, made at the April APS meeting, are the results of a six-month study.

At its first meeting on 29 June, the Committee on Economic Concerns, headed by Lee Grodzins of MIT, endorsed a proposal to support an extension of the Placement Service of the American Institute of Physics. The proposal consists of the hiring of a full-time person, who, according to Grodzins, would "develop new approaches to the placement problem." APS has already set aside $40 000 for this proposal and for the committee's work.

What form the permanent group on physics and society will take is still being discussed by the APS council. Initially, CPPS advocated a new division, but, says Clogston, "this idea has been met with considerable trepidation because of the extension of the concept of technical division to include nontechnical activi-