standing of the function of nerves and synapses are largely due to the work of the three scientists who were honored this year by the award of the Nobel prize.

Space: Senator Fulbright Steps Into Lunar Landing Controversy

The much-battered space program received a new blow last week when Senator J. William Fulbright delivered a critique that landed right on the preselected impact area.

As chairman of the Foreign Relations Committee in a highly compartmentalized legislative chamber, Fulbright exercises little or no direct influence on the Senate's space deliberations. But he has won a place for himself as perhaps the most scholarly and thoughtful senior member of that body, and when he chooses to express himself on areas outside his primary concern, the legislative climate is affected by at least a little bit.

The object of the Senator's critique was the two-pronged argument that is frequently offered in behalf of rapid expansion of the space effort: (i) that national security and prestige require the United States to surpass the Soviets in space, and (ii) that, because of political problems, the money allotted for space would not be made available for domestic welfare measures.

The first argument, Fulbright said in an address on the floor, "can be challenged on two grounds: first, it is not at all clear that the Russians are trying to beat us to the moon; second —and more important—it is even less clear that it would be an irretrievable disaster if they did. . . .

"What if they did get there first? Would that be an unmitigated disaster and disgrace for America? Would it make us a second-rate people, shamed in the eyes of the world, and in our own eyes, as well? I do not think so. I think it would be a temporary embarrassment and annoyance, but not a calamity. It would hurt our pride, but not our lives as free men in a free society. Most emphatically, it would not change the course of history. . . .

"The competition between freedom and dictatorship is a great deal more than a competition in technological stunts. The real issue is between two conflicting concepts of man and of his life in organized societies. It is on this level that the contest between freedom and communism will ultimately be resolved. . . . If, at the end of this decade, the Russians should have reached the moon, and we should not, but if we, instead, have succeeded in building the best system of public education in the world, in the renovation of our cities and transport, in the virtual elimination of slums and crime, in the alleviation of poverty and disease, who would then be ahead in the worldwide struggle for the minds and allegiance of men?"

Fulbright then went on to the argument that a reduction in the space program would not mean increased support for welfare programs. "It is frequently said that we did not provide adequate funds for education and other vital domestic needs before we had a space program, and that there is no assurance that we would increase our efforts in these areas if the space program were abandoned or reduced. This, I am bound to concede, may well be true, although the Congress has come close, several times, and very close last year, to adopting a meaningful program of Federal aid to education, and it is possible that the reduction of our space expenditures would provide the impetus for the enactment of a really good education bill. In any case, I see little merit in the view that since we will not spend money, anyway, on things we urgently need, we might as well spend it on things we do not need. If it comes to that, I, for one, would rather not spend the money at all."

No direct reply to the Senator's argument has yet been delivered, and in the nature of things it is quite possible that the speech will go unanswered by NASA supporters. But a few days after the Fulbright address, NASA officials, testifying on Capitol Hill, quite accurately pointed out that, to a large extent, the moon program has been the victim of some misleading bookkeeping. The figure $20 billion is often associated with the moon program, but it is reasonable to assume, they argued, that even without the moon objective we would have the massive missile effort and space exploration program that are major components of the lunar effort.

Although the NASA officials didn't agree on a figure, the consensus seemed to be that perhaps only a few billions of the overall space budget could be directly charged to the moon landing. This isn't at all far-fetched, but it comes rather late in the game, and since NASA itself has been using the $20 billion figure for the moon program, it is going to have a hard time convincing the Congress that the real price is considerably lower.—D. S. GREENBERG

Senator Seeks Views on Drug Policies

Senator Hubert H. Humphrey is soliciting the judgments of medical and other scientists on means of improving the clinical testing and evaluating of new drugs, and on related issues of federal drug policy. Responses should be sent to the Subcommittee on Reorganization and International Organization of the Committee on Government Operations, Room 162, Old Senate Office Building, Washington 25, D.C. The subcommittee will hold replies in confidence if requested to do so.

UNESCO: Director General Stakes Out Broader Responsibilities In Applying Research to Development

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) plans to put a substantially increased portion of its next biennial budget into science. UNESCO officials are seeking bigger appropriations, and a large part of the requested increase would be used for applying science to the problems of economic development.

Up to now, UNESCO activities in education have been much better financed than those in scientific research, and the new budget, if accepted, would narrow the gap significantly.

Pressures for more strenuous U.N. efforts to foster economic development have been building quite naturally in the international body in recent years as many new countries joined—countries which shared colonial origins and development problems.

The United Nations Conference on the Application of Science and Technology for the benefit of the Less Developed Areas (UNCAST), held in Geneva last February, probably marked the point at which R&D for development was generally recognized as a major concern for the U.N. However, after the UNCAST conference—a qualified success—no clear policy appears to have emerged on what the U.N. could and should do about develop-

ment beyond the technical assistance and planning help that has been proffered for a number of years.

It was at this point that UNESCO director-general Rene Maheu took the initiative. He drew up a plan, won the approval of his science advisers, and then got the formal backing of the UNESCO executive board for his proposal, "that scientific questions be accorded an importance in UNESCO's program similar to that given to education, and that UNESCO's activities in the field of science be redirected and expanded within the limits of resources that will be made available to the Organization."

Maheu, in effect, was proposing that UNESCO become the principal U.N. agency in the field of research on problems relating to development. United Nations organizations, or related international groups, with special concerns for meteorology, health, food, and so forth, are already involved in encouraging research related to development. But Maheu's proposal would give UNESCO the central role, a role for which, Maheu argues, UNESCO has the mandate.

Maheu's plan calls for a 20-percent increase, to $46.8 million, in UNESCO's regular budget for the 1965–66 period.

Funds for the natural sciences, under the proposal, would rise from $4.7 million for the current biennium to $7.5 million for '65–66, an increase of 57 percent.

In addition, funds for related purposes, derived from other U.N. sources but administered by UNESCO, would bring the total spent on science and technology to about $33 million.

These other sources are U.N. technical assistance funds, which would provide about $4.5 million, and the U.N. Special Fund, which furnishes money for long-range special development projects and would amount to some $21 million.

Under the proposed budget, the natural sciences share of the regular UNESCO budget would rise from 16.7 percent to 22 percent. Education would remain stable at 32.8 percent of the regular budget. There is, of course, some overlap in the two sections of the budget, since education programs for scientists, engineers, and technicians may be listed in either category.

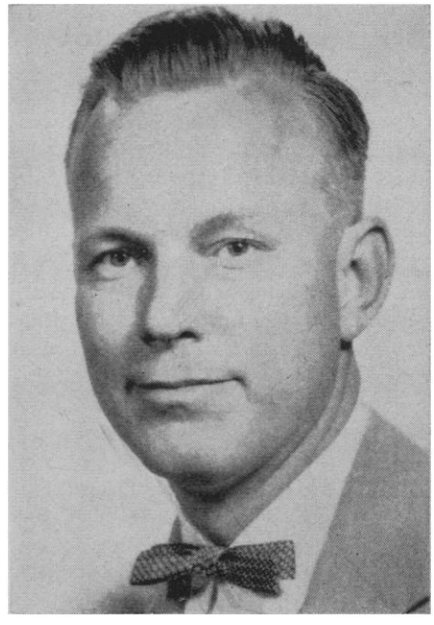
It is estimated that some $2.8 million of the increased funds for science would go directly into the application of science to problems of development, while the balance would be divided between programs for the development of the basic organization of science among member states and promotion of international cooperation for scientific research.

Increased funds for science, Maheu says, would be channeled into the promotion of research in basic sciences. Greater emphasis would be placed on research in hydrology, including promotion of research and international exchanges during the International Hydrological Decade, which begins in 1965, and on activities in oceanography, seismology, and geological sciences. UNESCO funds its programs primarily through international scientific organizations.

Maheu has proposed and already set in motion a regrouping of functions and reorganization of the UNESCO hierarchy which would give the agency greater competence in handling its expanded science program and in administering technical assistance and Special Fund projects. Significantly, a brand new Department of Application of Science to Economic Development is being set up.

Final action on Maheu's proposal will be taken a year from now at the UNESCO General Conference in Paris, but the organization's executive board is winding up an important preliminary meeting now in Paris, and reports indicate that Maheu's blueprint is being viewed with general approval.—JOHN WALSH

The appointment of a staff director for the House Select Committee on Government Research was announced last week by Representative Carl Elliott, the Alabama Democrat who chairs the committee. The appointment went to Robert L. Hopper, dean of the University of Alabama's College of Education. A graduate of North Texas State College, Hopper holds a master's degree from Harvard and a Ph.D. from New York University. He is president-elect of the Southern Council on Teacher Education and chairman of the Committee on Latin American Relations of the Southern Association of Colleges and Schools. He is also a member of the Tuscaloosa Chamber of Commerce and the Masonic Lodge.



Dr. Robert L. Hopper

A Lean Year for New Buildings: Congress Casts Critical Eye on NASA, PHS Facilities Requests

Along with other omens of unrest in the relations between Congress and science is one as troublesome to the construction industry as it is to scientists: this year's harvest of new buildings for science is not as abundant as some had hoped.

Shelved for the third year running is the proposed $33-million Center for Environmental Health that the Public Health Service wanted to construct in the vicinity of Washington, D.C. (*Science*, 23 August). The PHS proposal had the backing of Senator Lister Hill (D–Ala.), the key Senate figure in health-related appropriations, and funds for initial planning were approved by the Senate, though not without a small struggle. In the House, however, congressmen combined jockeying for the large installation for their own districts with detection of genuine flaws in the proposal—an imbalance between scientific and administrative reasons for the Public Health Service's attachment to Washington, some contradictory site, cost, and function estimates, and the waning authority of the PHS in the important environmental-health field of water pollution—and the proposal for the center was defeated.

Subsequently, the original White House backing for the Washington loca-