country." He might have noted, too, that a number of prominent journalists took part in the conference, including the editors of *Harper's* and the *Saturday Review* and the editorial page editor of the New York *Times*.

Secretary Rusk promised that the conference reports would be carefully considered. If the White House screens the reports for promising ideas, as President Johnson has indicated it would, the results of the conference could become tangible indeed. Already, among the government officials who served as conference panelists or as consultants for preparations of the reports, there have been ideas planted and new associations formed that could stimulate policy development.

Arthur Roe, head of the National Science Foundation's office of international science activities, said that, as a consultant to the Committee on Science and Technology, he found himself and representatives of other agencies looking at problems which they had never previously considered together in a meeting of this kind. The other consultants were from agencies such as NASA, the Atomic Energy Commission, the Agency for International Development (AID), and the Departments of State, Defense, Interior, Agriculture, and Health, Education, and Welfare.

John D. Wilkes, AID's science director and a consultant, said the conference had given him a better feel for what his scientific colleagues are thinking. "A conference focuses on certain priorities," he said. "You get a sense of the degree of push there is for certain advances and breakthroughs." The question of priorities, Wilkes indicated, is crucial in his own agency, which currently has a research budget of only $12 million.

If the chief value of the conference was to bring to the government the opinions and ideas of talented people from private life, it also gave the government a platform from which to express its own views. Most of the work of the conference was concerned with technical means of international cooperation, but Secretary Rusk and Ambassador Goldberg emphasized the pressing questions of war and peace. Rusk, in what some observers felt was one of his better performances, was at pains to stress the lengths to which the U.S. has gone to try to enter meaningful discussions with Red China and North Vietnam. If his message made an impression, Rusk's time was well spent, for many of his listeners had seemed to take a more sanguine view of the possibilities for cooperation with the Communist powers than the one commonly held in official Washington.

The conference took place at a time when the administration is unusually sensitive to criticism of its foreign policy. Despite some rumblings to the contrary, however, there is little evidence that the administration made much of an effort within the conference to repress criticism. Judging from the outspoken exchanges over arms control, one might as easily conclude that the conference was a "runaway."

Some conference reports would have been more critical of government policy if it had not been decided several weeks ago, when drafting of the reports was well advanced, that they should represent the views of the private participants alone. At first, the government officials who took part in the committee work were to share responsibility for the reports, but, as it turned out, they played only a consulting role. Under the original plan officials could have noted their dissent from any views they could not accept, but there is reason to believe that some committees resorted to vague language under which conflicts were hidden.

For example, the Science and Technology Committee, in addition to urging the establishment of a World Oceanographic Organization, recommended for the U.S. itself better "coordination" of its oceanographic programs, which are now scattered among various agencies. A scientist who took part in drafting the report said that only out of deference to the government participants' views did the committee not recommend the establishment of a U.S. oceanographic agency—a proposal popular among some members of Congress but opposed by the administration.

The usefulness of the conference may depend in large measure on the readiness of the administration to initiate venturesome new departures in international cooperation. Some State Department officials are suggesting that President Johnson, whose major successes up to now have been with his domestic programs, may want to shift the principal focus of his attention to foreign affairs. "If this should be true, the conference gives him a pretty big field from which to draw a harvest," one official remarked.—LUTHER J. CARTER

Announcements

The University of Tennessee has established a graduate school of **biomedical sciences**, to be built at Oak Ridge, as part of the university's graduate school. It will be closely associated with Oak Ridge National Laboratory's biology division and will supplement the existing cooperative programs between the university and the laboratory. The first class is to begin work next fall, with 15 to 25 students; a maximum enrollment of 200 is projected. James L. Liverman, associate director of ORNL's biology division, is interim director, until a permanent director is named.

Meeting Notes

A symposium on **electron and laser beam technology** is scheduled for 6–8 April at the University of Michigan, Ann Arbor. It is sponsored by the university and the Institute of Electrical and Electronics Engineers. Papers are invited on physics, applications, new equipment and processes, and holography. Two abstracts: 50 and 500 words; deadline: *15 January*. (G. I. Haddad, Electrical Engineering Department, University of Michigan, Ann Arbor)

Grants, Fellowships, and Awards

Vanderbilt University's medical school offers pre- and postdoctoral research opportunities in the various areas of **anatomy**, in developmental biology, and reproductive physiology. Applicants must have a bachelor's or a master's degree, preferably in the natural sciences, and a B average in their major field. Fellowships are available. Predoctoral stipends are $2400 for the first year, $2600 intermediate years, and $2800 last year, plus tuition. Postdoctoral fellows will receive stipends of $5000 to $6000, depending on experience. All fellowships include $500 allowance for each dependent. There are no deadlines for applications. (J. Davies, Department of Anatomy, Vanderbilt University Medical School, Nashville, Tennessee)

The Fannie and John Hertz Foundation invites nominations for a newly established, $20,000 award in **applied physical science**. Nominees must be U.S. citizens, preferably no more than

35 years old; teams will be considered. Augustus B. Kinzel, president of the National Academy of Engineering, and president and executive officer of the Salk Institute, is chairman of the award committee. Nomination forms should be requested as soon as possible; the award will be presented next spring. (James Olsen, 2101 Constitution Avenue, Washington, D.C.)

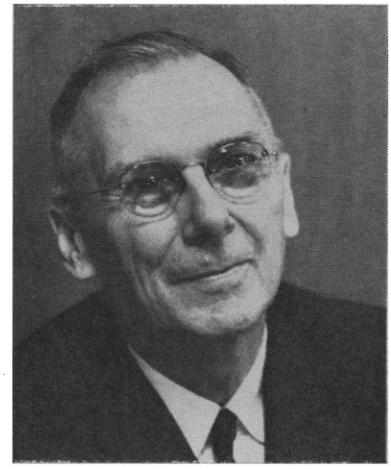
The Joint Institute for Laboratory Astrophysics at the University of Colorado is accepting applications for its **visiting fellowship program** for 1966. Ten 1-year fellowships will be awarded, to begin in September; recipients may conduct research of their own choice in the Boulder, Colorado, laboratory. Awards are based on the applicants' fields of scientific interest and on their scholarly achievements or promise. There are no citizenship restrictions. Stipends will equal the recipients' present academic salaries, adjusted to a 12-month basis; persons from industry or from abroad will receive stipends equal to salaries for comparable academic positions in the U.S. Stipends may not exceed $19,000. Round-trip travel costs for the recipients and their families between their homes and Boulder will also be provided. Deadline for receipt of applications: *15 January*. (Secretary, Visiting Scientists Program, JILA, University of Colorado, Boulder)

The Lalor Foundation is offering grants and awards for research on the physiology and biochemistry of **reproduction**. Applicants must be on the faculty or staff of a college, and have had training at the postdoctoral level and research experience. The age limit is 41. The work may be conducted at the recipients' institution or elsewhere. Grants may range up to $8000 a year, depending on the projects' scope and duration.

The foundation also is offering postdoctoral summer fellowships for research on the recipients' own projects at the Marine Biological Laboratory, Woods Hole, Massachusetts, and summer and other short-term fellowships for work at other institutions. Stipends are usually $1200 to $1550.

Deadline for receipt of applications: *15 January*. (Lalor Foundation, 4400 Lancaster Pike, Wilmington, Delaware)

NASA Leader Dies



Hugh L. Dryden, for more than four decades a leader in aviation and space research and administration, died 2 December of cancer. He had been deputy administrator of NASA since its inception in 1958 and home secretary of the National Academy of Sciences since 1955.

Dryden began his government career in 1918 as an inspector of munitions gauges for the National Bureau of Standards, and the next year, at the age of 20. he received his Ph.D. in physics from Johns Hopkins University. Soon named chief of the NBS aerodynamical physics section, he worked on problems of wind turbulence and boundary-layer flow, which became of major importance in aeronautics and eventually brought him international recognition.

During World War II he was a member of the National Defense Research Committee, which became part of the Office of Scientific Research and Development, headed by Vannevar Bush. He headed an experimental group that developed the radar homing missile known as "Bat." Near the end of the war he became deputy director, under Theodore von Karman, of an Army-Air Force scientific advisory group assigned to study various European powers' uses of science. After the war he became assistant, then associate, director of NBS.

Dryden joined the National Advisory Committee on Aeronautics in 1947 and within 2 years became its director. As chairman of an Air Force-Navy-NACA committee, aided in the development of the X-15 airplane. In the immediate post-Sputnik period he participated in activities that led to the writing of the National Aeronautics and Space Act of 1958. That year NASA was established, and he was appointed deputy director, a post he held until his death. A strong advocate of international cooperation in space research, he was instrumental in promoting U.S.-Soviet cooperation, through arrangements that came to be known as the Dryden-Blagonravov agreements.

Dryden became a fellow of the AAAS in 1934 and was a contributor to *Science*. His most recent article, "The university and the exploration of space," appeared in the issue of 26 November.—M.K.Z.

Courses

The Netherlands Central Institute for **Brain Research** will offer its fourth international summer school, 10–23 July, in Amsterdam. The subject of study will be the autonomic nervous system; work will cover structure, function, biochemistry, pharmacology, pathology, and clinical aspects. A $10 registration fee will be required. (J. P. Schade, Central Institute for Brain Research, Ijdijk 28, Amsterdam, Netherlands)

Applications are being accepted for participation in the third **teratology** workshop, at the University of Colorado, Boulder, 4–8 April. The sponsors are the university, AMA, the Teratology Society, and the NAS–NRC Drug Research Board. The number of participants will be limited by available laboratory space and equipment. Scientists from universities, government agencies, and the pharmaceutical industry may apply. The fee for persons from industry is $600. There is no fee for academic and government participants. Costs for travel, meals, and housing must be handled by the individual. Deadline for receipt of applications: *1 January*. (Department of Drugs, AMA, 535 North Dearborn Street, Chicago, Illinois 60610)

Travel Grants

Microcirculation, 4th European conf., 26 June to 2 July, Cambridge, England. Six NIH grants; air travel from U.S. to London, 7-day per diem allowance. Requirements: five copies of abstract, up to 450 words, of paper to be presented, brief curriculum vitae; maximum age, 35. Deadline: *1 January*. (H. J. Berman, Department of Biology, Boston University, Boston, Mass. 02215)

Psychology, 18th international congress, 1–7 August, Moscow. NSF and NIMH grants; transporation help for participants. Deadline: *15 February*. (Travel Awards Committee, American Psychological Association, 1200 17th Street, N.W., Washington, D.C. 20036)

Radiation Research, 3rd international congress, 26 June to 2 July, Cortina d'Ampezzo, Italy. NAS–NRC, and Radiation Research Society grants; partial travel support for U.S. participants. Deadline: *1 February*. (Ad Hoc Committee on Travel Grants, NAS, 2101 Constitution Avenue, N.W., Washington, D.C. 20418)

Scientists in the News

H. W. Thompson, president of the International Council of Scientific Unions since 1963, was named foreign secretary of the Royal Society 30 November, when P. M. S. Blackett was chosen president (see p. 1437). Thompson, whose major contribution is the application of infrared and Raman spectroscopy to chemical problems, is at the Physical Chemistry Laboratory, Oxford. Also on 30 November, the Royal Society chose **M. J. Lighthill** of Imperial College, London, as physical secretary. A student of fluid dynamics, Lighthill taught at the University of Manchester before heading the Royal Aircraft Establishment, Farnborough, in 1959–64. The Royal Society re-elected the following officers: treasurer, **Lord Fleck**, former president of Imperial Chemical Industries; biological secretary, **A. A. Miles** of the University of London, and director of Lister Institute.

Richard G. Bader, program director in oceanography at the National Science Foundation, has been appointed professor and chairman of oceanography at the University of Hawaii.

Gerd Burkhardt, director of the Institute of Theoretical Physics at the Higher Technical School, Hanover, Germany, has been appointed director of the department of advancement of science at UNESCO.

C. N. Yang, physics professor at Princeton's Institute for Advanced Study and co-winner, in 1957, of the Nobel Prize for physics, has been appointed distinguished professor of physics at the State University of New York, Stony Brook. He is to assume the Albert Einstein chair of science as of 1 April. The university also has announced the appointment of Maurice Goldhaber as adjunct professor of physics. He is director of Brookhaven National Laboratory.

J. D. J. Hofmeyr, head of the department of genetics at the University of Pretoria, has received the Havenga prize in biology from the South African Academy of Arts and Sciences.

Garman Harbottle, chemist at Brookhaven National Laboratory, has taken a 2-year leave of absence to serve as director of the division of research and laboratories at the International Atomic Energy Agency, Vienna.

Mead LeRoy Jensen, formerly professor and director of graduate studies in the geology department, Yale University, has become director of the recently established isotope geology laboratory at the University of Utah's school of mines and mineral industries.

REPORT FROM EUROPE

Blackett Chosen President of Royal Society

London. More than the desire to honor a distinguished physicist influenced the election, announced 30 November, of Patrick Maynard Stuart Blackett, 68, as president of the Royal Society for a term ending in 1970.

The Royal Society hopes to build on measures taken during the term of the retiring president, Lord Florey, to increase its political effectiveness. Behind this hope is the fear that Britain's machinery for making decisions about science and technology may not be strong enough for the tasks ahead.

In Britain, which, like the United States, spends nearly 3 percent of its gross national product on research and development, there is much discussion of an impending period of hard choices; such talk is typified by Lord Bowden's speech in September at the European Institute of Business Administration at Fontainebleau (*New Scientist*, 30 September and 7 October). Soon, it is felt, the exponential growth curves of research budgets or numbers of scientists will begin to level off in Britain. There is widespread worry here, as in the United States, that the choices which are looming will not be made rationally or in the best interests either of science or of the nation.

In Britain there is no top-level team of scientific advisers. Instead, the machinery for making government policy decisions about advancing science and technology appears, if anything, looser than it was before the reshuffling of British science and technology agencies recommended in the Trend report of 1963 and largely adopted by the present Labour government.

Instead of the single, if powerless, scientific advisory council which existed from the late 1940's, there are now two councils, one (of which Blackett has been permanent vice-chairman) to advise the new ministry of technology and another to advise the department of education and science. The two new

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