There is also a safeguard in the scholarship program, which will be administered through the states in order to minimize charges of federal domination of education. But the bill provides that there must be no discrimination and gives the federal government the power to hold up the money if the state's method of awarding scholarships is ruled discriminatory.

Rival Bills

Along with Kennedy's proposals, Congress has before it a panorama of rival school bills, representing the whole range of the political spectrum. Briefly summarized, and from left to right, here is a classification of the major ones:

The National Education Association bill: permanent subsidy for public education starting at about $1.4 billion the first year, climbing to $5 billion in the fourth year.

The Administration bill: $666 million the first year, $766 the second, $866 the third. States required to spend 90 percent on construction and teachers' salaries; 10 percent is available for "special problems."

Liberal Republican bill: In the same price range as the Administration bill, but with more money for the poorer states, and with the states free to spend the money in any legal way: that is, encouraged but not required to use a large share of it for teachers' salaries. Based, incidentally, on a bill introduced by Senator Taft, with bipartisan support, in 1947. Much the sort of bill that Nixon promised during the campaign.

Eisenhower Bills (bills the former President indicated were acceptable to him last year): either a long-term federally financed bond issue or grants, limited to a temporary program of school construction. If grants, it would cost about $300 million for several years; if bonds, about $60 million for 20 years.

Goldwater Republican bill: Unspecified as yet, but will involve allowing taxpayers deductions from their federal taxes to make more money available for state school taxes. Goldwater wing feels it has gotten a bad reputation as mere obstructionists. Therefore they have promised to offer alternatives, such as this one on education, to all liberal proposals involving greater federal spending or expansion of federal powers.

In general, most Democrats and the liberal Republicans are fairly close, both willing to provide money for teachers' salaries: the predominant view in the Senate. The Eisenhower view predominates in the House, but with strong Goldwater sentiment among most Republicans and Southern Democrats. The Goldwater bill is given no chance of passage, and its supporters will oppose anything else.—H.M.

News Notes

Lysenko Regaining Power in Soviet Biology

Recent events indicate that Soviet biologist Trofim D. Lysenko, who had great political and scientific power under Stalin, is regaining the influence that he began to lose with Stalin's death. Lysenko first won favor by maintaining that he could change plant heredity through environment, a theory that is rejected completely by Western geneticists. Soviet scientists who opposed Lysenko's views were discredited and in many cases lost their positions.

The most distinguished of these victims was geneticist Nikolai I. Vavilov, who died in a Siberian concentration camp during World War II. One of the evidences of Lysenko's diminished stature was the posthumous publication of Vavilov's works by the Soviet Academy of Sciences in 1956.

Last November this section published an erroneous report that Lysenko's influence was still waning, a report that was based on apparently current material from the Office of Technical Services of the U.S. Department of Commerce. One of the protest letters received as a consequence comments: "It is very unfortunate that a governmental report should be so erroneous, in regard to so important a matter." Another letter observed: ". . . You have inadvertently misled your readers, who, like me, were optimistic enough to believe that the report of the Office of Technical Services was an up-to-date revelation of a change of wind in Russian science."

Olshansky's Appointment Significant

That Lysenko is regaining influence was clearly demonstrated recently when Mikhail A. Olshansky was named minister of agriculture. Olshansky has been a devoted supporter of Lysenko's for many years and was the opening speaker at the 1948 session of the Lenin Academy of Agricultural Sciences at which Lysenko delivered an attack on academic scientists who opposed his views and quoted the Communist party's Central Committee in a way that established his ascendency beyond question.

Last month a New York *Times* article pointed out that the recent Soviet debate on agricultural policies, culminating in a sweeping reorganization of agricultural administration and Olshansky's appointment, indicated that Lysenko has won a key role in Premier Khrushchev's hierarchy "and is again bidding to set up his own political-scientific 'empire.'" Lysenko's rise is reported to have accompanied an intensive behind-the-scenes political struggle, the focus of which has been the continuing failure of Soviet agriculture to meet the optimistic levels of production promised by Khrushchev.

Lysenko's most recent project has been to increase Soviet butterfat production through widespread use of a special stock of bulls that he has bred. Farm leaders who opposed this plan have been ousted, including Olshansky's predecessor, Vladimir V. Matskevich.

1961 Federal Research Support Estimated at $9.1 Billion

The federal government will obligate an estimated $9.1 billion during fiscal year 1961 for the support of scientific research and development, according to the National Science Foundation. The estimate includes $8.5 billion for conduct of research and development and $600 million for increase of the research and development plant. About $850 million of the $8.5 billion—10 percent—is marked for basic research.

The 1961 total of $9.1 billion compares with obligations of $7.4 billion in fiscal year 1959 and an estimated $8.6 billion for fiscal year 1960, according to *Federal Funds for Science, IX: The Federal Research and Development Budget, Fiscal Years 1959, 1960, and 1961*, which NSF has just issued. The publication presents detailed information on obligations for the conduct of research and development in terms of administering agencies, performers of research and development, and character of the work.

Summary data for fiscal year 1961 reflect congressional action on the President's budget and subsequent administrative decisions. This is the first time such data have been introduced in this

series. Also presented for the first time are data on federal support of research and development abroad. Likewise, more detailed information, by field of science, on total research and basic research has been added.

In fiscal year 1961, three agencies—the Department of Defense, the Atomic Energy Commission, and the National Aeronautics and Space Administration—are expected to administer an estimated 90 percent, or $7.6 billion, of the total obligations for conduct of research and development. In fiscal year 1960 these agencies accounted for the same percentage of the total.

In fiscal year 1960, the year during which the estimates were submitted, funds administered for basic research ($747 million) represented more than 9 percent of the federal government's support of research and development. Forty-four percent of total federal obligations for basic research were allocated to educational institutions; 30 percent to federal agencies; 14 percent to profit organizations; and 12 percent to other organizations.

It is estimated that about one-fourth of total obligations for the conduct of research and development, or $1.9 billion, was committed for basic and applied research in fiscal year 1960. Of this amount, the physical sciences, including mathematical and engineering sciences, accounted for 56 percent and the life sciences for 27 percent; the remaining 17 percent was distributed among the psychological, social, and other sciences.

Copies of *Federal Funds for Science, IX* may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. (50 cents a copy).

London Has Society for Visiting Scientists

In London the Society for Visiting Scientists, which came into existence during World War II, offers a center at which foreign and overseas scientists visiting the United Kingdom may meet informally with other visitors and with British scientists.

The society provides club and restaurant facilities, and there are overnight accommodations for a limited number of visitors. There is a small library. Contact is maintained with a large number of scientists abroad and, through an information service and in other ways, the society is able to assist the activities of scientists on short visits to England, as well as, occasionally, those of British scientists traveling abroad. Students from overseas studying in England are brought together in the activities of the Overseas Science Students Association for which the society provides a home.

The work of the society, of which A. V. Hill is president, is made possible by the subscriptions of its British members, a grant from the British Council, and donations from industrial and other bodies interested in fostering closer understanding among scientists of all countries.

The society maintains an information service and is able to furnish details on the activities, scientific interests, and whereabouts of some 70,000 scientists. Increasing use is being made of this service by individuals and organizations who wish to get in touch with scientists working in specific fields. Inquiries are welcome.

Further information about the society may be obtained from the assistant secretary, Miss E. Simpson, at the organization's headquarters.

News Briefs

Communications satellites. Recent action by the Federal Communications Commission permits the American Telephone and Telegraph Company to launch a series of experimental communications satellites capable of relaying telephone calls, television programs, and other messages across the Atlantic. The company, with government assistance, plans to launch its first satellite within a year, as a forerunner of a global satellite system.

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South Pole expedition. An eight-man scientific traverse party arrived at the South Pole in the middle of February after a 65-day trek through many antarctic regions never before explored. The leader of the group, Albert P. Crary, chief scientist of the National Science Foundation's U.S. Antarctic Research Program, now joins the select group of two or three men who have been to both the North and South Poles. He was at the North Pole in 1952, doing scientific work on ice island T-1.

The current traverse of more than 1200 miles originated at McMurdo Sound on 10 December. The scientists made measurements to determine the elevation and thickness of the ice cap and the nature of the subglacial rock surface. Ice in some areas is about 2 miles deep, and analysis of ice cores is expected to provide valuable information on the past history of the ice and on past climatic conditions in Antarctica. The traverse was conducted by the University of Wisconsin under a National Science Foundation grant.

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Asian research headquarters. A new office to administer agricultural research grants in the Far East has been opened in New Delhi, India, by the U.S. Department of Agriculture. Named the Far Eastern Regional Research Office, it is directed by Paul W. Oman, formerly head of the insect identification and parasite introduction research branch of the USDA's Agricultural Research Service. The Delhi office will administer USDA grants for research to be conducted by institutions in India, Japan, Pakistan, Ceylon, Indonesia, Burma, and the Philippine Islands.

The USDA foreign research program is paid for with foreign currencies accruing to the account of the United States from sale of surplus agricultural commodities abroad under Public Law 480. About $3.5 million is available for research in the Far East in fiscal 1961.

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Salter memorial. On 10 February, the late William T. Salter, professor and chairman of the department of pharmacology, Yale University School of Medicine, from 1941 to 1952, was honored by former students, faculty associates, and friends for his many contributions to pharmacology, medicine, and graduate education. A portrait of Salter by Furman J. Finck was presented to Dean Vernon W. Lippard in the Beaumont Room, Sterling Hall of Medicine, by the W. T. Salter Society. Jerome M. Glassman, president of the society, unveiled the painting and gave the dedication address.

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NATO institutes. Under the sponsorship of the North Atlantic Treaty Organization, some 24 advanced-study institutes will be held in NATO countries during 1961. These institutes, covering advanced specialized fields, vary in length from 1 week to about 2 months, and most of them are scheduled for the summer holiday period. The National Science Foundation has announced that a limited number of transatlantic travel grants, providing only transportation costs, will be avail-

able to U.S. citizens who have been accepted by the institute directors. Further information on these institutes should be obtained directly from the pertinent institute directors, a list of whom may be obtained from the National Science Foundation, Washington 25, D.C.

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M.I.T. centennial. Some 100 world leaders in the arts and sciences will meet at the Massachusetts Institute of Technology during a week's centennial celebration next April. They will participate in an International Conference on Problems of Scientific and Engineering Education, 3–6 April, that will be the highlight of a varied program of events. John E. Burchard, dean of the School of Humanities and Social Sciences, is chairman of the Centennial Celebration Committee.

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New rocket research company. Three former Boeing Airplane Company engineers have formed the Rocket Research Corporation to conduct research, development, and manufacturing in Seattle. President is George S. Sutherland, former head of Boeing's Advanced Propulsion Group. He previously conducted research on solid propellants at Princeton University's Forrestal Research Center. Board chairman is Robert M. Bridgforth, formerly chief of the Boeing Propulsion Research Unit and a former member of the teaching and research staff of the Massachusetts Institute of Technology. Regis A. Hacherl, secretary-treasurer, headed Boeing's evaluation and experimental program in chemical rockets.

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Congress on medical librarians. The Medical Library Association has invited the second International Congress on Medical Librarianship to meet in Washington, D.C., 16–22 June 1963, at the time set for its own 62nd annual convention. Development of plans for the congress, to date, include the appointment of Frank B. Rogers as general chairman and M. Ruth MacDonald as executive secretary, and the establishment of an organization committee with special responsibilities for program development. The congress secretariat will be located in the National Library of Medicine.

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Quaternary research. A meeting of the International Association for Quaternary Research will be held in Poland during the late summer of 1961. The congress, which meets every 4 years, will be preceded by an excursion, which will set out from Warsaw on 27 August. Regular sessions will be held from 2 to 7 September, and a postcongress excursion is scheduled for 7–21 September. Although the congress has been attended primarily by Europeans, it is international, and non-Europeans are urged to attend. For information, write to Prof. Rajmund Galon, Secretary General, INQUA, Geographical Institute, University, Tourn, Poland.

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Communication Research Institute. The Communication Research Institute of St. Thomas, chartered by the government of the U.S. Virgin Islands as a nonprofit institution, has recently begun construction of a new laboratory building in St. Thomas and has opened a branch in Miami, Fla. The organization's research program is devoted to basic biological, biophysical, and psychological processes of communication. At present a major study of the bottlenose dolphin (*Tursiops truncatus*) is under way.

The institute is seeking personnel in the fields of biophysics, acoustic physics, linguistics, mathematics, solid-state electronics circuitry, neurophysiology and psychophysiology, neuroanatomy, physiology, and general marine animal care. For information write to John C. Lilly, Director, Communication Research Institute, 3908 Main Highway, Miami 33, Fla.

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Teratology Society. The Teratology Society, a new international organization devoted to study of the cause and prevention of congenital malformations, has been formed, with Josef Warkany, professor of research pediatrics, University of Cincinnati College of Medicine, as president. The first official meeting will be held in May in Cincinnati.

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Guide to reactors. The third volume of the *World Directory of Nuclear Reactors* has been published by the International Atomic Energy Agency. The new volume, a supplement to volume 2 of the *Directory*, which was published in December 1959, contains detailed information on 96 research, test, and experimental reactors currently in operation or under construction in 21 countries. The reactors have been grouped into the following main categories: light water moderated, pool type (27); light water moderated, tank type (21); liquid homogeneous (16); solid homogeneous (19); heavy water moderated (13); graphite moderated (4); and fast research reactors (6). The *Directory* is available from IAEA sales agents, or directly from IAEA, Kärntnerring, Vienna 1, Austria. The price of volume 3 is $4.

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Life sciences. The Atomic Energy Commission has published the second in a series of pamphlets describing its life sciences research program, which is directed toward the accumulation of knowledge of the effects of nuclear radiation from any source, natural or man-made, upon living things. The booklet, *Genetics Research*, was prepared under the direction of the commission's Division of Biology and Medicine. It summarizes work in progress at 49 institutions under 101 research contracts or projects. The publication is available from the Office of Technical Services, U.S. Department of Commerce, Washington 25, D.C.; price per copy, $1.25. (The first pamphlet in this series, *Marine Sciences Research*, may be purchased from OTS at 50 cents a copy.)

Grants, Fellowships, and Awards

Agricultural chemistry. The Association of Official Agricultural Chemists has announced that nominations are now being accepted for the fifth AOAC Harvey W. Wiley Award for Achievement in Analytical Methods. This award of $500 will be given to the scientist or group of scientists who have made outstanding contributions to the development of analytical methods in the fields of foods, drugs, cosmetics, feeds, fertilizers, and pesticides or for use in general analytical chemistry. These are the fields dealt with in the AOAC publication, *Official Methods of Analysis*, the primary laboratory manual of regulatory chemists and research workers in agriculture in the United States and throughout the world.

Nominations must be submitted *by 1 April* to the association secretary, William Horwitz, Box 540, Benjamin Franklin Station, Washington 4, D.C.

Chemistry teachers. The Manufacturing Chemists' Association has announced its 1961 College Chemistry Teacher Awards program, which will honor six outstanding college chemistry teachers throughout the United States. Medals and citations, accompanied by $1000 awards, will be presented at the

association's annual meeting, 8 June 1961, at White Sulphur Springs, W. Va. Two awards will be granted in each of three regions into which the United States has been divided by the selection committee.

To be eligible for nomination for an award, a teacher must have had at least 10 years' service in undergraduate teaching in chemistry, chemical engineering, or allied courses. He must be nominated by the president of the college or university where he is teaching, and this must be an accredited college or university offering 4-year bachelor degrees. However, there is no requirement for a minimum length of service at the institution from which he is nominated.

In reviewing a nomination the judges will consider convincing evidence that the nominee has been personally responsible over a period of years for awakening in students a genuine interest in chemistry, for inspiring them to make serious intellectual effort in that field, and for developing that interest into a continuing dedication. All nominations must be submitted *by 1 April* to the Manufacturing Chemists' Association, 1825 Connecticut Ave., NW, Washington 9, D.C.

Gravity. The Gravity Research Foundation has announced its 1961 Awards for Essays on Gravity. Five awards will be made on 1 June for the best 1500 word essay on the possibilities of discovering: (i) some partial insulator, reflector, or absorber of gravity; (ii) some alloy, or other substance, the atoms of which can be agitated or rearranged by gravity to throw off heat; or (iii) some other reasonable method of harnessing, controlling, or neutralizing gravity. The awards will be in amounts of $1000, $300, $200, $150, and $100.

Essays must be received *before 15 April*. For detailed information write to: Gravity Research Foundation, New Boston, N.H.

Neurology. The National Neurological Research Foundation is now accepting applications for its senior fellowships in neurology, which carry stipends of $12,000 a year for 5 years. Fellowships may be activated through 31 December 1961. Awards will be announced at the meeting of the American Neurological Association in June 1961. For further information, write the National Neurological Research Foundation, 3255 N St., NW, Washington 7, D.C.

Ophthalmology. The National Council to Combat Blindness, Inc.—The Fight for Sight, 41 W. 57 St., New York, N.Y.—makes annual awards in support of ophthalmic research. Fight for Sight grants-in-aid and full-time research fellowships are generally awarded for a period of 1 year, and may be renewed. Student fellowships are awarded for a 2- or 3-month period to students of medicine and the basic sciences, providing them with an opportunity to engage in research between semesters.

Reproductive physiology. In recognition of the world-wide need for scientific training in reproductive physiology, the Worcester Foundation for Experimental Biology plans to continue its postdoctoral program in this field under a grant from the Population Council. Starting in 1962, the annual program will commence on 1 February.

Fellowships will be awarded to candidates holding the Ph.D. or M.D. degree, or the equivalents. These fellowships will carry a stipend of $5500 per annum and will be for a 12-month period. An allotment will also be made for round-trip travel to Shrewsbury, Mass.

The application deadline is *1 June*. Application forms and information may be secured at any time from the program director, Celso-Ramon García, Worcester Foundation for Experimental Biology, Shrewsbury, Mass. However, applications will not be acted upon prior to the given date for the particular year selected.

Whenever possible, arrangements should be made for an interview with a member of the advisory and selection committee, which includes: Dr. Gregory Pincus, research director of the Worcester Foundation; Dr. Warren O. Nelson, The Population Council, Inc., Rockefeller Institute, 66th St. and York Ave., New York 21, N.Y.; Dr. V. R. Khanolkar, Indian Cancer Research Centre, Parel, Bombay 12, India; Dr. Roberto Caldeyro-Garcia, Facultad de Medicine, Avenida Gral Flores, 2125, Montevideo, Uruguay; Dr. Takeshi Nakao, Tokyo Jidei-kai School of Medicine, Atago-cho, Shiba, Minato-ku, Tokyo, Japan; and Dr. M. C. Shelesnyak, Weizmann Institute of Science, Post Office Box 26, Rehovoth, Israel.

Travel. Limited funds are available from the National Science Foundation for the support of travel by U.S. scientists to international scientific congresses. The grants will approximately cover round-trip, air-tourist fare between the recipient's home institution and the location of the meeting. Application forms may be obtained from the Division of Mathematical, Physical and Engineering Sciences, National Science Foundation, Washington 25, D.C. The following congresses are among those that have been selected for support:

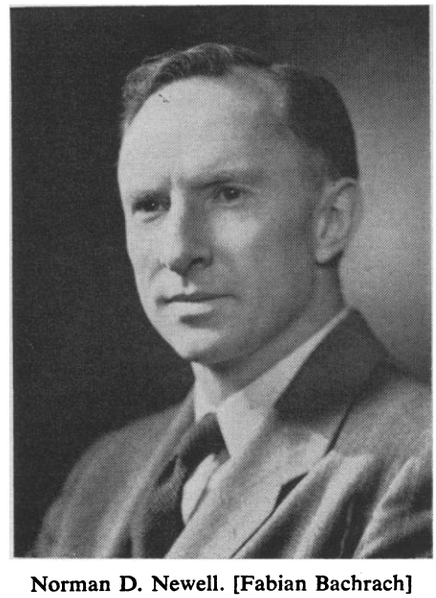
European Molecular Spectroscopy group in Amsterdam, Holland, 29 May–2 June. *Closing date: 20 March.*

International Association of Quaternary Research, Warsaw, Poland, 2–7 September. *Closing date: 1 April.*

International Cloud Physics Conference, in Canberra and Sydney, Australia, 11–21 September. *Closing date: 1 April.*

Scientists in the News

Norman D. Newell has been named the recipient of the Mary Clark Thompson Medal of the National Academy of Sciences in recognition of his outstanding contributions to paleontology and geology, and particularly to the ecology of modern and ancient calcareous reefs. Newell is chairman and curator of the Department of Fossil Invertebrates at the American Museum of Natural History in New York and a professor of geology at Columbia University. The award will be presented to him during the academy's annual meeting, to be held in Washington on 24 April.



Norman D. Newell. [Fabian Bachrach]

Warren S. Wooster, formerly associate research oceanographer at the University of California's Scripps Institution of Oceanography, has left for Paris, where he will head UNESCO's recently established Office of Oceanography.

The Office of Oceanography was authorized by the UNESCO Council in November. At the same time, the council set up an Intergovernmental Oceanographic Commission. The aim of both bodies is to foster international cooperative research in the marine sciences. As director of the Office of Oceanography, Wooster will serve as secretary of the commission.

Physicist **Richard F. Humphreys** has been named president of the Cooper Union for the Advancement of Science and Art in New York City, effective 1 June. He is now vice president of the Armour Research Foundation, Illinois Institute of Technology, Chicago. Humphreys succeeds **Edwin S. Burdell**, who retired in February 1960 to become president of the Middle East Technical University in Ankara, Turkey, after 22 years as director and president of Cooper Union.

Wendell M. Stanley, director of the University of California's Virus Laboratory, Berkeley, arrived in Europe this month to begin an 8-month study tour on a Guggenheim fellowship. Through visits to laboratories in ten European cities, he hopes to strengthen and extend international scientific cooperation in the field of virus research.

The following men will lecture at a number of colleges and universities during March as Sigma Xi national lecturers.

Theodosius Dobzhansky, Dacosta professor of zoology, Columbia University, will discuss "Man and Natural Selection."

Norman F. Ramsey, professor of physics at Harvard University, will discuss "Nuclear Interactions in Molecules."

Sanborn C. Brown, associate professor of physics at Massachusetts Institute of Technology, will discuss "Plasma Physics."

C. Jolliffe, deputy director of the Grants Division of Great Britain's Department of Scientific and Industrial Research, London, will be in the United States and Canada from 28 March to 8 May. He is primarily interested in the handling of problems arising from government support of universities and technical institutions. He will visit Washington (30 March–5 April, and 4–7 May); Baltimore; Raleigh, N.C.; the Boston area; and Ottawa and Montreal, Canada.

Among the six women with outstanding careers in government selected as winners of the first annual Federal Women's Award were two scientists—**Charlotte Moore Sitterly**, physicist with the National Bureau of Standards, Washington, D.C., and **Rosslyn S. Yalow**, principal scientist, Radioisotope Service, Veterans' Administration Hospital, Bronx, N.Y.

At Stanford University School of Medicine, **Thomas A. Stamey**, associate professor of urology at Johns Hopkins University Medical School, has been appointed associate professor of surgery and will head the new division of urology in the department of surgery. **Tag Eldin Mansour**, associate professor in the department of pharmacology at Louisiana State University, has been appointed professor of pharmacology.

Maurice J. Murray, chemical consultant to the Universal Oil Products Co., Des Plaines, Ill., has been appointed chief scientist of the U.S. Army Chemical Corps. He will report for duty on 1 March. Prior to joining Universal Oil, Murray was professor of chemistry and acting chairman of the department of chemistry at Illinois Institute of Technology.

William N. Parkinson, vice president in charge of the Temple University Medical Center, is retiring after more than 35 years of service. Parkinson, who has held various posts at Temple, was for 30 years dean of the Medical School, from which he was graduated in 1911.

Louis Gordon, professor of chemistry and a well-known analytical chemist, has been appointed dean of graduate studies at Case Institute of Technology. The appointment will be effective 1 July, when **Eric Arnold**, at present associate dean, reaches the mandatory retirement age for administrative personnel. Arnold will continue as professor of chemistry.

James A. Krumhansl, professor of physics at Cornell University, has been appointed director of Cornell's Laboratory of Atomic and Solid State Physics, succeeding **Robert L. Sproull**, who was recently named director of the Cornell Materials Science Center.

Lauriston Sharp, distinguished anthropologist, has been appointed visiting professor of anthropology for the 1961–62 academic year at the University of California, Berkeley. Sharp is an authority on the cultures of Southeast Asia.

Recent Deaths

Lyman Allen, Burlington, Vt.; a past president and a founder of the American College of Surgeons and emeritus professor of surgery at Vermont College of Medicine; 2 Feb.

Larry R. Commissaris, Tucson, Ariz.; zoologist; was doing graduate work in the department of zoology at the University of Arizona; 17 Jan.

Rev. Dr. **Etienne Drioton**, Paris, France; 71; archeologist and well-known Egyptologist who was named head curator of Egyptian antiquities of the Louvre Museum in 1952; worked in Egypt for 28 years, but at the time of the Egyptian *coup d'état* of 1952 was dismissed from his posts as director general of the Department of Egyptian Antiquities in the Ministry of Education and director of the Egyptian Museum in Cairo; 19 Jan.

Robert H. Kent, Havre de Grace, Md.; 75; physicist and a leader in modern ballistics, who worked at the Army's Proving Ground Ballistics Laboratory for 34 years before retiring in 1956; for many years was chairman of the explosives and armament panel of the Air Force Scientific Advisory Board; 3 Feb.

Meyer Mendelsohn, New York, N.Y.; 65; chemical engineer; vice president of Yardney Chemical, Inc., and head of chemical research for the Yardney International; early developer of ion-exchange separators, used in silver-zinc batteries for missile, satellite, and other applications; 14 Feb.

Jerome T. Syverton, Minneapolis, Minn.; 53; professor and head of the department of bacteriology, University of Minnesota; distinguished teacher and investigator in virology and cell biology; 28 Jan.