campaign explains such peculiarities as the talk of awarding federal assistance through a system of "matching grants." Matching grants with the spending of state governments (as opposed to outright grants) has become one of the keystones of Republican orthodoxy. But any matching that comes about under such a project as the National Meteorological Institute is likely to involve a very big federal grant to "match" modest contributions from universities and the foundations.

The report of the National Academy of Sciences committee which recommended the establishment of the institute called for a capital investment of $50 million over a 5-year period and an annual operating budget of $15 million. All the money would come from the federal government, although some NSF officials hope that there would eventually be some contributions from private sources.

Similarly, Brookhaven National Laboratory, cited by Nixon as an example of what he has in mind, is supported almost entirely by the federal government. Brookhaven cost the government $30 million last year in direct support.

A few researchers and a small amount of equipment were financed by the participating universities, but even here the actual money often came from a grant the government had given to the university to support the scholar or to buy the equipment.

Contributions from state governments and private industry, as a practical matter, are not likely to be important. Even on programs like slum clearance and road building, where the benefits to the state are very direct, the federal government often contributes $4 or more to every dollar put up by the state or local governments. In the case of the research institutes, where the benefits are clearly to the nation, rather than to the state in which the institute might be located, no one really expects more than token participation by state and local governments or by private business. Thus, the institute program will almost certainly depend on how willing a Nixon administration would be to go beyond the terms of the paper, which specifically says the government will not finance the institutes. It is difficult to find anyone who believes that Brookhaven would exist or that the proposed institute for meteorology is likely to come into existence unless the federal government is willing to put up the money.—H.M.

News Notes

Radiation Limits Reduced to One-Third Present Levels by Atomic Energy Commission

The Atomic Energy Commission has established sharply lower limits for radiation exposure by amending its regulation for the protection of employees in atomic energy industries. Therefore, the radiation limit for members of the general public beyond the confines of atomic plants is also radically changed, for the rule is that the public may not receive more than 10 percent of the maximum exposure permitted radiation workers.

The new restrictions, which go into effect on 1 January 1961, will reduce the allowable life-time accumulated dose of radiation received by workers to approximately one-third the amount allowed under the regulation as it now stands. The total external radiation exposure that any worker may accumulate beyond the age of 18 will be lowered to an average of 5 rem per year and to not more than 3 rem in any one quarter. Present limits for radiation workers are 0.3 rem per week (or approximately 15 rem a year), without further restrictions as to accumulated dose.

[A rem (*r*oentgen *e*quivalent *m*an) is a radiation dose of any ionizing radiation estimated to produce a biological effect equivalent to that produced by 1 roentgen of x-rays.]

National Committee Proposes Limits

The radiation exposure levels now in effect are based on the 1957 recommendations of the National Committee on Radiation Protection, a group of radiation specialists who work for government agencies, including the AEC, and for private institutions. The new radiation limits are designed to bring the commission's regulations into accord with the current recommendations of the National Committee.

The committee emphasizes that the lowering of the limits should not be interpreted as indicating that exposures at levels currently permitted by the regulations have caused damage. The NCRP says that the changes, rather, are based on a desire to bring radiation standards into accord with new trends of scientific opinion and to reflect awareness of the probability of a large future increase in radiation uses.

Soviet Scientist Describes Dogs During Space Flight

The reactions of the Soviet dogs Belka and Strelka while they were orbiting the earth in the U.S.S.R.'s satellite spaceship last month were described as follows in the Soviet press by P. Fyodorov, one of the scientists who watched the telecast transmitted from the ship's cabin during flight.

"At the moment of the start the dogs pricked up their ears and looked in bewilderment at the floor of the cabin: What was that unusual noise? During the first seconds of the flight the dogs were worried and tried to rush about. As the ship's speed was accelerated, the dogs were gradually pressed to the floor by the increasing force of gravity. Strelka tried to resist by pressing firmly with [her] legs and anxiously looked around her. Then the animals stood stock-still. The ship had reached its orbit.

"After the great overload, a condition of weightlessness set in. The dogs found themselves in mid-air in the cabin, their paws and heads limply lowered. At first glance the animals seemed lifeless.

"I will not conceal the fact that we were greatly worried during those minutes. Only the readings of the telemetric system reassured us: The pulse and respiration of our travelers gradually returned to normal. We realized that the animals were simply resting after all the 'excitement' experienced during the take-off and were becoming accustomed to the new and extremely unusual sensations.

"Gradually they started to raise their heads and move their paws. Everything was unusual: It was not so simple to manage their own paws in such strange conditions. Belka even became angry and started to bark; but one gradually becomes accustomed to everything, and the animals became accustomed to the condition of weightlessness. They started to eat. . . .

"There were times during the flight when they again became alarmed, but gradually they began to feel at home."

The television system aboard the satellite is reported to have provided valuable motion-picture films. The recording of the images was synchronized with the recordings of telemetric information, making it possible to compare direct observation of the animals with data on the changes in their physiological functions.

In addition to Belka and Strelka, the spaceship carried 13 white mice, 15 gray mice, and two white rats. These were the first animals ever to be returned from outer space.

The following laboratory specimens were also aboard: insects—*Drosophila* in 15 flasks; plants—spiderworts in two flasks, *Chlorella* in eight ampules in a liquid nutritive medium in suspension form and in four ampules in slant agar; fungal cultures—*Actinomyces* in 14 ampules; seeds—corn and different varieties of wheat, peas, onions, and *Nigella*. The space cabin also contained small segments of skin (human and rabbit) in two ampules; HeLa cancer cells in six ampules; and microbes—KK-12 intestinal bacilli in 11 ampules, B intestinal bacilli in six ampules, intestinal bacilli of the aerogenes type in four ampules, butyric acid fermentation bacteria in two ampules, staphylococci in two ampules, deoxynucleic acid in six ampules, T-2 bacteriophage in three ampules, and 13-21 bacteriophage in three ampules.

Presidential Candidates Urged To Promote Nuclear Test Resumption

Thomas E. Murray, a Democrat and former member of the Atomic Energy Commission, has written an open letter to presidential candidates John F. Kennedy and Richard Nixon urging them to promote the resumption of fallout-free nuclear weapon tests underground and in outer space. Murray, who is now a consultant to the Joint Congressional Committee on Atomic Energy, holds that the test suspension has jeopardized this country's atomic superiority. He says there is a pressing need for the development of weapons suitable for "rational military purposes," emphasizing that he does not mean larger and larger weapons of mass destruction.

He warns that support of test resumption would be "an act of political courage" that would be "unpopular both at home and abroad," yet a "necessary act of political wisdom." At the same time he stresses that the testing issue "must not be exploited for partisan advantage."

Both Kennedy and Nixon have said in recent public statements that the test suspension should be continued as long as there is hope of progress on a permanent test-ban agreement with the Soviet Union.

Scholarship Programs Bring Two Groups of Africans to the U.S.

A program to bring from 100 to 200 African students to this country each year has been announced by a group of 24 colleges and universities. The students will receive all-expense 4-year scholarships from the participating schools. Their governments will pay their travel expenses. A pilot program, involving 23 Nigerian students, has brought 23 students here to begin their studies this fall.

The colleges include: Amherst, Barnard, Brandeis, Brown, Bryn Mawr, Columbia, Cornell, Dartmouth, Harvard, Haverford, the University of Minnesota, Mount Holyoke, Notre Dame, Oberlin, Pembroke, the University of Pennsylvania, Princeton, Radcliffe, Smith, Stanford, Swarthmore, Vassar, Wellesley, and Yale. Other schools are expected to join. Additional financial support will be sought from the government as well as from private foundations.

The program has no connection with the 270 African students who became the center of controversy over whether the State Department or the Joseph P. Kennedy Jr. Foundation should put up the money to fly them to the United States in order to take advantage of scholarships which had been arranged through the African-American Student Foundation. The State Department had turned down a request for the $100,000 needed to fly the students here, but had reversed itself after the Kennedy Foundation had agreed to put up the money.

The State Department later conceded that the reversal had come after intercession by an aide of Vice-President Nixon, and after the Student Foundation had already arranged to finance the students' transportation through the Kennedy Foundation. By this week the controversy had been almost forgotten and the first group of 144 students flew to the United States virtually unnoticed in the press. The remaining 130 students were to arrive later this week and early next week.

Koprowski Protests Exclusive Approval of Sabin Vaccine

Hilary Koprowski, director of the Wistar Institute, who discovered the live-virus poliomyelitis vaccine and developed one of the three types well known in this country, has protested the Public Health Service's recent approval for public use of only the Sabin vaccine. In a letter to PHS Surgeon General Leroy Burney, Koprowski said that "there are no scientific data available which warrant such an exclusive endorsement as you have made."

He pointed out that both the Sabin and Koprowski vaccines had been given to more than 9 million people throughout the world with no ill effects, and commented: "If we are to evaluate the safety of all polio vaccines by their effects on only 223 monkeys, as you have done, both the Sabin and Koprowski vaccines again appear to be eligible for approval because this inconclusive test shows no appreciable difference between the vaccines." The Public Health Service found the Sabin vaccine to be less virulent than Koprowski's and one developed by Herald Cox of Lederle Laboratories.

News Briefs

Support for atomic research. The Joint Congressional Committee on Atomic Energy has issued a report asking for increased research in applications of atomic energy. The report said the government had not been imaginative enough in seeking out and supporting promising new areas for applications research. It was also critical of support for Project Rover, the atomic rocket, which the report said was not being adequately financed.

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French nuclear tests. France's third nuclear weapons test will take place on 15 October in the Sahara Desert some 400 miles south of Algiers. According to an unconfirmed report, an underground explosion will be fired that will trigger a series of similar test blasts.

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Sixty-ton satellite. When he was in Finland recently, Soviet Premier Nikita Khrushchev told a factory worker that the Soviet Union would soon send up a 60-ton space satellite—"a whole train."

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Fast transfer reactions. Molecular biophysicists are becoming increasingly aware of the biological significance of fast transfer processes utilizing elementary particles. To inquire into the possible physiological role of fast transfer reactions in eliciting specific interactions in ordered macromolecular

structures, a series of seminar lectures was held at the Massachusetts Institute of Technology during the spring term of 1960. Abstracts of these lectures and pertinent references have been compiled and are available gratis. Requests should be sent to Professor Francis O. Schmitt, Department of Biology, Massachusetts Institute of Technology, Cambridge 39, Mass.

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NASA consultant. The National Aeronautics and Space Administration has appointed 25 scientists as consultants in five fields of space science: astronomy, ionospheric physics, lunar sciences, particles and fields, and planetary and interplanetary sciences. The scientists will advise the NASA subcommittees which make recommendations to the agency's Space Sciences Steering Committee, the committee that serves as a focal point for space science activities and that selects experiments for satellites and space probes.

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Radiation research. The second International Congress of Radiation Research will be held at Harrogate, Yorkshire, England, 5–11 August 1962. It is sponsored by a committee set up in 1958 at the first congress at Burlington, Vermont, and by the Association for Radiation Research. The program will be concerned with the physical, chemical, biological, and medical effects of radiation, particularly ionizing radiations. Research workers in these fields will be invited to proffer original papers and reports of new experimental work. A brochure will be available April 1961. Information may be obtained from the Secretary-General, Mount Vernon Hospital, Northwood, Middlesex, England.

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Plant science. The University of Colorado College of Pharmacy was host to the First Annual Meeting (Plant Science Seminar) of the American Society of Pharmacognosy from 30 June to 2 July. The president of the society is Varro E. Tyler, Jr., and the secretary is Rolf S. Westby, Eli Lilly and Co., Indianapolis 6, Ind. The society was formed by the pharmacognosists of the United States to formalize and perpetuate the standards and ideals of the Plant Science Seminar and to "promote the growth and development of pharmacognosy, . . . to provide opportunities for presentations of research achievements and to promote the publication of meritorious research." Membership is open to graduate students and workers of other nations.

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Chemical Society building. Government officials, educators, and industrial leaders will join with chemists and chemical engineers from many parts of the country in the dedication on 7 October of the new eight-story national headquarters of the American Chemical Society in Washington. Principal speakers will include Glenn T. Seaborg of the University of California; Charles A. Thomas of the Monsanto Chemical Company, St. Louis; and W. Albert Noyes, Jr., of the University of Rochester.

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Science Youth Month. October will again be National Science Youth Month. As the school year begins, national organizations, including the AAAS, will cooperate with Science Service, Washington, D.C., in a month-long program to stimulate young people's interest in science and technology. Organization of science clubs and science fairs in all parts of the country will be stressed. A calendar of events has been prepared, and information has been assembled for those in local and regional organizations who wish to cooperate.

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International medical journal. *Medicina Universalis*, a new periodical published in six languages, has been established to achieve greater international cooperation in the medical field. Headquarters are in Paris, 71 rue Sainte-Anne. Contributions from physicians and biologists of medical and scientific papers are requested for consideration. Ionel Rapaport, assistant professor in the Psychiatric Institute at the University of Wisconsin, has been appointed editor for the United States. Articles may be addressed to him at 418 N. Randall Ave., Madison, Wis.

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Health statistics center. A National Center for Health Statistics has been established in the Public Health Service. Initially the center will have two divisions: the U.S. National Health Survey, which was transferred to it on 15 August, and the National Office of Vital Statistics, which will become part of the center on 1 October. The center's work will supplement but not supplant the statistical work associated with particular Public Health Service programs. Forrest E. Linder, who has been director of the National Health Survey since its inception in 1956, is acting director of the center pending formal establishment of the position of director.

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New nebula. Radio telescope investigations made by scientists at Cambridge, England, have led to the sighting by astronomers at Mount Palomar Observatory in California of a new nebula farther out in the universe than man has ever seen before. The Mullard Radio-Astronomy Observatory at Cambridge fixed the nebula's position at 5000 million light years away. From this information, it was possible to photograph the nebula with Palomar's 200-inch telescope. The two observatories have been cooperating on the project since the nebula's signals were first noted on the Cambridge radio telescopes last year.

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Paleontological research. The annual meeting of the Paleontological Research Institute, originally scheduled for 1 October, has been postponed until 8 October.

Grants, Fellowships, and Awards

Arctic research. The Arctic Institute of North America invites grant applications from research scientists interested in arctic and subarctic North America and in Antarctica. The aims of the institute's grant-in-aid program, which last year numbered 35 awards ranging in value from $400 to $10,000, are to support the work of experienced field scientists and to introduce competent researchers to polar science. The institute favors no particular scientific disciplines but appraises proposals on the basis of their individual excellence. Grants are usually made for a 1-year period. The institute can assist researchers to obtain the use of laboratory facilities and field stations for many kinds of work.

Further information about the program and application forms are available on request from the Arctic Institute of North America, 3485 University St., Montreal 2, P.Q., or 1530 P St., NW, Washington 5, D.C. Applications for 1961 grants should be submitted *before 1 November.*

College teaching. The Woodrow Wil-

son National Fellowship Foundation has announced the opening of competition for its 1961–62 fellowship awards. The purpose of the Woodrow Wilson program is to combat the critical shortage of qualified college teachers by encouraging outstanding students to enter the college teaching profession.

To accomplish this purpose, the foundation, operating under a $24,500,000 grant from the Ford Foundation, annually offers 1000 first-year graduate fellowships to students interested in college teaching careers. The fellowships, which are worth $1500 plus full tuition and fees and family allowances, may be used at any graduate school in the United States or Canada.

The program is open to college seniors or graduates in the humanities, the social sciences, and the natural sciences. Both men and women are eligible. There is no limit on the age of the candidate or on the number of years he may have been out of college. However, the foundation does not accept applications directly from students; candidates for the award must be nominated by a faculty member, *prior to 31 October*. A brochure containing information about the program may be obtained by writing to Dr. Hans Rosenhaupt, National Director, Woodrow Wilson National Fellowship Foundation, Box 642, Princeton, N.J., or from the Woodrow Wilson representative on any college campus in the United States or Canada.

Graduate study abroad. Two hundred fellowships for graduate study in 13 foreign countries will be offered by foreign governments and universities through the Institute of International Education for the academic year 1961–62. The institute has announced that applications for the fellowships are now available and will be accepted until *1 November*.

The scholarships cover tuition and varying amounts of maintenance in universities in Austria, Canada, Denmark, France, Germany, Iran, Israel, Italy, Mexico, the Netherlands, Poland, Sweden, and Switzerland. Students applying for Italian university awards or Austrian, Danish, French, German, Israeli, Italian, or Netherlands Government awards may apply for a Fulbright travel grant to supplement their scholarships. Two additional awards, offered by an American foundation, are for study in any country in the Far East, in South or Southeast Asia, or in Africa.

General eligibility requirements are United States citizenship, a bachelor's degree or its equivalent before departure, language ability sufficient to carry on the proposed study, and good health. Preference is given to applicants under 35 years of age who have not had extensive foreign experience. While married persons are eligible for most of the awards described above, the stipends are scaled to the needs of single grantees.

For further information and application forms, prospective applicants should write to the Information and Counseling Division, Institute of International Education, 1 E. 67 St., New York 21, N.Y., or to any of the Institute's regional offices.

Medical faculty. Nominations are being accepted for the eighth annual series of Lederle Medical Faculty Awards of the Lederle Laboratories Division of American Cyanamid Company. Awards, in amounts not exceeding $10,000 per year, will be made for a term not exceeding 3 years for the support of young individuals of faculty rank who have demonstrated capacities both as teachers and investigators in departments of anatomy, biochemistry, microbiology, pathology, pharmacology, physiology, and medical genetics, in order to help accelerate their progress as responsible members of their faculty and to encourage them to remain in these disciplines.

Applications will also be considered on behalf of candidates from certain clinical departments which have broad responsibilities for undergraduate medical teaching—namely, internal medicine, pediatrics, and general surgery. These candidates should be experienced physicians who intend to orient their full-time interest and activities primarily toward the teaching of clinical medicine as integrated with the basic medical sciences.

In general, an award will not be made to a candidate with a stable salary provided from a departmental budget if the major purpose of the award is to free funds for new but unspecified individuals. A candidate will receive consideration only if it is clearly evident that the departmental funds will be augmented by the full amount of the award.

Nominations should be submitted to the office of the dean of the medical school and should be endorsed by him and also by the administrative head of the sponsoring department. Only one candidate from any school will be considered in any given year. Nominations for 1961–62 should be sent *before 23 October* to Lederle Medical Faculty Awards, Office of the Secretary, Pearl River, N.Y.

Ophthalmology. The National Council to Combat Blindness, Inc., has announced that the closing date for receipt of completed applications for full-time research fellowships, grants-in-aid, and summer-student fellowships for the 1961–62 period, has been designated as *1 March 1961*.

In general, notification to applicants for full-time research fellowships and grants-in-aid will go forward in July, with 1 August as the commencement date for the projects. Under special circumstances, where earlier notification is essential, the Scientific Advisory Committee may consider applications in advance of the scheduled date. Applicants for student fellowships will be notified in May of the action taken by the Scientific Advisory Committee in order that arrangements may be made with their respective institutions to commence work in early summer. Appropriate forms may be obtained by addressing the Secretary, National Council to Combat Blindness, Inc., 41 W. 57 Street, New York 19, N.Y.

Scientists in the News

Sir Wilfred Le Gros Clark, professor of anatomy at Oxford University, was elected president of the British Association for the Advancement of Science at its recent meeting in Cardiff, Wales. He is widely known for his studies of the thalamus and hypothalamus and of nerve regeneration, and for his work as a paleontologist. His *Fossil Evidence of Human Evolution* was published in Chicago in 1955.

Sir Wilfred succeeds Sir **George Thomson**, professor of physical chemistry at Cambridge University and master of Corpus Christi College, whose father was the famous J. J. Thomson, originator 60 years ago of the concept of electrons that opened the atomic age. In his presidential address, Sir George noted the two aspects of science, one concerned with understanding nature, the other with controlling it.

When the past president, Sir James Gray, thanked Sir George for his ad-

dress, he referred to the unique instance of son following father, after half a century, as president of the British Association, pointing out, in addition, that both father and son were Nobel laureates.

Garbis H. Keulegan, an expert in hydrodynamics and hydraulics at the National Bureau of Standards and an internationally recognized authority on density currents, retired on 31 July after more than 38 years at the bureau. He was one of the original members of the bureau's hydraulics laboratory staff and thus has perhaps contributed more than any other one man to the development of the science of density currents in water. His paper, "Equation of motion for the steady mean flow of water in open channels" stands as a monumental piece of work. He has also pioneered in the development of basic laws relating to wave motion and tides.

Perry R. Stout, chairman of the University of California's department of soils and plant nutrition at Davis and Berkeley and director of the Kearney Foundation of Soil Science, received the Stephen Hales Prize Award of the American Society of Plant Physiologists at its recent national meeting at Oklahoma State University. Stout is known for his work on the micronutrient requirements of plants: minerals such as manganese, zinc, copper, molybdenum, and chlorine. He is the codiscoverer of the last two as essential plant nutrients.

Robbin C. Anderson, professor of chemistry at the University of Texas, will be in Washington during the 1960–61 academic year to work with the National Science Foundation as program director for in-service institutes in NSF's Division of Scientific Personnel and Education.

Howard E. Brown, associate professor of mechanical engineering at Texas, will also serve NSF this year. He has been named assistant program director of the foundation's engineering sciences program.

Thomas J. Macek has been named director of pharmaceutical research and development in the Merck Sharp and Dohme Research Laboratories, West Point, Pa. He succeeds **Paul W. Wilcox**, who resigned recently. Since joining the company in 1942, Macek has been closely associated with the development of synthetic adrenocortical steroid hormones and synthetic vitamin B_{12} and with research on antibiotics.

F. A. Kroger, of the Philips Research Laboratories, Eindhoven, Netherlands, has been named Baker lecturer at Cornell University for the fall term. His lectures on "The Chemistry of Solids" will begin on 4 October and will continue through 10 December.

Erwin R. Biel, professor of meteorology at Rutgers University, will discuss "Bioclimatology and Comparative Studies on Dynamic Climatology" as a Sigma Xi national lecturer at a number of colleges and universities during October.

David K. Caldwell has been appointed curator of marine zoology at the Los Angeles County Museum. For the past 3 years he has been fishery research biologist at the U.S. Fish and Wildlife Service Biological Laboratory in Brunswick, Ga.

S. L. Morrison of the British Medical Research Council's Social Medicine Research Unit, London Hospital, will spend the 1960–61 academic year working in the department of medical statistics at the University of North Carolina.

S. L. Hoyt, metallurgical consultant, has returned from Frankfurt, Germany, where he spent 15 months on a North Atlantic Treaty Organization assignment for the U.S. Department of Defense. He is resuming his consultant's practice at his new residence in Berkeley, Calif. (88 Purdue Rd.).

Theodore Holstein, formerly of the Westinghouse Electric Corporation, has been appointed professor of physics at the University of Pittsburgh. During the past year he served as a visiting professor.

Robert L. Wolke, who will initiate a program of teaching and research in nuclear chemistry and radiochemistry at Pittsburgh, has been appointed associate professor of chemistry. He has been on the faculty of the University of Florida since 1957.

Theodore A. Link, well-known Canadian petroleum geologist, has been awarded the Selwyn G. Blaylock Medal by the Canadian Institute of Mining and Metallurgy "for his distinguished service to Canada in the Field of Geology." He is a past president of the American Association of Petrol Geology and also of the Geological Association of Canada and the Alberta Society of Petrol Geologists.

The following research workers at the National Bureau of Standards, Washington, D.C., have received U.S. Department of Commerce gold medals.

Garbis H. Keulegan, who retired in July from the Fluid Mechanics Section, was cited for "many outstanding contributions to the basic laws of hydrodynamics, particularly for his fundamental work on open channel flow, water waves, and modeling laws underlying the science of density-current flows."

Alvin G. McNish, chief of the Metrology Division, was cited for "outstanding contributions of great importance to the special fields of geomagnetism and ionospheric physics, and to the more general fields of metrology and standardization."

Chester H. Page, chief of the Electricity Division, was cited for "rare and outstanding contributions of major significance . . . in the fields of electronics, ordnance, and physical research and measurement, including highly distinguished authorship."

Harold O. Wyckoff, chief of the X-ray Section, was cited for "outstanding scientific research in the field of radiation shielding and measurements culminating in distinguished authorship of a book on radiation protection."

Herbert P. Broida, technical coordinator of free radicals research, and **Arnold M. Bass**, chief of the Free Radicals Section, were cited jointly for "outstanding scientific and administrative leadership in the direction of the Bureau's Free Radicals Research program."

Charlotte Moore-Sitterly of the Spectroscopy Section was cited for "outstanding scientific research in spectroscopy and astrophysics, for distinguished authorship of the definitive tables of atomic energy levels and spectroscopic multiplets, and for internationally recognized interpretations of the solar spectrum."

Leonardo Testa, chief of the glass blowing shop in the Shops Division, was cited for "his outstanding contributions as a creative glass blower to highly significant scientific and technical programs."

Raymond W. Cunningham, formerly assistant to the director of clinical investigations in the Lederle Laboratories Division of the American Cyanamid Company, Pearl River, N.Y., has been appointed executive secretary of the Pharmacology Training Committee in the Division of General Medical Sciences of the National Institutes of Health. He succeeds **George M. Briggs**, who has accepted a professorship at the University of California, Berkeley.

W. E. Sackston, formerly head of the Plant Pathology Laboratory, Canada Department of Agriculture Research Station, Winnipeg, Manitoba, has accepted the position of professor of plant pathology at Macdonald College of McGill University, Ste. Anne de Bellevue, Quebec.

Harry Alpert, dean of the graduate school and professor of sociology at the University of Oregon, has been named editor of the *American Sociological Review*, official publication of the American Sociological Association.

Harold I. Amory, former chief of radiological service at the Walter Reed Army Hospital, Washington, D.C., has been appointed professor and chairman of the department of radiology at the West Virginia University Medical Center.

W. W. Wainio has been appointed to a 3-year term as chairman of the department of physiology and biochemistry, Rutgers University College of Arts and Sciences, New Brunswick, N.J. He succeeds **J. B. Allison**, who, in addition to being the director of the Bureau of Biological Research, is now director of the University Research Council.

Charles H. Southwick, associate professor of zoology at Ohio University, recently returned from 9 months of field study in northern India. As a Fulbright research fellow at Aligarh Muslim University, Southwick conducted a population survey and behavioral study of rhesus monkeys in the province of Uttar Pradesh.

Henry B. Linford, professor of chemical engineering at Columbia University, has been selected as the 1960 recipient of the Edward Goodrich Acheson Gold Medal and $1000 prize of the Electrochemical Society, Inc. The presentation will be made at the society's banquet, which will be held in conjunction with its fall meeting in Houston, Tex., 9–13 October. The award is given biennially for conspicuous contributions to the advancement of any of the objects, purposes, or activities of the society.

Paul F. Hahn, formerly director of the cancer research laboratory and professor of oncology, Meharry Medical College, Nashville, Tenn., has joined the Division of Radiological Health, U.S. Public Health Service, Washington, D.C.

Cutting B. Favour, director of the department of immunology at the Palo Alto Medical Research Foundation, has been appointed professor and chairman in preventive medicine and associate professor in medicine at Georgetown University.

G. Milton Shy, for the past 7 years clinical director of the National Institute of Neurological Diseases and Blindness, has been appointed to the newly created position of NINDB associate director in charge of intramural research. He will be responsible for developing the clinical and basic research program at the institute's laboratories in Bethesda. In addition, he will advise NINDB director Richard L. Masland on the institute's total program and will represent NINDB on the scientific director's staff of the National Institutes of Health.

Milton F. Pravda, nuclear engineer, has joined the Martin Company's Nuclear Division in Baltimore as chief of system design. Formerly he was manager of reactor design for the U.S. Atomic Energy Commission's natural circulation reactor project at the Knolls Atomic Power Laboratories in Schenectady, N.Y.

Two Texas A. and M. faculty members—**G. M. Watkins**, director of agricultural instruction, and **H. C. Mohr**, associate professor of horticulture—have received the American Society for Horticultural Science's annual Leonard H. Vaughn Award for research in vegetable crops. They were honored for their paper on "The nature of resistance to Southern blight in tomato and the influence of nutrition on its expression."

Recent Deaths

W. G. Bickford, New Orleans, La.; 53; research chemist at the Southern Utilization Research and Development Division of the U.S. Department of Agriculture; well known for his work on the chemistry of vegetable fats and oils; 15 Aug.

Sir **Gordon Gordon-Taylor**, London, England; 82; a leading abdominal surgeon and an authority on the treatment of the abdominal injuries caused by modern warfare; fellow of the British Royal College of Surgeons for more than 50 years; twice held a chair of surgery at Harvard University as a visitor; 3 Sept.

David Greene, New York, N.Y.; 67; retired pediatrician and a former associate professor of pediatric medicine at the Flower and Fifth Avenue Hospital; 1 Sept.

Herbert F. Hinners, Scarsdale, N.Y.; 49; chemical engineer for the Lever Brothers Company; 29 Aug.

William J. Moore, Tom's River, N.J.; 82; professor of experimental engineering at Brooklyn Polytechnic Institute for 35 years; later taught mechanical engineering at the University of North Carolina; 29 Aug.

G. Canby Robinson, Greenport, L.I.; 81; retired professor of medicine, Cornell University Medical School; as director of the New York Hospital–Cornell Medical College Association from 1928 to 1935, played a major role in the establishment and building of the New York Hospital–Cornell Medical Center; during World War II directed the Blood Donor Service of the American Red Cross; dean of Washington University Medical School, 1917–20, and of the Vanderbilt University Medical School, 1920–28; was visiting professor at Peiping (China) Union Medical College in 1935 and served as a lecturer in medicine and preventive medicine at Johns Hopkins University from 1936 to 1946; 31 Aug.

Martin D. Whitaker, Bethlehem, Pa.; 58; president of Lehigh University and a leading nuclear physicist; was serving as acting chairman of the department of physics at New York University in 1942 when he joined the metallurgical laboratory at the University of Chicago to work on the program leading to the development of the A-bomb; in 1943, was named director of the new Clinton Laboratories at Oak Ridge, for which he planned the design and operation; 31 Aug.