

RESOLVED: It is the sense of the assembled representatives of universities and kindred institutions engaged in meteorological, oceanographic, and related research and teaching, that the interim report of the Committee on Meteorology of the National Academy of Sciences be endorsed; that present support for basic research in meteorology at academic and related institutions should be substantially increased; and that a national institute for atmospheric research, operated by an association of universities, should be established to bring together scientists from meteorology and the related physical sciences and to provide research facilities on a scale required to cope with the global nature of the meteorological problem. It is further requested that appropriate organizational steps for establishing such an institute be taken immediately by the National Academy of Sciences, acting in concert with the universities and kindred institutions.

The resolution was signed by: W. A. Baum, Florida State University; R. A. Bryson, University of Wisconsin; H. R. Byers, University of Chicago; P. E. Church, University of Washington; B. Haurwitz, New York University; S. C. Hollister, Cornell University; H. G. Houghton, Massachusetts Institute of Technology; M. Neiburger, University of California, Los Angeles; H. H. Neuberger, Pennsylvania State University; S. Pettersen, American Meteorological Society; R. Revelle, Scripps Institution of Oceanography; and A. R. Kassander, University of Arizona.

Krypton-85 and Diagnosis of Heart Disease

Research at the Public Health Service's National Institutes of Health has shown that krypton-85, a radioactive form of a harmless inert gas, can be used to detect abnormal openings in the wall of muscle dividing the right and left chambers of the heart. Left to right "shunts" of blood which result from defects in the partitions of the heart are the commonest form of congenital heart disease. Accurate knowledge of the presence and location of these defects is essential for corrective surgery.

The new diagnostic technique was developed by research surgeon Richard Sanders, a staff member of the Clinic of Surgery of the National Heart Institute. The discovery was announced in the January issue of the *Proceedings of the Society for Experimental Biology and Medicine*.

Soviet Bloc IGY Plans

A weekly report of Soviet bloc activities in connection with the Interna-

tional Geophysical Year is being published by the U.S. Office of Technical Services. The reports contain information selected and translated from foreign-language publications regarding Soviet bloc plans and endeavors in rockets and artificial earth satellites, upper atmosphere, meteorology, oceanography, latitude, seismology, glaciology, the Antarctic, and other subjects. Non-Government scientists may subscribe to the series for \$10. The series runs from 14 February 1958 to 2 January 1959. (Order PB 131632 *Soviet Bloc International Geophysical Year Information* from OTS, U.S. Department of Commerce, Washington 25, D.C. Back issues to 14 February will be supplied to subscribers regardless of the date of their order.)

Faculty Salaries

The average salary for college faculty members in the United States this year is \$6120, according to the U.S. Office of Education.

A new study of higher education shows that average faculty salaries in public colleges and universities range from \$5110 for instructors to \$8530 for full professors; in private institutions, the average is \$4230 for instructors and \$7360 for full professors. The study is designed to provide basic information to assist college administrators in their planning. The 102-page report, entitled *Higher Education Planning and Management Data, 1957-58*, was prepared by W. Robert Bokelman, specialist in college business management, U.S. Office of Education.

Nearly 1150 colleges and universities, having more than 80 percent of all higher education enrollment, participated in the survey.

Salaries of full professors in the highest-paying single private university average \$13,800, compared with an average of \$5150 in the lowest-paying private university. The highest-paying public university had a salary average for full professors of \$12,350, the lowest-paying \$5750. The average salary of instructors in the highest-paying private university is \$5150, compared with \$3550 in the lowest-paying. The average for the highest-paying public university is \$6550, compared with \$3450 in the lowest-paying.

Among the lowest fourth of public universities, salaries average \$7440 for full professors, \$6280 for associate professors, \$5460 for assistant professors, and \$4410 for instructors.

The report shows that students in private colleges pay, on the average, nearly 3½ times as much in tuition and fees as most students in public colleges. Tuition and fees for resident students in public

institutions average \$155 for the current school year, compared with \$531 in private institutions. Tuition and fees in public institutions average \$13 more this year than last year, an increase of 9.2 percent. Such costs in private institutions went up \$36, or 7.3 percent. In addition to salaries, and tuition and fees, the report covers other faculty benefits and room and board costs.

Copies of the publication (Circular No. 517) may be obtained for 60 cents each from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

Atherosclerosis Findings

A research finding that seems to advance knowledge of coronary heart disease and other diseases associated with atherosclerosis has been reported by the laboratories of the departments of preventive medicine and pathology of the Harvard Medical School and the department of pathology of Children's Hospital, Boston. Atherosclerosis is now responsible for more deaths in the United States than any other one disease. The new approach developed at Harvard utilizes tissue-culture methods which make possible direct observation at the point where fatty substances enter cells grown from human arteries. Prior to this, the disease could be studied in the laboratory only by indirect methods, either in animals or by measuring the level of fatty substances in human blood.

Led by David D. Rutstein, head of the university's department of preventive medicine, the group of investigators say that they have observed the deposit of these fatty substances in arterial cells. More important, they maintain that they have also demonstrated that the process is reversible and can either be prevented with unsaturated fatty acids or aggravated with saturated fatty acids.

The new research results are published in the current issue of the British medical journal *Lancet*. Rutstein's associates are Estelle Fasolino Ingenito, research associate in preventive medicine; John M. Craig, assistant professor of pathology; and Marcello Martinelli, Lederle research fellow in preventive medicine from the University of Bologna, Italy.

Nomenclature of Cell Strains

At the International Tissue Culture Meeting, held in Glasgow, Scotland, last summer, the subject of the nomenclature of cell-strains used in tissue culture was considered and a study committee was appointed that made various recommendations. It was suggested that the following information be given when first

mention of a cell strain is given in a publication: (i) whether the tissue of origin was normal or neoplastic and, if neoplastic, whether benign or malignant; (ii) whether the tissue was adult or embryonic; (iii) animal species of origin; (iv) organ of origin; (v) the cell type (if known); (vi) the designation of the strain; (vii) whether the strain has been cloned and, if so, the clone number; and (viii) the reference to the original article in which the strain was described. It was further suggested that the designation of the strain should consist of a series of not more than four letters indicating the laboratory of origin, followed by a series of numbers indicating the strain.

Markle Scholars

The John and Mary R. Markle Foundation has announced the appointment of 25 scholars in medical science, all faculty members of medical schools in the United States and Canada. The sum of \$750,000 has been appropriated toward their support at the schools where they will teach and conduct research. For each scholar appointed, the foundation has allocated \$30,000 to the school at the rate of \$6000 a year for 5 years.

The 25 scholars who received the appointments were selected from 57 candidates nominated by medical school deans. Five committees of laymen helped to select the scholars through extended interviews over 3-day periods. This year's Markle scholars are: Murray N. Andersen, associate in surgery, University of Buffalo School of Medicine; Neil R. Burch, assistant professor of psychiatry, Baylor University College of Medicine; William R. Drucker, assistant professor of surgery, Western Reserve University School of Medicine; Richard H. Egdahl, instructor in surgery, Medical College of Virginia; David Hamerman, assistant professor of internal medicine, Albert Einstein College of Medicine; Harold F. Hardman, instructor in pharmacology, University of Michigan Medical School; Robert F. Hetherington, assistant professor of neurological surgery, Queen's University Faculty of Medicine (Canada); Eugene A. Hildreth, assistant professor, internal medicine, University of Pennsylvania School of Medicine; Walter Hollander, Jr., assistant professor, internal medicine, University of North Carolina School of Medicine; Gerald H. Holman, assistant professor of pediatrics, University of Saskatchewan College of Medicine (Canada); James P. Isaacs, instructor in surgery, Johns Hopkins University School of Medicine; Robert B. Jennings, assistant professor of pathology, Northwestern University Medical School; Thomas Killip, assist-

ant professor, internal medicine, Cornell University Medical College; Jack Wayne Love, instructor in physiology, Yale University School of Medicine; James V. Maloney, Jr., assistant professor of surgery, University of California School of Medicine; Lionel E. McLeod, lecturer in internal medicine, University of Alberta Faculty of Medicine (Canada); Rene B. Menguy, instructor in surgery, University of Oklahoma School of Medicine; Robert L. Metzner, Jr., assistant professor of biochemistry, University of Wisconsin Medical School; Donough O'Brien, assistant professor of pediatrics, University of Colorado School of Medicine; Guy Owens, assistant professor of neurosurgery, Vanderbilt University School of Medicine; Ned W. Smull, instructor in pediatrics, University of Kansas School of Medicine; Gerald B. Spurr, assistant professor of physiology, University of Tennessee College of Medicine; Donald P. Swartz, lecturer in obstetrics and gynecology, University of Western Ontario Faculty of Medicine (Canada); Ullrich Georg Trendelenburg, associate in pharmacology, Harvard Medical School; William L. Weirich, instructor in surgery, University of California School of Medicine, San Francisco.

Committee on Effects of Radiation

The 15-member United Nations Scientific Committee on the Effects of Atomic Radiation recently completed a 5-week session during which it considered a basic draft of a comprehensive report to the U.N. General Assembly, scheduled for transmission to member states in mid-1958. The draft as now formulated will be put into document form and sent by the Secretariat to committee members for further study. The committee will meet again in June for review and approval of the report before it is presented to the Secretary-General for transmission to the members of the United Nations.

The report will deal with the effects of atomic radiation, including the natural background radiation always present, artificial radiation from medical applications and other peaceful uses of atomic energy, and fallout resulting from nuclear weapon tests. It will be concerned both with the immediate effects on man and his environment and with long-range effects on future generations.

It has been based on study of some 180 reports submitted by 30 governments, by four United Nations specialized agencies (the Food and Agriculture Organization; the United Nations Educational, Scientific and Cultural Organization; the World Health Organization; and the World Meteorological Organization), and jointly by the International

Commission on Radiological Protection and the International Commission on Radiological Units and Measurements.

The session just ended was the fourth held by the committee. The three previous sessions considered specific problems, including measurements of natural and man-made sources of radiation, the effects of small doses of radiation, possible hazards in medical uses of radiation, the extent and effects of radioactive fallout, the contamination from atomic energy installations (including nuclear power plants), and the long-range genetic effects of radiation. At the beginning of the fourth session the committee first considered one other specific subject, the somatic effects of radiation (effects limited to the individual and not passed on to descendants). It then began formulating the draft report as a whole.

The committee is composed of scientists named by Argentina, Australia, Belgium, Brazil, Canada, Czechoslovakia, Egypt, France, India, Japan, Mexico, Sweden, the U.S.S.R., the United Kingdom, and the United States. Zenon Bacq of Belgium is chairman, and E. A. Watkinson of Canada is vice chairman.

Darwin Centennial Celebration

The University of Chicago will sponsor a celebration of the 100th anniversary of the publication of Darwin's *Origin of Species* from 18 to 24 November 1959. With aid from the National Science Foundation, and with the cooperation of the Chicago Natural History Museum and of national scientific societies, the celebration will bring together leading figures in the sciences from all over Europe and America.

The core of the celebration will be 5 days of conferences to discuss invited papers, which will later be published in a volume, possibly with some discussion. In addition to the 40 scientists whose papers will be discussed, about 500 to 1000 visitors are expected to attend. Scientists from abroad who have already agreed to participate include: Sir Charles Darwin, Cambridge, England; Sir Julian Huxley, London; E. B. Ford, director of the Genetics Laboratory, Oxford University, Oxford, England; C. D. Waddington, professor at the Institute of Animal Genetics, Edinburgh, Scotland; G. F. Gause, professor at the Institute of Antibiotics, Academy of Medical Sciences, Moscow; N. Tinbergen, lecturer on animal behavior, Oxford University; François Bordes, professor of archeology and prehistory, University of Bordeaux, Bordeaux, France; Fred Polak, head of the department of social relations, University of Rotterdam, Rotterdam, Netherlands; and MacDonald Critchley, chief physician, National Hospital, London.