

ing to the special WHO committee, the live-virus vaccine will provide reliable and enduring immunity against paralytic poliomyelitis. It would also eliminate or substantially reduce virulent strains. The committee believes that the present Salk killed-virus vaccine is not able to achieve this kind of result. Committee members emphasized that the new vaccine should be considered an adjunct to the Salk vaccine, although it might eventually replace it.

There is an unlikely but possible hazard in the use of the live-virus vaccine, since it has not been conclusively determined whether viruses excreted by immunized persons could prove dangerous to others. Viruses excreted by human beings were injected into the spinal fluid of chimpanzees without harm.

AEC Nuclear Technology Fellowships

Applications are again being accepted for Atomic Energy Commission special fellowships in nuclear technology. These awards are available to students starting their work at the beginning of the second semester or quarter, or third quarter, of the 1957-58 year. The fellowship program is administered for the AEC by Oak Ridge Institute of Nuclear Studies.

Completed applications should be submitted *not later than 15 Oct.* Forms may be obtained from the Fellowship Office, Oak Ridge Institute of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn.

These fellowships, which carry stipends of \$1800 plus tuition and dependency allowances, are open to students with a bachelor's degree in engineering, chemistry, mathematics, or physics, who have completed a course in ordinary differential equations. Fellows must be United States citizens. Before fellowship appointments become effective, the applicant must be accepted as a candidate for a graduate degree by an institution participating in the program. A list of these institutions is included with the application form, and applicants may make their choice from among them.

Proposed Legislation

Of the many bills introduced in Congress, some have a special relevance to science and education. A list of such bills introduced recently follows:

S 2447. Authorize and direct Secretary of Interior to undertake continuing studies of effects of insecticides, herbicides, and fungicides upon fish and wildlife for purpose of preventing losses of those natural resources following spraying and to provide basic data on various chemical controls so that forests, croplands,

and marshes can be sprayed with minimum losses of fish and wildlife. Magnuson (D Wash.) Senate Interstate and Foreign Commerce.

HR 8461. Amend Atomic Energy Act of 1954 to provide for appointment of representatives of U.S. in organs of International Atomic Energy Agency; make provisions re participation of U.S. in that agency. Cole (R N.Y.) Joint Atomic Energy.

S 2490. Provide for control of noxious weeds on land under control or jurisdiction of Federal Government. Humphrey (D Minn.) Senate Agriculture and Forestry.

HR 8571. Provide federal insurance for loans made to science and engineering students. Lane (D Mass.) House Education and Labor.

HR 8629. Protect public health by amending the Federal Food, Drug, and Cosmetic Act to prohibit the use in food of additives which have not been adequately tested to establish their safety. Wolverton (R N.J.) House Interstate and Foreign Commerce.

H J Res 399. Amend act of Congress approved 7 Aug. 1935 (PL 253), concerning United States contributions to the International Council of Scientific Unions and certain associated unions. O'Hara (D Ill.) House Foreign Affairs.

S 2501. Authorize 88 positions for specially qualified scientific and professional personnel in the Department of Commerce at rates of compensation not to exceed the maximum rate payable under PL 313, 80th Congress, as amended, and PL 854, 84th Congress. Johnston (D S.C.) Senate Post Office and Civil Service.

News Briefs

Columbia University has received a large collection of documents by and about the late Otto Rank, psychotherapist and student and associate of the late Sigmund Freud. Also included among the gifts were three of Freud's original manuscripts.

The French research reactor at Saclay has begun to operate on nuclear energy, utilizing heavy water made available to France by the U.S. Atomic Energy Commission.

The Philadelphia College of Osteopathy has announced plans to erect an osteopathic center on a 16-acre tract in Philadelphia at a cost of \$10 million. Among the buildings will be two hospitals, with a total of 600 beds.

National Science Foundation publications are available to all scientists who have need for them. Lists of publications

may be obtained from the foundation. Requests should be addressed to the Publications Office, National Science Foundation, Washington 25, D.C.

The corporate name of North American Instruments, Inc., has been changed to Northam Electronics, Inc. The company is a subsidiary of Norris-Thermador Corporation, with headquarters in Los Angeles, Calif.

A centennial program in memory of Elisha Mitchell, chemist, geologist, and mathematician, was held on the summit of the mountain near Asheville, N.C., that bears his name. It was the second of three programs planned by the University of North Carolina in observance of the centennial of Dr. Mitchell's death. The third will take place this fall at Chapel Hill.

The blue whale, the biggest animal ever known to exist, is in danger of becoming extinct owing to overhunting. Under international treaty, each year's take is limited, but it is feared that, unless the killings are further reduced, the species may not survive.

Aerojet-General Corporation, Azusa, Calif., has announced the establishment of a new Astronautics Research Laboratory for investigation in propulsion, astrophysical chemistry, and materials.

A lifelike cast of *Latimeria*, the living coelacanth and survivor of a 300-million-year-old species, is being exhibited at the American Museum of Natural History, New York. It was purchased from the Natural History Museum in Paris.

BJ Electronics, a facility of Borg-Warner Corporation, has begun operation of a new electronic performance and environmental testing laboratory at Santa Ana, Calif.

Total iron-ore resources of the United States are about 75 billion long tons of crude ore, according to a recent estimate by the U.S. Geological Survey. Since the last summary of iron-ore resources was published in 1955, the estimated total of major deposits has been increased by more than 25 billion long tons, partly as the result of further exploration and more complete information but principally by the inclusion of additional low-grade material in the Lake Superior region.

Career Choice of Merit Scholars

The 1957 Merit Scholarship Program conducted a survey of the career choices and proposed fields of specialization in

college of the Merit Scholars and finalists. Results of the survey for scholars and for students who became finalists in the competition are listed in Table 1.

Table 1. 1957 Merit scholarship program.

Career	Scholars		Finalists	
	Boys	Girls	Boys	Girls
<i>Career choice</i>				
Engineering Research	158	5	1657	54
Academic	19	7	166	63
Industrial	170	44	1170	314
Government	7	2	77	22
Medicine				
Physician	46	23	414	124
Related fields (nursing, technology, pharmacy)	2	4	35	130
Teaching	74	74	392	771
Business	40	12	257	97
Law	36	3	318	22
Ministry	14		96	7
Government service	10	8	105	119
Social work, psychology	6	7	46	105
Library work		3	1	16
Writing, journalism, radio	11	11	103	172
Arts: design, music, theater	4	5	79	79
Agriculture, forestry	2		15	1
Miscellaneous	1	1	6	22
Undecided or no information	14	8	290	151
Total	614	217	5227	2269
<i>Proposed fields of specialization in college</i>				
Engineering				
Aeronautical	11		151	4
Chemical	40	2	358	17
Civil	8		114	2
Electrical	51	1	526	7
Mechanical	17		245	4
Metallurgical, mining	5		23	1
Architecture	3		44	7
Not specified	26	1	272	9
Total	161	4	1733	51
Science				
Biology	12	5	80	86
Premedical	29	16	299	100
Chemistry	45	35	414	220
Geology, geophysics	8	1	34	4
Mathematics	49	27	304	216
Physics	122	13	833	71
Not specified	14	7	93	178
Total	279	104	2057	875
Liberal arts				
Humanities	46	53	360	599
Social sciences	74	35	541	455
Not specified	8	4	72	26
Total	128	92	973	1080
Business	26	4	151	41
Miscellaneous	10	11	86	162
Undecided or no information	10	2	227	60
Total	614	217	5227	2269

Scientists in the News

PAUL E. KLOPSTEG has been named associate director for research of the National Science Foundation. Formerly an associate director of the foundation and more recently an NSF consultant, he will now be responsible for the foundation's activities in support of basic research in the sciences. Klopsteg has been professor of applied science and director of research at Northwestern Technological Institute, Evanston, Ill., and is professor emeritus at Northwestern University.

A. M. PAPPENHEIMER, JR., chairman of the microbiology department in the College of Medicine, New York University, will become professor of biology at Harvard University a year from now. He will direct the program of tutoring in the biochemical sciences in Harvard College. This includes some 150 undergraduates preparing for careers in medicine and biological research.

While he was senior chemist at the Massachusetts State Antitoxin and Vaccine Laboratory before World War II, Pappenheimer isolated the diphtheria toxin in purified form. He has since studied toxin production by the diphtheria bacillus and the mechanism by which toxin exerts its lethal action. His recent research has centered on delayed hypersensitivity, especially the allergy resulting from chronic bacterial infections.

SHERWOOD K. HAYNES, professor of physics at Vanderbilt University, has been named head of the department of physics and astronomy at Michigan State University. He will take up his new duties on a part-time basis on 1 Sept. and full time next 1 Feb.

J. B. S. HALDANE, professor of biometry at University College, London, and one of Britain's leading geneticists, left England on 24 July to settle in India. He was accompanied by his wife, Helen Spurway, who has been a lecturer on genetics and animal behavior at University College. The two scientists will work together in the Indian Statistical Office in Calcutta.

CHARLES S. HOWARD retired 31 July after 37 years as chemist with the water quality branch, Water Resources Division, U.S. Geological Survey. With W. D. Collins, former chief of the branch, he did pioneer work in investigations of water quality throughout the United States.

Howard joined the survey in 1920 after a year as chemistry teacher at the U.S. Naval Academy. He has written many papers on the chemistry of water

and is particularly well known for his contribution to knowledge of the sediment and chemical characteristics of the Colorado River. He earned his B.S. degree at Worcester Polytechnic Institute in 1918, his M.S. degree at American University in 1925, and his Ph.D. degree at American University in 1928.

JOHN B. BROWN, specialist in the chemistry of fats, has been appointed chairman of the department of physiological chemistry and pharmacology at Ohio State University, succeeding CLAYTON S. SMITH, who retired from active teaching duties this summer after 37 years of service. The new chairman, a member of the Ohio State faculty since 1924, continues also as director of the university's Institute of Nutrition and Food Technology.

MICHAEL T. CRONIN has been named manager of the newly formed department of toxicology and pathology in the research laboratories of Schering Corporation, Bloomfield, N.J. He previously had been associate pathologist at Penrose Research Laboratories, Philadelphia, Pa., and assistant professor of veterinary pathology at the University of Pennsylvania.

MICHAEL HEIDELBERGER started on 1 Aug. upon a deferred terminal sabbatical leave from Columbia University, where he is now emeritus professor of immunochemistry. He will present a paper at the second International European Congress on Clinical Chemistry in Stockholm (19-23 Aug.) and then visit a number of European countries. From October until January, on leave from Rutgers University, he will conduct research and lecture at the Faculté de Pharmacie of the University of Paris. In about the middle of January 1958 he is to give the York lecture at the University of British Columbia, Vancouver, after which he will return to Rutgers University to resume his duties as visiting professor of immunochemistry.

The New England Center Hospital has announced the establishment of a new department of infectious diseases under the direction of LOUIS WEINSTEIN who, in addition to being named chief of the new unit and senior physician at the hospital, has also been appointed professor of medicine at Tufts University School of Medicine. Both the hospital and the medical school are part of Boston's New England Medical Center. To accept these appointments, Weinstein has resigned as chief of the Infectious Diseases Service at Haynes Memorial of the Massachusetts Memorial Hospitals and as associate professor of medicine at Boston University School of Medicine.