

on important events of the meeting read in part as follows:

The program indicates the great advance that has been made by medical science in recent years. Panel discussions on tropical medicine, chemotherapy, plasma and neuropsychiatry, already arranged for the general scientific meetings, emphasize these chief lines of interest.

The very first paper scheduled for the section on practice of medicine deals with penicillin. Additional manuscripts cover current topics, such as rheumatic fever, and there is a panel discussion on vitamins, amino acids and enzymes. In the Section on Surgery the use of surgical technics in hypertension and new technics related to methods of suture are featured. The opening session of the Section on Obstetrics is concerned with problems of pregnancy, but attention is given also to new studies with hormones and to complications related to the bladder. A symposium on penicillin features the Section on Laryngology, and one on rheumatic fever appears in the Section on Pediatrics. Unusual is the symposium on the abuse of rest in the treatment of disease, scheduled for the Section on Experimental Medicine. Prominent in the program on nervous and mental diseases is the panel discussion on operational fatigue in combat air crews. All the newer investigations in the intensive and modern treatment of syphilis are included in a full session of the Section on Dermatology and Syphilology; in these discussions the investigators who have been doing most of the work for the Office of Scientific Research and Development are cooperating. New attitudes in industrial medicine and a consideration of the relocation of physicians in the postwar period are listed for the Section on Preventive and Industrial Medicine and Public Health. In the Section on Urology the new advances in the treatment of cancer of the prostate are noted, and in the Section on Orthopedic Surgery space is provided for the report of the committee which is making a joint investigation of the Kenny technic. The Section on Anesthesiology gives opportunity to hear the last word on continuous caudal analgesia. Especially interesting also are the sessions of the Section on Miscellaneous Topics, devoted on this occasion to the interests of the general practitioner.

The scientific exhibit and the other usual features of the annual session will be up to the standard of peacetime and will be high-lighted as well by the interests associated with the needs of war. Attention is called to the motion picture theater, which will offer continuously from the first day the latest demonstrations utilizing visual education.

A specially arranged feature for this session is the war meeting planned for Wednesday night, June 14, at the Medinah Temple. This program will include not only the Surgeons General and other distinguished representatives of our own armed forces but also representatives of some of the United Nations.

The sessions of the House of Delegates of the American Medical Association will begin on Monday, June 12.

IN HONOR OF ALEXANDER PETRUNKEVITCH

Two hundred colleagues and former students of Dr. Alexander Petrunkevitch, since 1917 professor of zoology at Yale University, a well-known authority on spiders, who will retire this June after serving for thirty-four years on the faculty of the university, were present at a meeting held in his honor on May 3 at the Connecticut Academy of Arts and Sciences.

The surprise gathering was held at 8 o'clock P.M. in the Osborn Zoological Laboratory. The speakers included Edgar S. Furniss, provost of the university, and Charles H. Warren, professor of mineralogy and dean of the Sheffield Scientific School; George Vernadsky, research associate in history of the Connecticut Academy of Arts and Sciences; Dr. Lorande L. Woodruff, professor of protozoology; Dr. Roger B. Friend, lecturer in forest entomology, a former student; and Dr. Ross G. Harrison, Sterling professor of zoology, emeritus, director of the National Research Council.

Dr. Petrunkevitch was presented with two bound volumes containing forty-three manuscripts on history, arachnology, experimental zoology and general zoology, prepared by his colleagues and former students, now scattered throughout the world.

Several of the papers, by leading arachnologists from England, Brazil and Tasmania, as well as from all parts of the United States, contain accounts of new species of spiders which have been named in his honor.

The volumes include a portrait by Stanley C. Ball, associate professor of biology, an appreciation by Professor Woodruff and an account of the life and works of Dr. Petrunkevitch by G. Evelyn Hutchinson, associate professor of biology.

SCIENTIFIC NOTES AND NEWS

THE University of Rochester will at its commencement on May 14 confer honorary degrees on Joseph W. Barker, dean of engineering at Columbia University and special assistant to the Secretary of the Navy in formulating policies on all Navy college-training programs, and on Dr. George W. Corner, director of the department of embryology at Baltimore of the

Carnegie Institution of Washington. Dr. Corner was for sixteen years professor of anatomy at the School of Medicine of the University of Rochester.

THE University of Wisconsin will confer the degree of doctor of science on Dr. Jesse T. Littleton, physicist, assistant director of research and development

with the Corning Glass Works, New York. The doctorate of laws will be conferred on Arthur J. Glover, for forty years editor of *Hoard's Dairyman*.

THE University of Birmingham, at a special congregation in July, will confer the honorary degree of M.D. on Dr. H. Guy Dain, chairman of the Council of the British Medical Association.

DR. LUDVIG HEKTOEN, executive director of the National Advisory Cancer Council of the U. S. Public Health Service, on April 8 was awarded the gold-headed cane of the American Association of Pathologists and Bacteriologists "in recognition of his distinguished service to pathology and his unselfish devotion to the highest ideals of the profession."

THE New England award for 1944 was presented on May 5 by the Engineering Societies of New England to Dr. Sanford A. Moss, consulting engineer of the General Electric Company. The presentation was made by H. C. Hamilton, president, who said: "Widely recognized for his creative work in the development of compressors, steam and gas turbines and turbo superchargers, honored as well for his exceptional service to our nation through a period embracing two world wars, this certificate is presented with the affection and esteem of his fellow engineers in New England."

THE Society of Chemical Industry, Canada, has awarded its medal for 1944 to Dr. Otto Maass, chairman of the department of chemistry of McGill University, "in recognition of his outstanding contribution to chemistry in Canada, both at the university and in industry."

A SURPRISE party was given on April 29 to Dr. John R. Murlin, professor of physiology at the University of Rochester and director of the department of vital economics, in celebration of his seventieth birthday. Approximately fifty former and present students and associates were in attendance. After the dinner, Professor Murlin was presented with letters from his many associates who were unable to be there and with informal snapshots of all his former associates, to be arranged in a leather album as a "Vital Economics Family Album." The program was completed with a humorous skit entitled "Life with Father."

At the Milwaukee convention of the Electrochemical Society, honorary membership certificates were awarded to Paul J. Kruesi, president and general manager of the Southern Ferro Alloys Company, and to Dr. Willis R. Whitney, honorary vice-president of the General Electric Company, non-resident professor of chemical research at the Massachusetts Institute of Technology.

A PORTRAIT of Colonel Harold W. Jones will be presented at 5 o'clock on May 13 to the Army Medical Library in recognition of his contribution to the advancement of medicine and particularly his adoption of microfilm copying as a legitimate extension of the service rendered by the library to those at a distance. On this occasion the enlarged installation of the Photoduplication Service of the library will be open to inspection.

DR. ALBERT L. MIDGLEY was tendered on April 19 a testimonial dinner by the Rhode Island Board of Dental Examiners in recognition of thirty-five years of consecutive service on the board and of notable contributions to the advancement of dentistry.

THE installation program of the Vanderbilt University Chapter of the Society of the Sigma Xi was held on April 15 under the direction of the installing officers, Dr. George A. Baitzell, of Yale University, and Dr. Fernandus Payne, dean of the Graduate School of Indiana University. The dinner program on this occasion was attended by members of the newly inaugurated chapter and all members of the scientific staff of the university. Addresses were made by the chancellor of the university and by the installing officers. A paper, entitled "Some Biological Interrelationships," prepared by Dr. E. Carroll Faust, professor of parasitology at the School of Medicine of the Tulane University of Louisiana, was presented on this program. Officers of the new chapter are Dr. Louis J. Bircher, professor of physical chemistry, *President*, and Dr. John A. Hyden, professor of mathematics, *Secretary-Treasurer*. There are forty-four charter members of the new chapter.

DR. TORALD H. SOLLMANN, head of the department of pharmacology of Western Reserve University and dean of the School of Medicine, who reached the age of seventy years on February 10, will retire on June 30. He plans to continue research in pharmacology. Dr. Sollmann has been a member of the staff since 1895, when he became demonstrator in physiology. He will be succeeded as head of the department of pharmacology by Dr. Arnold D. Welch, research director of Sharpe and Dohme, Glenolden, Pa.

DR. H. H. ANDERSON, formerly of the Peiping Medical College, has been appointed professor of pharmacology and chairman of the department of the newly reorganized division of pharmacology of the Medical School at San Francisco of the University of California. Dr. Anderson in 1937 became associated with the Council on Medical Education and Hospitals of the American Medical Association, studying medical education. He then was made professor of pharmacology at Peiping. On December 7, 1941,

he became a prisoner of war, and was exchanged in December, 1943.

DR. ITALO F. VOLINI, since 1929 professor and head of the department of medicine of the School of Medicine of Loyola University, has been appointed dean of the school for the duration of the war. He will take the place of Commander Francis J. Braceland, on leave with the Navy.

DR. GEORGE W. WILSON has been appointed dean of the School of Dentistry of Marquette University. He succeeds Dr. Henry L. Bauzhaf, who has been made dean emeritus.

DR. FLORENCE L. BARROWS has been appointed assistant professor of botany and chairman of the department of botany of Wheaton College, Norton, Mass.

At the University of London, Dr. J. M. Mackintosh has been appointed from October 1 to the chair of public health, tenable at the London School of Hygiene and Tropical Medicine.

DR. OTIS W. CALDWELL, of the Boyce Thompson Institute for Plant Research at Yonkers, N. Y., general secretary of the American Association for the Advancement of Science, has become a member of the Board of Trustees of Science Service.

DR. EUGENE M. LANDIS, professor of physiology at the Harvard Medical School, has been elected a member of the Council on Pharmacy and Chemistry of the American Medical Association, to fill the unexpired term of Dr. William C. Rose, professor of biochemistry at the University of Illinois, who has resigned owing to the pressure of other work.

DR. A. L. ROBINSON, professor of chemistry at the University of Pittsburgh, has been placed on half time by the department of chemistry so that he may serve as acting librarian of the university. Dr. Robinson has been chairman of the Library Committee of the department for many years, and for the past several years has been chairman of the Senate Committee on Library and Publications of the university.

WALTER G. CAMPBELL, U. S. Commissioner of Foods and Drugs of the Federal Security Agency, previously from 1933 to 1940 chief of food and drug administration of the U. S. Department of Agriculture, has retired.

DR. JOEL B. PETERSON, research chemist of the White Laboratories at Newark, N. J., has joined the department of applied research of Standard Brands, Inc., as technical consultant for pharmaceuticals.

THE thirteenth Joseph Henry Lecture, entitled "Faster Than Sound," was delivered on April 29

before the Philosophical Society of Washington by Dr. Theodor von Kármán, director of the Guggenheim Aeronautics Laboratory of the California Institute of Technology.

DR. WILLIAM H. SEBRELL, chief of the Division of Chemotherapy of the National Institute of Health, will deliver on May 18 the eighth Harvey Society Lecture of the current series at the New York Academy of Medicine. He will speak on "The Relation between Sulfonamide Drugs and Vitamin Deficiencies."

THE annual oration of the Massachusetts Medical Society will be delivered by Dr. Joseph C. Aub, associate professor of medicine at the Harvard Medical School, at the annual meeting to be held on May 22, 23 and 24. He will speak on "The Toxic Factor in Traumatic Shock." The Shattuck Lecture will be given by Dr. Alfred Blalock, professor of surgery at the School of Medicine of the Johns Hopkins University. The lecture is entitled "A Consideration of Certain Recent Advances in Surgery."

DR. ROBERT CUSHMAN MURPHY, of the American Museum of Natural History, lectured on April 14, Pan American Day, before the students and faculty of Smith College. He spoke on "Climate, Nature and Man in Northwestern South America."

DR. VALY MENKIN, of the Fearing Research Laboratory of the Free Hospital for Women at Brookline, Mass., was the guest speaker on April 24 at the meeting at the University of Michigan of the American Academy of Periodontology. He gave two lectures on the "Dynamics of Inflammation."

DR. WALTER R. MILES, professor of psychology at Yale University, at a meeting on April 20 of the Iowa State College Chapter of the Society of the Sigma Xi, discussed psychological problems arising under conditions of military flying. His lecture was entitled "Psychology and Military Aviation."

THE centenary of the American Psychiatric Association will be celebrated at a meeting to be held in Philadelphia on May 15 and on the three following days. Advances made in military psychiatry and the steps now being taken to rehabilitate psychiatric casualties will be discussed. Other subjects on the program include child delinquency, psychological first-aid in the public health service, industrial mental hygiene, child psychiatry and psychiatric nursing, convulsive shock therapy, pre-frontal lobotomy, electroencephalography, psychosomatic medicine, alcohol neuroses and sleep disorders. There will be sessions devoted to psychiatry and the United States Army, psychiatry and the United States Navy, rehabilitation and psychoneuroses. The meeting will be formally opened on Monday morning, with Dr. Edward A.

Strecker, of the University of Pennsylvania, presiding. The incoming president, Dr. Karl M. Bowman, of the Medical School at San Francisco of the University of California, will be inducted into office on Thursday.

THE celebration of the sixtieth anniversary of Memorial Hospital for the Treatment of Cancer and Allied Diseases, New York, N. Y., opened on May 6. There were no formal anniversary exercises. May has been designated as anniversary month with special emphasis on cancer education for the public, and a series of lectures on "The Challenge of Cancer" will be given on successive Saturdays at 11 A.M. in the hospital auditorium.

A NEW laboratory specially equipped with high-frequency heating apparatus has been established by the department of chemical engineering of Columbia University. It will have the cooperation of technical experts of the Induction Heating Corporation of New York, which provided the high-frequency equipment for the laboratory. The department of chemical engineering will have full authority in guiding the program and in publishing the results of research. The laboratory is under the direction of Professor Arthur W. Hixson, head of the department, and Professor Philip W. Schutz. Everette K. McMahon, a graduate of the Georgia Institute of Technology, specialist in the applications of high-frequency heating, is in charge of the laboratory.

DISCUSSION

BASIC BIOLOGY AND GENERAL EDUCATION

It is unfortunate that the multiplicity of objectives of college and university students has not been brought to the fore in the recent discussion of the teaching of general biology, which is part of a very important and far-reaching problem in college and university teaching.^{1, 2} It is likely that few scientists would disagree with one of the writers cited² that for the education of professional biologists, detailed and systematic introductory courses in each of several important branches of biology are indispensable. However, it is not for such students that courses of more comprehensive scope and less complete detail should, in the opinion of the present author, be designed or offered.

It is unfortunately a fact that very large fractions of college and university students now leave such institutions without appreciable contact with modern science. Our choice as educators in science is not between presenting the broad range of knowledge about nature to students in many systematic courses covering individual areas of specialization, and its presentation in a more comprehensive manner. The limitations of time in four college years make it impossible to include a detailed treatment of even the major subdivisions of the sciences along with the other desirable content of the modern college curriculum. The practical alternative which is actually open to us seems to be the choice between the more comprehensive and less detailed course and nothing.

The peculiar virtue of the American educational system is its extensiveness. The American system has many weaknesses, but it has apparently been good enough to allow the people to operate a reasonably satisfactory democratic system. Our colleges and uni-

versities may be inferior to some others, for example, the old German, in intensiveness of training offered to the majority of their students. It does not follow, however, that they perform a less useful service. To provide a modicum of college training to about ten times the proportionate number of young people in the population is an achievement of American education to be borne in mind when the virtue of one or another educational policy is to be decided. Such education has apparently performed a great service in the past by creating a broad base of fairly well-informed citizens in the democracy. But our training of students in science is becoming poorer by the year because of the greater emphasis on vocational and professional training. The teaching of science has reached a low ebb, as far as non-science students are concerned. Something constructive will have to be done to turn the tide. Our old offerings have been rejected. The present problem is to find new ways to accomplish old ends.

We are living in an age of greatly expanding knowledge in science. If our people are to have some useful appreciation of this increase in scientific information is it not reasonable that the colleges and universities should offer their students courses with broad enough scope so that an introduction to the whole range of science is possible within the limitations of time of a college curriculum? This question can not be answered by evasion because it is on the public mind as well as our own. If we do not give a satisfactory answer, the public or college administrators may give it for us in the form of a directive, perhaps less congenial to us and less useful to society than our own solution could be.

The problem of specialized versus general courses is not one of either-or. There is no bar to maintaining every essential introductory course in a field of specialization, designed for smaller numbers of serious stu-

¹ Gordon Alexander, *SCIENCE*, Vol. 99, January 28, 1944.

² C. A. Shull, *SCIENCE*, Vol. 99, March 10, 1944.