

specific chemical factors influencing vertebrate growth and differentiation, Gudernatsch.

The genetics of growth is to be considered particularly in discussion of the gene in relation to growth and development, Demerec; internal constitution and genic factors in growth determination, Stockard; the gene as a factor in pathology, Gowen, and the genetics of abnormal growth in the guinea pig, Wright.

Other specific biological aspects of growth are to be discussed: growth and structure of plant tissues with special reference to cellulose, Clark; growth correlations in amphibia studied by the method of transplantation, Twitty; mitogenetic rays, Rahn; growth of yeast, Richards, and population growth in protozoa, Jahn.

Certain biological aspects (biological dosimeters) of x-radiation in growth and in other phenomena will be considered by Packard. Bernstein will discuss growth and decay generally, and Rahn the chemistry of death.

Such, in practise, is this year's development of the more formal part of Cold Spring Harbor conference-symposia on quantitative biology. Investigators interested in taking part in the discussion may obtain programs from the Biological Laboratory at Cold Spring Harbor.

HONORARY DEGREES AT YALE UNIVERSITY

TWELVE honorary degrees were conferred by Yale University at the two hundred and thirty-third commencement. These included the doctorate of laws, conferred on President Roosevelt, on Dr. William Lyon Phelps and on Dr. James Bryant Conant, and the doctorate of science conferred on Dr. Frederick George Keyes and Dr. Adolf Meyer. The degree of master of science was conferred on John Levi Rice, formerly of New Haven, now commissioner of health of New York City.

The candidates were cited by Professor Phelps and the degrees were conferred by President Angell.

The citations made in conferring the degrees on President Conant, Professor Keyes and Professor Adolf Meyer were as follows:

JAMES BRYANT CONANT, LL.D.

Professor Phelps:

President of Harvard.

Born in Dorchester, Massachusetts, March 26, 1893, Dr. Conant took his B.A. at Harvard in 1913, Phi Beta Kappa and his doctor's degree in 1916. He began to teach there the same year, and proceeded through the grades of instructor, assistant professor, associate professor, to the professorship of organic chemistry in 1927. He was the head of that department until he became head of the university. His researches in chemistry were recognized everywhere by those competent to judge; in 1932 he received the Chandler Medal from Columbia Uni-

versity and in the same year the Nichols Medal from the American Chemical Society. In 1924 he was visiting lecturer at the University of California and in 1927 research associate of the California Institute of Technology at Pasadena.

But although learned specialists are proud of his distinction as a scientific investigator, the world is not particularly interested in that. When at the age of forty, he was elected president of Harvard, every one who did not have the privilege of his acquaintance wanted to know what kind of a man he was.

Well, serious students who took his courses, and those who were not serious took something else, found him not only an admirable teacher, but an intimate associate. He spent much time with individual students, and seemed to understand both them and their problems. That is to say, he was interested both in the subject and in the object. In matters requiring practical judgment and executive ability, his qualities have been admired by his associates for a long time.

One can not help thinking of the election to the presidency of Harvard of another young professor of chemistry, in 1869. It is the universal wish that President Conant may have as long a time in office as his scientific predecessor enjoyed; that such length of service will again be of great service to Harvard and to the cause of education everywhere, is the universal belief.

His own words on taking office may fitly be quoted today: "May I have skill and patience to continue the bold advance, and courage and steadfastness sufficient for my duty in these uncertain times. . . . I pledge my entire strength and devotion to the leadership of this community of scholars and students, that knowledge and understanding may be increased and transmitted to the youth of our country."

We know that both scholarship and citizenship are safe in his hands. During his entire career he made only one mistake, and that is now about to be rectified.

President Angell:

Eminent chemist, foregoing a brilliant scientific career to heed the imperative call to leadership of the most venerable of American universities, Yale manifests her profound confidence in your future achievement and her filial respect and admiration for the noble institution whose destinies now lie so largely in your hands by conferring upon you her highest honor, the degree of Doctor of Laws, admitting you to all its rights and privileges.

FREDERICK GEORGE KEYES, Sc.D.

Professor Phelps:

Physical chemist. Born in Kingston, Canada, he took his bachelor of science degree at Rhode Island College, and his master's and doctor's degrees at Brown University. He is professor of physical chemistry research at the Massachusetts Institute of Technology, chairman of the department of chemistry and director of the George Eastman Research Laboratory. He is to-day the most prominent American investigator in the field of thermodynamics. His particular contribution is the interpretation of the thermodynamic properties of gases and liquids from the point of view of intramolecular forces

and the introduction of specific and characteristic magnitudes in the physico-chemical applications of the theory of Josiah Willard Gibbs.

He has developed new methods for measuring the physical properties of fluids; as a practical result of his work, enormous savings of fuel in improved steam-turbines have been made; while similar benefits to refrigeration practise have come from his work in ammonia. It is clear, therefore, that he is not a Laodicean.

His mastery of the methods of theoretical analysis is equalled by his skill in devising and carrying out experimental procedures of the highest precision.

President Angell:

Nature has joined in you fruitful and unusual powers of theoretical analysis to high fertility in ingenious practical experimentation, the union issuing in a plethora of discoveries invaluable to man. In recognition of your honorable achievement and because she sees in you a worthy descendant in the direct scientific line from her own great Willard Gibbs, she confers upon you the degree of Doctor of Science, admitting you to all its rights and privileges.

ADOLF MEYER, Sc.D.

Professor Phelps:

Psychiatrist and neurologist. He is a man, who, although he was born in the nineteenth century, belongs emphatically to the twentieth.

He was born near Zurich, in Switzerland, and studied there until he took the degree of doctor of medicine in 1892. Then he pursued his studies—often overtaking them—in Paris, Edinburgh, London, Vienna and Berlin. Later he was on the teaching staff of various American universities, going from his professorship in the Medical School of Cornell, to Johns Hopkins in 1910. This came about through the presentation by Doctor Welch of Clif-

ford Beers's book, "A Mind that Found Itself," to Mr. Henry Phipps, who then founded the Phipps Psychiatric Clinic in Baltimore. Psychiatry had not been an unknown plant in that educational Eden, but it seemed exotic, delicate and unattractive. Several years elapsed before Meyer's clinic was ready, but his activities in the field of the study of the central nervous system and his technique, seemed to his contemporaries not only superior but miraculous.

When the institute came, it was abreast of every other clinical field in its facilities for research.

Dr. Meyer's broad viewpoint, involving the biological, the psychological, and the social approaches to behavior, his keen understanding of the importance of the analysis of average or normal behavior, and of the importance of preventive measures in psychiatry, have made him a leader.

Absorbed in his work, he failed to realize his own importance. When the Queen of Belgium visited his clinic in Baltimore and found he was busy, she waited awhile; then seeing him at a distance, walked over and introduced herself as the Queen of Belgium. He replied, "Yes. How long have you thought you were the Queen? Many of my patients have similar ideas."

President Angell:

Beloved physician to the ailing mind of man, armed with all the weapons of science and twice armed by a gentle, kind and sympathetic spirit, you have brought hundreds from the edge of the precipice back to happy, normal lives. In no small measure through your influence, psychiatry and mental hygiene have won their way into the high places of American medicine, whence so long and so unwisely they had been excluded. Yale University counts it a pleasure to confer upon you the degree of Doctor of Science, admitting you to all its rights and privileges.

SCIENTIFIC NOTES AND NEWS

PROFESSOR BAILEY WILLIS, emeritus professor of geology at Stanford University, was elected at the Berkeley meeting president of the Pacific Division of the American Association for the Advancement of Science. He succeeds Dr. Joel H. Hildebrand, professor of chemistry at the University of California.

THE honorary degrees conferred by Harvard University at its two hundred and ninety-eighth commencement included the degree of doctor of science conferred on Dr. Thomas Hunt Morgan, director of the William G. Kerekhoff Laboratories of the California Institute of Technology, and the degree of doctor of laws conferred on Dr. Edward Lee Thorndike, professor of psychology and director of the division of psychology of the Institute of Educational Research at Teachers College, Columbia University. The citations made by President Conant were: "Thomas Hunt Morgan—a renowned zoologist whose experi-

mental skill and penetrating insight have laid bare the mechanism of heredity." "Edward Lee Thorndike—educational psychologist, the foremost American pioneer in developing those new types of measurement which supplement our oldest forms of examination."

PRINCETON UNIVERSITY has conferred the degree of doctor of laws on Dr. James Bryant Conant, president of Harvard University, and the doctorate of science on Dr. Arthur Holly Compton, Swift professor of physics at the University of Chicago.

WILLIAMS COLLEGE conferred at commencement the degree of doctor of science on Dr. Winterton C. Curtis, professor of zoology at the University of Missouri.

DARTMOUTH COLLEGE on June 11 conferred the degree of doctor of science on John Adam Fleming, acting director of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington.