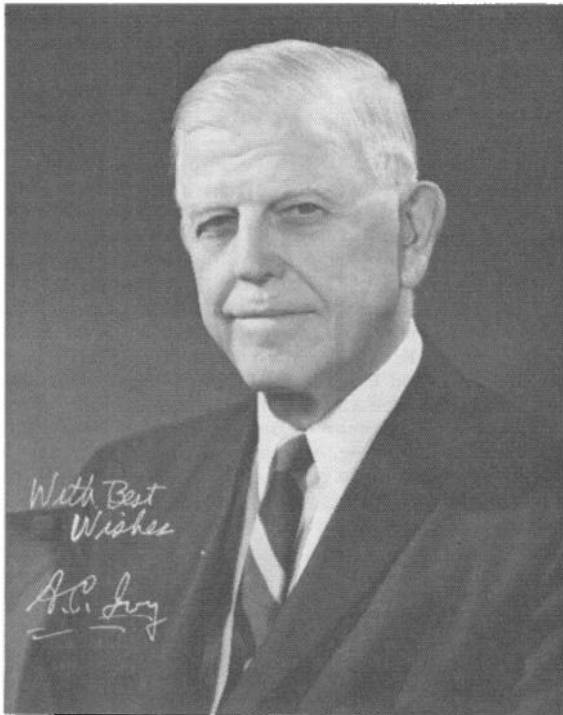


ANDREW C. IVY

1893 -



A recent photograph of Dr. Ivy.

Dr. Andrew Conway Ivy was elected President of the Society at its fifty-first meeting in Toronto in 1939. He had served as Secretary for the previous five years.

He was born in Farmington, Missouri, on February 25, 1893. The family soon moved to Cape Girardeau, Missouri, where his father, Henry McPherson Ivy, was Professor of Chemistry at the State Normal School. Ivy's first research was done while a student at that school. The area was psychology and the topic of one study was "The Effect of Disciplined and Undisciplined Play on Post-recess Conduct in Fifth Grade Students." In 1913, at age 20, he received the Bachelor of Arts and Bachelor of Pedagogy degrees. He already had decided to study medicine but did not have enough money, so he took a position as principal and coach of athletics at a high school in Clarksdale, Mississippi. In two years he saved enough money to resume his education. In 1915 he entered the University of Chicago, a school he selected because his father and brother had attended it and because he thought that he could get a part-time job there.

At the University of Chicago he quickly fell into the orbit of Anton J. Carlson, a legendary figure who was popularly referred to by the appropriately legendary name of Ajax. Carlson directed Ivy's interest to gastrointestinal physiology which was to remain the focus of his career. The research studies for his master's degree (M. S., 1917) and doctorate (Ph. D., 1918) were in gastric physiology. While completing the work toward the M. D. degree (Rush Medical School, 1922) he was Instructor in Physiology at the University of Chicago (1917 to 1919) and Associate Professor of Physiology at Loyola University School of Medicine (1919 to 1923).

He returned to the University of Chicago as Associate Professor of Physiology for two years, 1923 to 1925, and then was called to the chair of Physiology and Pharmacology at Northwestern University as Nathan Smith Davis Professor where he remained until 1946. From 1946 to 1953 he was Vice President of the University of Illinois in charge of the Chicago professional colleges; this was the period of most rapid growth of this great medical center. In 1953, amid the much publicized controversy over his work on Krebiozen, he resigned the Vice Presidency and continued as Distinguished Professor of Physiology and Head of the Department of Clinical Science at the University of Illinois. From 1961 to 1966 he was Research Professor of Biochemistry at Roosevelt University. Since 1966 he has been working, seven days a week as usual, at the Ivy Cancer Research Foundation, a privately supported organization with offices and laboratories in the heart of Chicago's loop. Since 1962 his research has been devoted exclusively to the body's defense mechanisms against cancer.

The pattern of many irons in many fires began early and persisted. In college Ivy played second base in baseball, competed in cross country track, played quarterback and defensive end in football, performed gymnastics, was on the basketball team, played tennis, wrestled, and boxed. ("I could stand up to anyone in my weight, 135 pounds. I defeated 'all comers' in the sixth regiment of Missouri in 1909.") He played violin in the college orchestra and helicon bass in the college band. At the University of Chicago he was on the debating team and sang second tenor in the University choir and glee club. The income helped him study medicine. While interning at two hospitals he taught physiology at two medical schools and conducted a large research program. And so it went. Throughout his long career he has often held several major positions simultaneously. He thrives on work.

In 1919 Ivy married Emma Anna Kohman who also received her Ph. D. in physiology from the University of Chicago. She has stood beside him literally and figuratively, always helping when needed, always stalwart. Their five sons are all in medical activities, four as doctors, one with a pharmaceutical company.

Between 1919 and 1955 Ivy and his coworkers published more than 1500 papers, an average of more than 40 papers per year for more than 35 years. Science Citation Index shows that during the period from 1964 to 1971 Ivy's articles were cited more often than any other scientist in the world. His work covered almost every aspect of gastrointestinal

physiology. Some contributions have come to be regarded as classics. Examples include the introduction of subcutaneously transplanted organs to prove the existence of humoral mechanisms for gastric and pancreatic secretion, the discovery of the hormone cholecystokinin, the discovery of urogastrone, and the elucidation of the effects of total gastrectomy in animals. Few know that Ivy had deep and continuing interests in several areas outside of gastroenterology including physiology of the uterus in labor, experimental intersexuality, aviation medicine, artificial respiration, cardiac pain, preparation of fresh water from sea water, protection from flash burns, and treatment of typhoid carriers. He introduced the "Ivy bleeding time", a procedure still in use for diagnosing clotting abnormalities. His book on "Peptic Ulcer" with Doctors Grossman and Bachrach is an internationally recognized text book.

Unknown to many physiologists, Dr. Ivy has worked on the physiological aspects of cancer since 1917. As a result of observations on dogs with cancer of the thyroid, he developed the hypothesis that the body of multicellular animals contains an "anticancer substance" (or substances) which is involved in the prevention of cancer and body resistance to cancer, and that it should be possible to concentrate and isolate the substance. He believes the substance to be present in all cells and especially in reticuloendothelial cells. He calls this substance "carcalon." The existence in the liver of animals of an ether-soluble substance which inhibits the growth of breast tumor in C3H mice has been recently confirmed. (L. C. Strong: Cytobios: 5, 119-124, 1972).

Dr. Ivy considers the training of physiologists and gasteoenterologists as his greatest contribution. More than 300 of his academic offspring are teaching in medical schools throughout the world; many hold high academic positions. Dr. Ivy always regarded teaching as his first responsibility. ("It is the duty of those who know to teach.") As with all to which he addressed himself, he put everything he had into it. He has inspired many students.

Dr. Ivy has held many high positions, only a few of which are mentioned here. He was founder and Scientific Director (1942 to 1943) of the Naval Medical Research Institute, and Executive Director of the National Advisory Cancer Council from 1947 to 1951. He was President of the American Gastroenterological Association in 1940. He engineered the founding of that Association's Journal, Gastroenterology, and served a decade (1942 to 1952) as its first managing editor.

Dr. Ivy has received many honors. A sampling: five honorary Doctor of Science degrees, one honorary Doctor of Laws degree, the Distinguished Alumni Award of the University of Chicago, and The Certificate of Merit from the President of the United States.

A man of action, Andrew Ivy has given more than verbal support to humanitarian causes in which he believes. He was for many years the prime mover and, in many instances, the founder of organizations devoted to humane goals such as eradication of tuberculosis, prevention and treatment of alcoholism, elimination of discrimination in higher education, and protection of animal research against antivivisectionism.

covering Dr. Milton O. Lee and persuading him in 1941 to take Dr. Donald Hooker's place as Managing Editor of the Journals of the Society.

Dr. Ivy's term as President was the last undisturbed prewar period. He presided at the meetings in New Orleans in 1940 and in Chicago in 1941.

Dr. Ivy is known to be a man of much determination and courage. Physiologists who worked with him closely have a warm friendship with him and know him as a man of high ideals and broad vision, with a wide knowledge of physiology and much wisdom and skill as an executive. In Chicago, he was particularly vigorous and effective in the defense of the use of animals for medical research. He attends meetings of the Society and has worked long and faithfully for the Society and its publications and for the advancement of physiology.

Taken from "History of the American Physiological Society - The Third Quarter Century 1937-1962" by Wallace O. Fenn and from "Presentation of the Julius Friedenwald Medal to Andrew Conway Ivy" by Morton I. Grossman (Gastroenterology 58: 747-749, 1970).

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION

The American Industrial Hygiene Association will hold its annual conference on May 12-17, 1974 in Miami, Florida, at the Hotel Fontainebleau. During the conference, the AIHA Ergonomics Committee will sponsor three paper sessions. These papers may be of interest to members of the American Physiological Society. A copy of the complete AIHA program may be obtained from Mr. William E. McCormick, Managing Director, American Industrial Hygiene Association, 66 S. Miller Road, Akron, Ohio 44313.