

George Linus Streeter

George Linus Streeter was born on 12 January 1873 in Johnstown, New York, to Hannah Green Anthony and George Austin Streeter. He completed his undergraduate studies at Union College in 1895 and received his MD degree from the College of Physicians and Surgeons of Columbia University in 1899. At Columbia, Professor George S. Huntington sparked Streeter's interest in anatomy, and Streeter also interned at Roosevelt Hospital in New York City. He then went on to Albany to teach anatomy at the Albany Medical College and to work with neurologist Henry Hun. In 1902 he studied with Ludwig Edinger at Frankfurt and with Wilhelm His at Leipzig. After working with His, Streeter shifted his focus to embryology, particularly the development of the human nervous system.

After deciding against a career in medical practice in favor of research, Streeter arrived in Baltimore to join the department of anatomy at Johns Hopkins University School of Medicine in 1904. While working under Franklin Paine Mall, Streeter was surrounded by a number of gifted researchers including Ross G. Harrison, Charles R. Bardeen, Warren H. Lewis, and Florence R. Sabin. Utilizing Mall's extensive collection of human embryos, Streeter published a paper on cranial and spinal nerve development in human embryos, his first of many contributions to embryology. His later experimentation involved the early development of the inner ear in frog embryos, which led to many years of research on the development of the human ear. Throughout his research, Streeter gained a great appreciation for the embryo, seeing it not merely as an incomplete stage in development but as a living, growing organism.

From 1906-1907 Streeter worked at the Wistar Institute of Anatomy and Biology in Philadelphia as an assistant professor and continued his research. From 1907-1914 he held the positions of Professor in Charge of Gross Human Anatomy and Director of the Anatomical Laboratory at the University of Michigan. While in Michigan, Streeter married Julia Allen Smith of Ann Arbor in 1910. Their son and a daughter later became physicians and another daughter received her doctorate in chemistry. Streeter's research on the embryological development of the human brain and ear caught Mall's attention. In 1914 Mall invited Streeter to move to Johns Hopkins as a research associate at the newly developed Carnegie Institution of Washington Department of Embryology.

When Mall died in 1917, Streeter succeeded him as director of the department. With Streeter as director, the department thrived. The embryo collection, which was already one of the world's largest, continued to grow, and Streeter trained a number of technicians and artists to meet his high standards for the collection of specimens and models. Research blossomed with experimentalists such as Warren H. Lewis, Margaret R. Lewis, Carl G. Hartman, Charles W. Metz, and anthropometrist Adolph H. Schultz.

Throughout his career, Streeter published a number of papers individually and collaboratively on embryonic development. His 1920 paper, "Weight, Sitting Height, Head Size, Foot Length, and Menstrual Age of the Human Embryo," continues to stand as a model and his chapter in the Manual of Human Embryology on human brain development still sets a high standard. Collaborating with Chester A. Heuser on the early embryology of the pig and with Heuser and Hartman on that of the rhesus monkey, Streeter published their findings in the Carnegie Institution's Contributions to Embryology. Their research descriptions are regarded as the most accurate presentations of early mammalian embryology at the time and are held as exemplars of American scientific success. Streeter's accomplishments earned him the presidency of the American Association of Anatomists from 1926-1928, membership in the National Academy of Sciences in 1931, and in the American Philosophical Society in 1943.

In 1940 Streeter retired from the department of embryology but continued his research. After years of dedication to scientific discovery, Streeter died suddenly of a heart attack on 27 July 1948 at the age of 75, his microscope in hand.

Sources

1. Corner, George W. "Streeter, George Linus." *Dictionary of Scientific Biography* 13: 96-98.
2. Corner, George W. "George Linus Streeter, 1873-1948." *Biographical Memoirs. National Academy of Sciences* 28 (1954): 261-87.