Elizabeth Caroline Crosby (1888–1983)

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Early life and Education

Elizabeth Caroline Crosby (Figure 1, 1888–1982) was a pioneer in neuroanatomy and academics. She was born in Petersburg, Michigan as the only child of Lewis Frederick and Francis Kreps Crosby. She excelled in her education and as a high school graduation present, her father promised her four years of college. She majored in mathematics in only three years even though it was a four-year course. She was awarded a Bachelor of Science degree from Adrian College in 1910.

Inclination Toward the Life Sciences

Influenced by a zoology course and Elmer Jones, a professor of physics and chemistry, Crosby attended the University of Chicago, under the guidance of C. Judson Herrick. Here, she earned a Master of Science degree in biology in 1912 and a Ph.D. in anatomy, through a fellowship in 1915. After serving as a high school principal until 1916 and school superintendent until 1918 in Petersburg, Michigan, she took on a teaching position under the guidance of Dr. Gotthelf Carl Huber at the University of Michigan in 1920. She taught histology and neuroanatomy and became an Assistant Professor in 1926 and an Associate Professor in 1929. Although she did not have a medical background, she became the first woman to receive a full professorship at the University of Michigan Medical School in 1936.

Contributions in Middle Years

During her tenure at the University of Michigan, Crosby contributed significantly to the two-volume text, The Comparative Anatomy of the Nervous System of Vertebrates, Including Man (1936) with Huber and Ariëns Kappers, Director of the Central Institute for Brain Research in Amsterdam. She was also the editor and primary contributor to the Huber Memorial Volume (1936) in the Journal of Comparative Neurology.

Writings

In 1958, Crosby retired, becoming Professor Emeritus and the first to receive the “University’s Faculty Achievement Award,” in 1956. In her research, her focus was the study of the nervous system, the nuclear masses in the brain, and the fiber connections of the cell groups and she studied extensively the phylogenetic/evolutionary development of the brain in vertebrates, including humans. She was prolific and co-authored Correlative Neurosurgery (1955) and Correlative Anatomy of the Nervous System (1962). She was asked to continue as a consultant in neurosurgery, teaching medical residents.

Crosby conducted research with Dr. Edgar Kahn and Dr. Richard C. Schneider and continued publishing new reference works in comparative vertebrate neuroanatomy. In 1963, Crosby became Professor Emerita of Anatomy at the University of Alabama and was named a distinguished faculty lecturer. She was also inducted into the Alabama Women’s Hall of Fame in 1987. During her lifetime, Crosby influenced many students, faculty, and physicians through her profound understanding of the nervous system and her complete selflessness in teaching.

Achievements and Awards

Her significant accomplishments in research and the quality of her scientific publications were also recognized by colleagues all over the world, with awards and honors. As early as 1950, she received the Achievement Award of the American Association of University Women and as late as 1972, the Henry Gray Award from the American Association of Anatomists. Crosby’s excellence in teaching was officially recognized in 1957 when the Galen Society of the University of Michigan Medical School established the Elizabeth C. Crosby Annual Award for the best preclinical teaching in the school. Invitations to lecture took her to London, Amsterdam, Puerto Rico, and Scotland. She was awarded ten honorary doctorates by universities both in the United States and abroad. Her own university honored her with the Solis Award (1926), and she was the first woman to receive the Henry Russell Lectureship (1946) and an Honorary Doctorate of Sciences (1970). In 1980, President Jimmy Carter presented Crosby with The National Medal of Science, “for outstanding contributions to comparative and human neuroanatomy and for the synthesis and transmission...”
of knowledge of the entire nervous system of the vertebrate phylum.” To this day, the University of Michigan, Department of Neurosurgery, continues to have a yearly Crosby Lecturer in her honor. One of the authors of this article (EGS) was a graduate student under Dr. Crosby.

CONFLICT OF INTEREST STATEMENT

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REFERENCES


