Wilson, Henry Van Peters 🗟

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Wilson, Henry Van Peters (16 February 1863–04 January 1939), biologist, was born in Baltimore, Maryland, the son of Samuel Augustine Wilson, a clergyman, and Sophia Ann Stansbury. His father was a circuit rider in Maryland, Virginia, and Pennsylvania, then served in churches in Baltimore and Washington, D.C., until he retired from active service in the ministry and became a postal inspector. Both parents encouraged reading and study.

After attending the Baltimore City College (essentially a high school), Wilson entered the new Johns Hopkins University in 1880, intending to study medicine. Instead he received his A. B. degree in 1883 and continued for one more year of undergraduate biology. He enrolled in the University of Maryland Medical School but left after a few weeks, then served for a year as private tutor in zoology to the manufacturer Edward Phelps Allis, Jr. Allis's enthusiasm for biological research led him to establish the Allis Lake Laboratory in Milwaukee (directed by Charles Otis Whitman) and to provide financial support for the *Journal of Morphology*.

The next year, 1885, Wilson began his graduate studies in zoology with the morphologist William Keith Brooks. He joined most of Brooks's other outstanding students, including Thomas Hunt Morgan, Ross Granville Harrison, and Edwin Grant Conklin, in the study of marine embryology. Wilson concentrated on coral and completed his dissertation, "On the Development of *Manicina areolata*," in 1888. After a year supported by an Adam T. Bruce postdoctoral fellowship, with which he began his marine studies on sponges in the Bahamas, Wilson spent two years as scientific assistant at the U.S. Fish Commission's facility in Woods Hole, Massachusetts. His *Embryology of the Sea Bass* (1891) from that period provides a classic study of vertebrate embryology, complete with excellent illustrations.

In 1891 Wilson moved to the University of North Carolina in Chapel Hill, where he remained active in teaching and research until his death. Although the university expected its faculty to pursue research, it provided relatively little support for it. Wilson's biographer, Donald Costello, sketches a dedicated, strong-willed professor making his way by foot through muddy streets to ill-equipped laboratories with very basic equipment. This was a small university just undertaking a significant expansion, and as head of the one-man biology department, Wilson carried a heavy load. He added to his responsibilities by teaching and carrying out research at the U.S. Fisheries Department marine station at Beaufort, North Carolina, which he and a colleague in geology helped to organize. Partly as a result of these conditions, Wilson had relatively few graduate students. In 1893 he married Edith Theresa Stickney, who died in 1900, leaving two daughters and one son. A sister helped with housekeeping at first, then Wilson's daughters took over; he lived alone after his children moved on.

Continued research trips to marine stations brought new research materials, especially among the lower invertebrates, and new studies of development, regeneration, and classification, so that Wilson maintained an active research career. He produced more than ninety articles, including "Observations on the Gemmule and Egg Development of Marine Sponges" (*Journal of Morphology* [1894]) and "On Some Phenomena of Coalescence and Regeneration in Sponges" (*Journal of Experimental Zoology* [1907]), despite his relative isolation and heavy teaching load. Undoubtedly his most important work, centered on the sponges, began in 1890 in the Bahamas. He carried out taxonomic study for ten years on the sponges collected during the *Albatross* Expedition and sent to him by Alexander Agassiz, and he reviewed the collection gathered by the Fish Commission off Puerto Rico in 1899.

This careful taxonomic and morphological study prepared Wilson to notice an unusual phenomenon in sponge cells. At the Beaufort research station he observed that sponges in sea water dishes had disaggregated into a number of cells, which then reaggregated. Experimentally, he squeezed cells apart and watched as they moved together to form new, small aggregates. A single cell could even undergo differentiation and develop as a new sponge. This provided an important research tool for studying separate cells, as well as powerful suggestions concerning the nature of differentiation and regeneration of cells.

Wilson played active leadership roles in many organizations, serving as president of the American Society of Zoologists (formerly the American Morphological Society) in 1911, of the Elisha Mitchell Scientific Society (1905–1906 and 1938–1939), and of the North Carolina Academy of Sciences (1912). He was active in the American Philosophical Society and was a charter member and council member of the American Association of University Professors. The National Academy of Sciences elected him a member in 1927. He became Kenan Professor at the University of North Carolina in 1917 and held that position until his death in Durham, North Carolina, although he retired as department head in 1935.

Wilson was a much-loved and respected leader in the community where he spent his entire career; his former students reported that he was affectionately known as "Froggy." The chancellor noted in 1939:

All of us who studied under Dr. Wilson, who worked with him, or even knew him, had a profound reverences for his fearless, honest and skilful personality. We thought of him as a great teacher and we rejoiced in his distinction as a scholar. Above all, we enjoyed him. He loved Chapel Hill and the University. No one enjoyed more than he did the round of life among the faculty and students. He enjoyed particularly the enterprise and initiative of the students and was a sympathetic but shrewd observer of all they did. (quoted in Howell, p. 185)

Bibliography

Wilson's papers are in the Southern Historical Collection and in other special collections at the University of North Carolina. A biography is Donald Paul Costello, National Academy of Sciences, *Biographical Memoirs* 35 (1961): 350–83. See also R. E. Coker, *The American Philosophical Society Yearbook 1939* (1940), pp. 470–82, and A. C. Howell, *The Kenan Professorships* (1956), pp. 185–89.

See also

Whitman, Charles Otis (1842-1910), zoologist

Brooks, William Keith (1848-1908), zoologist

Morgan, Thomas Hunt (1866-1945), biologist

Harrison, Ross Granville (1870-1959), biologist

Conklin, Edwin Grant (1863-1952), biologist

Agassiz, Alexander (1835-1910), marine biologist, oceanographer, and industrial entrepreneur