Washington University in St. Louis

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Washington University in St. Louis served as the backdrop for many scientific discoveries, including that of nerve growth factor (NGF). Many of the accomplishments in embryology at Washington University can be attributed to the influence of Viktor Hamburger. He served as chair of the zoology department for twenty-five years. One of the few Nobel Prizes given for embryological research was awarded to faculty members Hamburger hired; Rita Levi-Montalcini and Stanley Cohen won for their role in the discovery of nerve growth factor.

Washington University was founded in 1853. The University was known by a variety of names: in 1853 it was known as the Eliot Seminary, in 1854 the Washington Institute of St. Louis, in 1855 the O'Fallon Institute, and in 1856 it became Washington University. The words “in St. Louis” were added in 1976 to relieve confusion about the location of the university. Washington University was founded primarily through the work of Wayman Crow and William Greenleaf Eliot. Eliot was a driving force in the school’s early history and became the third chancellor in 1871.

War played a role in the development of the university. During the Civil War the Union Army annexed a portion of the campus for training. World War II brought an influx of talented refugees to the university. This class of faculty, displaced by the war, Ralph Morrow referred to as “Illustrious Immigrants” in his history of the institution. Washington University added more schools as it grew. The law school was opened in 1867 to a class of a dozen students. The law school was one of the first programs in the nation to accept women in 1909. Washington University is now composed of seven schools, led in enrollment by the School of Arts and Sciences. The Department of Biology, formed by a union between the Department of Zoology and the Department of Botany in 1969, is a part of the School of Arts and Sciences. From 1919 to 1935 the Department of Zoology was headed by Caswell Grave, noted for his work in cytology and credited with making his department the most productive in the university. In 1935 Grave offered Viktor Hamburger a position as an Assistant Professor of Zoology, which Hamburger accepted. Hamburger became the chair of the Department of Zoology in 1941, a position he occupied until 1966.

Viktor Hamburger came to Washington University from the University of Chicago, where he had worked under Frank Rattray Lillie at the end of his Rockefeller Fellowship. Hamburger was instrumental in bringing some of the “Illustrious Immigrants” to Washington University. For example, he brought Rita Levi-Montalcini in 1947 and began a collaboration that led to the discovery of nerve growth factor. Hamburger brought Stanley Cohen to the zoology department in 1953 to assist in the identification of nerve growth factor. Together, Levi-Montalcini and Cohen won the 1986 Nobel Prize in Physiology or Medicine for their work on NGF.

Washington University continues to maintain a leading presence in the biological community. Partnerships with industry, including Monsanto, have helped the biology department and studies of the natural sciences flourish. The Department of Biology continues to focus on graduate student recruiting and funding, faculty recruitment, and undergraduate resources to maintain the tradition of excellence at Washington University. This university is recognized for its contributions to genetics, neuroscience, and development, past and present.