

## September 2020 Her Story ENewsletter Scientific Legacies

Two scientific pioneers have died within recent months – physicist Betsy Ancker-Johnson and molecular biologist Flossie Wong-Staal. Both helped blaze the trail for the women in the sciences. We celebrate the legacies of these two accomplished women.



**Betsy Ancker-Johnson** grew up in a family where her interest in math and science was encouraged. Her junior high school, however, was not so accommodating. She was not allowed to take shop class; instead, she had to enroll in home economics. Although she wanted to attend the Massachusetts Institute of Technology, she did study physics at Wellesley College, one of only two students selecting that major. From Wellesley, she earned her PhD at the University of Tübingen in Germany, where she was the only female student in the physics department.

She married mathematician Harold Hunt Johnson in 1958 saying he was "the first man I ever met who thoroughly understood that my interest in

electrons was as great as his in partial differential equations of the umpteenth order." During her career, Ancker-Johnson worked at a variety of corporations, universities and in government. In 1973, President Nixon appointed her assistant secretary of commerce, where she was responsible for science and technology. In that position, she was in charge of 7,500 employees and an annual budget of \$230 million. In 1979, she became the first female vice president at General Motors. She served in that role until 1992. In 1993, she helped prepare a report for the National Academy of Sciences on the underrepresentation of women in scientific and engineering jobs. In retirement, she competed internationally in masters swimming meets.



**Flossie Wong-Staal** was born in China and fled with her family to Hong Kong in 1952. While attending Catholic school there, she needed to choose an English name. Her father suggested Flossie, the name of a typhoon that had recently hit the area. At 18, she left Hong Kong to study molecular biology at the University of California, Los Angeles. She completed her PhD there as well, before taking a postdoc at the University of California San Diego. After her PhD, Wong-Staal joined the staff of the National Institutes of Health (NIH).

At the NIH, Wong-Staal found the molecular evidence that a certain virus caused cancer; this provided the foundation for understanding that human retroviruses could be carcinogenic. Most significantly, she is known as the major figure in the discovery of the human immunodeficiency virus (HIV) and the first to clone that virus. She discovered the function of the HIV genes. This

was a major step in proving that HIV caused acquired immunodeficiency syndrome (AIDS). Her honors include membership in the National Academy of Medicine, being listed as one of the top 50 female scientists by *Discover* magazine (2002), and induction into the National Women's Hall of Fame.

Betsy Ancker-Johnson and Flossie Wong-Staal are among the more than 850 women profiled in our book *Her Story: A Timeline of the Women Who Changed America* Women's accomplishments continue to inspire and encourage us all. Continue to help us tell women's stories!

Charlotte Waisman and Jill Tietjen

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