

## GERTRUDE MARY COX

**Gertrude Mary Cox** (January 13, 1900 – October 17, 1978) was one of the world's leading statisticians of the 20<sup>th</sup> century and one of the first women in the field. Her work promoted practical application of modern statistical procedures, as she developed programs that provided services to education, agriculture, nutrition, horticulture, as well as to industry and government. Giving up her plan of becoming a deaconess in the



Methodist Church, she instead studied mathematics at Iowa State University, receiving a B.S. in 1929. In 1931, she was awarded the first master's degree in statistics given by the University. Between 1931 and 1933, she pursued psychological studies at the University of California, Berkeley, before returning to Iowa State in 1939 to work with George Snedecor, who headed the newly created Statistical Laboratory.

Her next move was the result of a postscript in a letter Snedecor sent to North Carolina State University, in which he gave the names of five male candidates to organize and head a Department of Experimental Statistics in the School of Agriculture. Snedecor added that if the school would consider a woman, he recommended Cox for the position. In January 1941, the department was established with Cox as the first female full professor and first female head of a department at North Carolina State.

When an Institute of Statistics was established at the university in 1944, Cox was named its first head. She was a moving force in the creation of what is now known as the Research Triangle Institute (RTI), which began with applied statistical projects in 1959. The Institute and the Research Triangle Park have significantly improved the quality of life in the state and far beyond by attracting high-tech industries to the area. When Cox retired from her faculty position and the Institute in 1960, she organized and

became the first head of the RTI's Statistics Research Division. When she left this position in 1965, she continued as a consultant and then turned her attention to international statistical activities.

Affectionately known as the "First Lady of Statistics" and recognized nationally and internationally for her innovative uses of statistical methods, Cox helped North Carolina become a world center for advanced work in statistics.

Cox was the first editor of the *Biometrics Bulletin of the Biometric Society of the American Statistical Association* (ASA), and she founded the Biometric Society. She served as president of the ASA (1956) and of the Biometric Society (1968-69). She was the first female elected to the International Statistical Institute, and in 1956 she was awarded an honorary doctor of science degree from Iowa State University. In 1970, Cox Hall, the current home of the Department of Statistics, was dedicated at North Carolina State University and in 1989, the Caucus for Women in Statistics of the ASA established the Gertrude Cox Scholarship to encourage women to enter into statistically oriented professions.

**Quotation of the Day:** "I majored in math ... because I liked it and because I could elect all the psychology and craft courses that I needed. I was working my way through college and managed to land a job in the computing laboratory. In that manner I became interested in statistics. By the time I graduated, I was as well trained in psychology and crafts as in math but I was already in statistics. Consequently, I stayed on in that field." – Gertrude Mary Cox