

# Famous New Yorker Marie Maynard Daly

Marie Maynard Daly inherited her father's dream of being a chemist. She inspired dreams for future generations as the first African-American woman to earn a Ph.D. in chemistry, and as a researcher whose work has influenced everyone's life.

Marie's father was an immigrant from the British West Indies. He won a scholarship to study chemistry at Cornell University, but room and board were too expensive for him. He dropped out after one semester and eventually moved to the Corona neighborhood in Queens, where Marie was born on April 16, 1921.

Marie was fascinated by her father's science books. Her grades allowed her to attend the all-female Hunter College High School, where teachers encouraged her interest in chemistry. After graduation she enrolled in Queens College, part of the City College of New York system. Not only was the tuition free, but the school was close enough to home that Marie could commute to classes. She could thus afford to earn a Bachelor's degree in 1942.

During World War II opportunities opened up for women seeking careers in science while their male counterparts went to war. Marie Daly earned a Master's degree from New York University while working as a lab assistant at Queens College. She moved on to the Ph.D. program at Columbia University. Mentored by Dr. Mary Letitia Caldwell, who overcame physical disability to become the school's first female assistant professor, Daly earned her doctorate in 1948 with a dissertation on a pancreatic enzyme's effect on digestion.

Dr. Daly took a teaching job at Howard University, one of the nation's most prestigious black colleges. She soon earned an American Cancer Society research grant that allowed her to work at the elite Rockefeller Institute. The only black scientist at the Institute, Daly was at the forefront of research during a golden age in the field of biochemistry. She studied cellular metabolism and the building blocks of the nucleus at the same time that James Watson and Francis Crick discovered the structure of DNA. Watson acknowledged Daly's work when he and Crick won the Nobel Prize for their discovery.

Daly returned to Columbia as a biochemistry instructor at the school's College of Physicians and Surgeons. At the same time, she became a researcher at Goldwater Memorial Hospital, where she did her most influential work. Researching the causes of heart disease in rats, she identified cholesterol as an important factor in high blood pressure and the clogging of arteries. Americans haven't looked at food the same way since.

The chemistry of aging and heart disease became Daly's specialty. Moving to the Albert Einstein College of Medicine at Yeshiva University, she organized research on the effects of diet and smoking on heart health. She remained at Einstein College until her retirement in 1986.

As a researcher and professor, Marie Maynard Daly became a mentor for the next generation of scientists. She became a leader in the recruitment of minority students in fields beyond her own. Among her protégés was Francine Eissen, the first African-American woman to earn a Ph.D. in biology. Daly died on October 23, 2003 but a scholarship fund she created in 1988 keeps her father's dream alive by creating opportunities for future black scientists.



**Photo by Ted Burrows, courtesy of Albert Einstein College of Medicine, D. Samuel Gottesman Library Archives**



**Queens** is the easternmost and largest in area of the five boroughs of New York City, located at the western end of Long Island.

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