Ruth Ella Moore

Scientific & Historic Trailblazer...





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hortly before women received the right to vote and half a century earlier than the civil rights movement, Dr. Ruth Ella Moore was born in 1903 in Columbus Ohio.(1) Unbeknownst to her parents at the time, Ruth would become a trailblazer for both women and the African-American community in academics and science.

Growing up, Dr. Moore was encouraged by her artist mother to attend college. Her mother had attended the Columbus State College of Art and Design and felt that earning a degree was important. At the time, this was not an easy feat for an African-American woman. Despite this, Dr. Moore enrolled in Ohio State University where she received both her Bachelor of Science and her Master of Science degree.(1)

Dr. Moore was not finished at two degrees. She went on to earn a Ph.D. in bacteriology in 1933, an remarkable accomplishment at the time. Dr. Moore was not only the first Black woman in the United States to earn a PhD in the natural sciences; she was also the first African-American of any gender to earn a Ph.D. in Bacteriology. Her dissertation was titled "Studies on Dissociation of *Mycobacterium tuberculosis*" and "A New Method of Concentration on the Tubercule Bacilli as Applied to Sputum and Urine

Examination."(1) During Dr. Moore's time, Tuberculosis was known as consumption due to the common symptoms of rapid weight loss and weakness. The disease was the second leading cause of death in the United States and was greatly feared. Dr. Moore's work on *Mycobacterium tuberculosis* contributed greatly to the eventual control of the disease, which can now be treated successfully.(2)



Figure 1: Dr. Ruth Ella Moore at her graduation.

After earning her Ph.D., Dr. Moore became the assistant professor of bacteriology at Howard University College of Medicine. Later, when the department Head of bacteriology was drafted for WWII, Dr. Moore was promoted to the position. Her first order of business was changing the name of the department to the department of Microbiology.(2) Aside from her work on Tuberculosis, Dr. Moore also performed several notable research projects. This included research into blood types, where she compared the prevalence of blood types by race. She also researched the etiological agents that contribute to the formulation of dental cavities, investigating the organism Lactobacillus acidophilus. Dr. Moore also performed some of the earliest research on the

microbiomes, utilizing the gut of the Death Head Cockroach.(2)

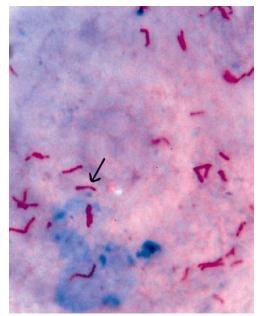


Figure 2: Mycobacterium tuberculosis on an oilimmersion smear slide. A typical bacillus is indicated by the arrow.

Throughout her career, Dr. Moore participated in many firsts. Along with her Ph.D., she was also the first African-American to join the American Society for Microbiology. Unfortunately, segregation meant that she had limited access to meetings, hotels, and conference venues. She was also a member of the American Public Health Association, the American Society of Immunology, and the American Association of Science.(1,2)

Dr. Moore remained an associate professor emeritus of microbiology at Howard until 1990. Despite many barriers to African-American women, she persevered and left an undeniable mark on microbiology and the natural sciences. Dr. Moore also took after her mother and loved fashion, creating her own pieces to wear for any occasion. She passed away at the age of 91 after an impressive, successful life and career.(1)

References:

- 1. https://en.wikipedia.org/wiki/Ruth_Ella_Moore
- 2. https://cph.osu.edu/news/2021/06/ruth-ella-moore-inducted-diversity-hall-fame