

BECAUSE OF HER



WOMEN'S HISTORY MONTH



Discover how fearless females changed the world of Science, Technology, Engineering, and Mathematics (STEM) with Gale's *Science In Context*.



VIRGINIA APGAR

As an attending anesthesiologist, she developed the Apgar system which allows a doctor or nurse to quickly determine if a baby is at risk for complications. She focused her career on advocating for prenatal care and ensuring proper care for newborns. Apgar laid the foundation for perinatology and the programs she developed are credited for our understanding of the risks to a developing baby.



RACHEL CARSON

Her book *Silent Spring* revealed the toxicity of pesticides and served as a call-to-arms to protect our planet. Despite being called a 'hysterical woman' and having her credentials questioned, Carson was undeterred in her fight for conservation. Her work drew praise from President John F. Kennedy and the public, leading to more than 40 bills and amendments to federal environmental laws.

“What I discovered was that everything which meant the most to me as a naturalist was being threatened and that nothing I could do would be more important.”

- Rachel Carson

“Silent Spring.” Animal Sciences, edited by Allan B. Cobb, Macmillan Reference USA, 2010. Science In Context



JEWEL COBB

She spent her early career researching melanin and the effects of drugs on cancer cells, creating the foundational understanding upon which chemotherapy is built. Aside from her work as a cell biologist, she initiated programs to encourage minorities and women to pursue the sciences. As an educator and administrator, she worked to raise funds for scientific research and foster educational opportunities for minorities.



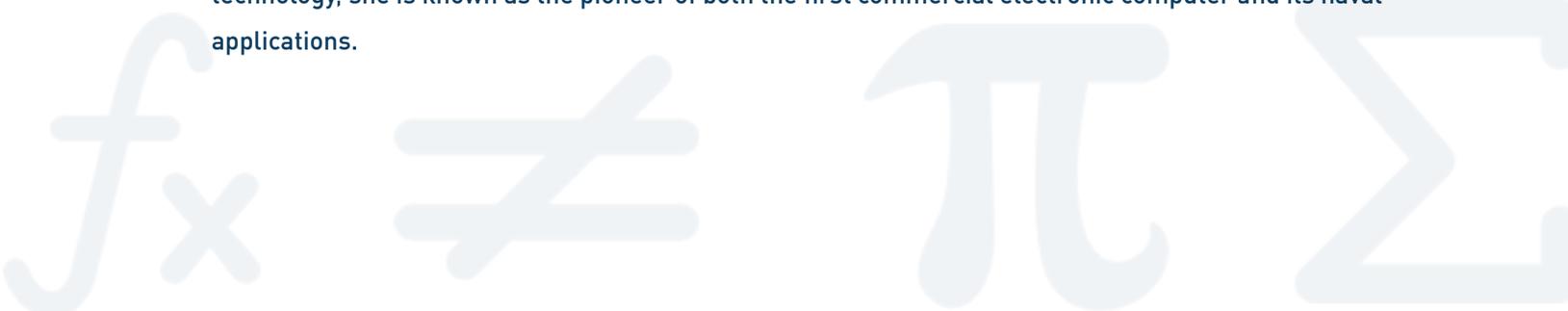
SYLVIA EARLE

Has dedicated her life as a marine biologist to understanding our oceans and their importance to our ecosystem. Sylvia set the record for the deepest free dive and was one of the first to pioneer modern SCUBA equipment. She has discovered 153 new species of plants while diving on the sea floor. Sylvia continues to explore and advocates for greater education regarding our oceans.



GRACE HOPPER

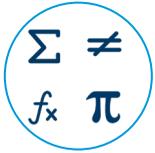
As a pioneer in computer programming, Grace built the first tool that could translate programming language into machine-readable instructions. She continued her work by developing basic language standards for programming known as COBOL. Because of her contributions to the design and development of computer technology, she is known as the pioneer of both the first commercial electronic computer and its naval applications.





MAE JEMISON

She was both the first African-American woman admitted into the astronaut training program and the first in space following her 8-day mission aboard the Endeavour. After leaving the astronaut corp, Dr. Jemison focused on the advancement of education and science. She founded the Earth We Share International Science Camp that focuses on the impacts of science and technology on society and leads initiatives to advance space travel.



KATHERINE JOHNSON

While working at NASA, she developed the calculations necessary to track the orbits of spacecrafts and satellites. Johnson was critical to performing the complex calculations necessary to ensure the safety of the Apollo 11 mission. She is a firm believer in the importance of education, especially math, and has worked with the Department of Education to introduce math to children.



BARBARA MCCLINTOCK

A geneticist ahead of her time, McClintock was the first to observe that genes were located on chromosomes. Her theories were largely ignored by the scientific community at the time as it conflicted with contemporary theories. As technology improved, McClintock's discoveries were better understood, and she is credited with laying the foundation for our current understanding of the genome.



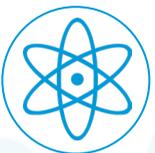
VERA RUBIN

She fought for her place in the scientific community and spent her early career juggling a family and work. Her family life did not stop her from challenging accepted theories in astronomy and making discoveries that changed our understanding of the universe, including proving the existence of dark matter. Rubin's work paved the way for women in her field as she worked with an organization dedicated to helping women work in the sciences.



FLOSSIE WONG-STAAAL

She was the first researcher to clone the HIV virus, allowing for the first genetic mapping of HIV. Wong-Staal's work led to the creation of tests to screen patients and blood donors for HIV. She continues her research today using gene therapy to find vaccines against HIV and a cure for AIDS.



CHIEN-SHIUNG WU

Overcame gender barriers and racism to become an internationally-renowned physicist. Wu is best known for her experiment on beta decay, which confirmed revolutionary predictions about the principle of parity. Her male colleagues won the Nobel Prize in Physics for their work on the theory, but Wu did not share the award despite her work being essential to proving the theory.

WOMEN'S HISTORY MONTH
BECAUSE
OF **HER**

“When I look at our role as women, I look at our role as being full-fledged adult human beings, which means we are responsible for where the world goes.”

-Mae Jemison

“‘We Have the Power’: Successful black women are rethinking and challenging old racial stereotypes and assumptions. In an exclusive round table, activists, entertainers, scientists and executives talk about where they’ve been, where they are and where they’re going.” Newsweek, 18 Sept. 2000, p. 54. Science In Context.

**LEARN
MORE** 


 **GALE**
A Cengage Company