

Vanguard Presents



How Hedy Lamarr inspires me

Claire Tang, CONTRIBUTING WRITER

Women's History Month is a time to celebrate the achievements of millions of women throughout history. Reflecting on the contributions of both historical and contemporary women empowers us students to create our own ideas and legacies. Hedy Lamarr, an actress and inventor in the 20th century who eventually became known as the "Mother of Wi-Fi," serves as an inspiration for me.

Lamarr, born Hedwig Kiesler in 1914, was the only child of an Austrian-Jewish family. Lamarr had always been intrigued by theater and films, and was most known for her roles in countless movies during Hollywood's Golden Age. She starred in several classics, including romantic dramas, mystery film noirs, and soft melodramas. Her charismatic talent made her a household name, and eventually she was honored as one of the most renowned American actors of her time. Although she was captivated by Hollywood's bright lights, her mind often buzzed with an infatuation for science; she would spend hours in her trailer between movie shoots experimenting with new technology. This interest of hers was inspired in many ways by her father, who would often explain the function of technology to her while they were on long walks.

While Lamarr was shooting the romantic mystery "Algiers," World War II brewed with tension in the background. As the United States debated whether to enter the war, Lamarr too debated leaving Hollywood. She desired to join the National Inventors Council to assist the U.S. in developing military inventions. Yet reportedly, she was told by NIC member Charles Kettering that she would better help the war efforts by selling war bonds using her star status and beauty. This was not the first time her innovative mind had been overshadowed by her looks, and it would not stop her from inventing.

One invention of Lamarr's was a wireless torpedo coded with a frequency hopping system immune to jamming. She had read that radio-controlled torpedoes were proposed for use in the war, but they were often faulty as their guidance systems were easy for the enemy to jam. Though her developments were initially turned down by the Navy, her creation planted the seed that would blossom into some of the world's most widespread technology. Eventually, Lamarr's ingenious frequency-hopping system was woven into the development of wireless technologies, like the Wi-Fi, Bluetooth, and GPS that we still use on our phones and computers to this day.

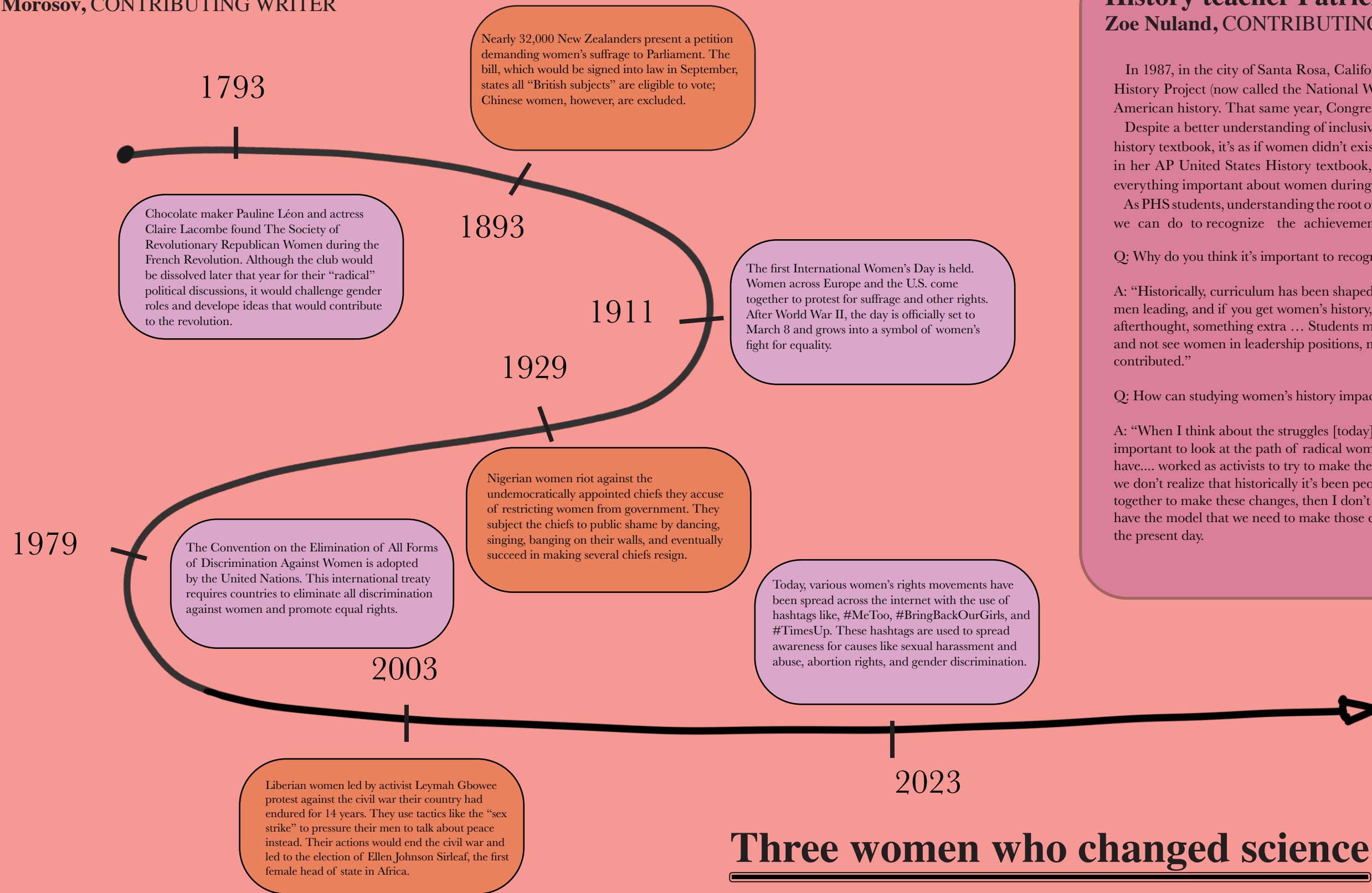
Hedy Lamarr adored flashing cameras and vanity mirrors, but also treasured tinkering gadgets and analyzing frequencies. Her life inspires me, as it illustrates how passion can be multidimensional and unlimited. Oftentimes, I become so absorbed in packaging myself as a certain type of person, whether it be a writer or an artist, that I forget the possibilities that exist. Lamarr reminds me that I can love to craft stories full of fantastical words, but also enjoy immersing myself in numbers through algebra. She shows me that I don't have to choose to be one thing. Her legacy as a bright star during Hollywood's Golden Age and a bright mind in the innovative world illustrates the fact that there are no limitations in what I, or we, can do. ■



graphics: Angela Wu

A timeline of women's movements

Asya Morosov, CONTRIBUTING WRITER



History teacher Patricia Manhart on celebrating women's history month

Zoe Nuland, CONTRIBUTING WRITER

In 1987, in the city of Santa Rosa, California, the first celebration of Women's History Month took place in the United States. Women led by the National Women's History Project (now called the National Women's History Alliance) had voiced their demand for a month dedicated to observance of the contributions of women in American history. That same year, Congress passed an act to officially recognize March as Women's History Month.

Despite a better understanding of inclusivity today, there is still progress to be made. In 2022, the Washington Post featured an article, "In my advanced high school history textbook, it's as if women didn't exist," by teenage journalist, Macaela Wells, who described her experience when coming across a paragraph titled "Women" in her AP United States History textbook, the AMSCO. She wrote how she "was bothered that the writers had deemed 100 words sufficient for teaching students everything important about women during that era."

As PHS students, understanding the root of this issue is crucial to changing the patriarchal system embedded in high school courses like APUSH. There are many things we can do to recognize the achievements of women in history or today. United States History II teacher Patricia Manhart shares her opinion on a few ways we can

Q: Why do you think it's important to recognize women's history at PHS?

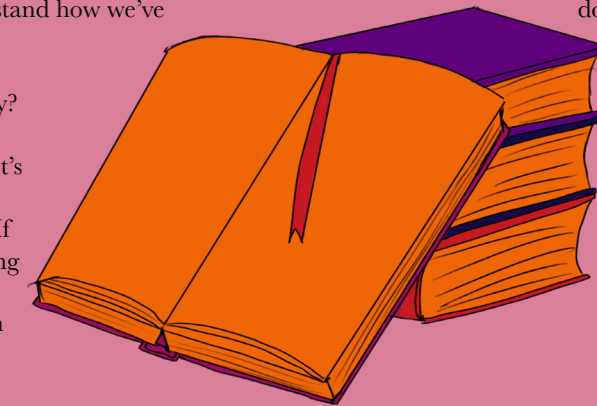
A: "Historically, curriculum has been shaped by patriarchal standards where it's men leading, and if you get women's history, it tends to be a side note, like an afterthought, something extra ... Students might go through their K-12 education and not see women in leadership positions, not understand how we've contributed."

Q: How can PHS students celebrate Women's History Month?

A: "Women's history is highlighted in March, but I hope that it also continues outside of March. We might take this time to kind of pause, reflect and put more focus on women's history, but it is important that it's throughout the year that we're doing these things."

Q: How can studying women's history impact us today?

A: "When I think about the struggles [today], I think it's important to look at the path of radical women who have... worked as activists to try to make these gains. If we don't realize that historically it's been people coming together to make these changes, then I don't think we have the model that we need to make those changes in the present day."



Q: How do you think being a history teacher has influenced your thoughts on women empowerment in the modern day and is history?

A: "[I've learned] that you want women who are going to change that system, make it more equitable and accessible for all workers. I feel like being a history teacher, the more I read, and the more I learned, has really shaped and shifted my values about what feminism looks like, could be, or should be."

Three women who changed science

all graphics: Angela Wu

Alice Augusta Ball
Ivy Hu, CONTRIBUTING WRITER

Born in 1892 in Seattle, Washington, chemist Alice Augusta Ball developed the "Ball Method," the most effective treatment for the skin infection leprosy. Growing up, Ball's mother and grandfather were photographers, and Ball grew up watching them chemically develop photos. This greatly contributed to her love of chemistry, which Ball later studied during her time at the University of Washington. There, she was incredibly successful — her master's thesis was recognized by Harry T. Hollman of the Public Health Service — who invited her to study the oil from an herb called chaulmoogra. In this research, Ball developed a technique to make the chaulmoogra oil injectable and absorbable by the body, allowing greater accessibility to psoriasis and eczema treatment. Aside from her discoveries in pharmaceuticals, Ball also achieved many other firsts in her career. She was the first Black woman to be published in the Journal of the American Chemical Society as well as the first Black American and first woman to graduate with a master's degree at the University of Hawaii. ■



Chien-Shiung Wu
Kyra Mehta, CONTRIBUTING WRITER

Known as the first lady of physics, Chien-Shiung Wu was very influential in the world of experimental physics during her time. Wu was born in 1912 in China, and her father, who worked as a teacher and an engineer, encouraged her to invest in her studies. Wu attended National Central University (now called Nanjing University), where she originally studied mathematics but changed her major to physics. After school she moved to work at Columbia University, where she contributed to the Manhattan Project, a research project during World War II that produced the atomic bomb. She won several prizes for her exceptional scientific achievements, including the Comstock Prize in physics and the National Medal of Science; however, her contributions to particle physics were overlooked by the Nobel Prize Committee, who instead awarded the Nobel Prize to the male scientists she worked with. At a conference at MIT in 1946, she wittingly questioned the audience "whether...DNA molecules have any preference for either masculine or feminine treatment." ■



Mary Anning
Ivy Hu, CONTRIBUTING WRITER

Born in England in 1799, Mary Anning made great contributions to the field of paleontology. Although she grew up in a time when women were discouraged from exploring the sciences, her passion for finding fossils surfaced early in her childhood when her father took her along the coast to look for fossils. Anning finally gained a name for herself in the paleontologist community when she became the first person to discover a complete skeleton of a plesiosaur—a prehistoric water-dwelling creature. However, as a woman in a male-dominated field, other paleontologists hesitated to accept her findings. As such, Anning was never financially well-off; she even sold many of her findings to scientists who often took the credit for themselves. Although she was not fully recognized for her work when she was alive, Anning's many discoveries — such as the ichthyosaur, plesiosaur, and pterosaur — are showcased in many museums where aspiring young scientists can admire them today. ■

