

Women in History

Marie Curie

Marie Sklodowska Curie was born Nov. 7, 1867, in Warsaw, Poland.

She studied at the clandestine Flying University, which operated from 1885-1905, then again from 1977-1981. Institutions like the Flying University were instrumental in resisting Germanization and Russification under occupation.

In 1891, she followed her sister Bronislawa to study in Paris, where she earned degrees. She married French physicist Pierre Curie in 1895 and shared the 1903 Nobel Prize in Physics with him and physicist Henri Becquerel for their work in radioactivity. She also won the 1911 Nobel Prize in Chemistry for her discovery of polonium, named after her native country of Poland, and radium, using techniques she invented for isolating radioactive isotopes.

The Curies had two daughters, Irene and Eve. Marie, who never lost touch with her Polish identity, hired Polish governesses to teach her daughters Polish and took them to Poland for visits. After the accidental death of Pierre in 1906 — he was hit by a horse-drawn vehicle — she became the first woman to become a professor at the University of Paris.

Marie also founded the Curie Institute in Paris and the Curie Institute of Warsaw, both of which are still major centers of medical research. In 1910, she succeeded in isolating radium and defined an international standard for radioactive emissions, the curie.

During World War I, Curie

developed mobile radiography units, the "Petites Curies," to help assist battlefield surgeons and save soldiers' lives and limbs.

Marie served as the director of the Red Cross Radiology Service and set up France's first military radiology center, assisted by her daughter Irene. The Petites Curies would eventually treat more than a million wounded soldiers.

After the war, she was awarded a stipend from the French government and toured the U.S. to great applause and success. Marie traveled broadly, giving lectures and making appearances in Belgium, Brazil, Spain and Czechoslovakia. Her daughter Irene and son-in-law won their own Nobel Prizes for their radioactive research. She was named a member of the League of Nations' International Committee on Intellectual Cooperation in 1922, along with Albert Einstein. Marie also won the Cameron Prize for Therapeutics of the University of Edinburgh and was named to the International Atomic Weights Committee.

In 1934, Marie was confined to the Sancellemoz sanatorium in Passy, Haute-Savoie, suffering from aplastic anemia, thought to have been caused by her long-term exposure to radiation. The dangerous effects of radiation weren't known at the time of her work, and she frequently carried test tubes containing radioactive isotopes in her pocket and was also exposed to unshielded radiation during World War I.



Margaret Thatcher

Margaret Thatcher was the first woman to serve as British prime minister and the longest-serving prime minister of the 20th century.

She was born in 1925 in Grantham, Lincolnshire, England, and worked briefly as a research chemist before becoming a barrister, then Member of Parliament for Finchley in 1959.

Thatcher, who by then was married to her husband, Denis, continued to work her way up through Britain's Conservative Party, becoming the first woman to lead a major political party in Britain. She won the 1979 general election to become prime minister under Queen Elizabeth II.

Once in power, Thatcher introduced a series of economic policies intended to reverse high inflation and deregulate industry. Her popularity was buoyed by a victory in the 1982 Falklands War against Argentina and she won re-election in 1983. Thatcher survived an IRA assassination attempt in 1984 and scored a victory in the 1984-1985 miners' strike, propelling her to victory in the 1987 election as well.

But her increasingly caustic views on the European Community and support for a poll tax forced her resignation in 1990 after a challenge against her leadership launched. She retired from the House of Commons in

1992 and was given a life peerage as Baroness Thatcher of Kesteven, Lincolnshire, which allowed her to sit in the House of Lords.

Thatcher also wrote two memoirs, "The Downing Street Years" and "The Path to Power." She worked for tobacco company Philip Morris as a geopolitical consultant and established her own foundation and worked for other causes, such as Croatian and Slovenian independence. She also published another book, "Statecraft: Strategies for a Changing World," which was dedicated to Ronald Reagan.

In 2007, Thatcher became the first living British prime minister to be honored with a statue in the Houses of Parliament. It stands opposite her hero, Sir Winston Churchill. She died April 8, 2013, after suffering a stroke.

She was ranked as one of the 100 Greatest Britons by the BBC in 2002 and 100 of the most important people of the 20th century by Time. Her nickname was the Iron Lady, a moniker first given to her by a Soviet journalist, that eventually became associated with her uncompromising politics and leadership style.



Women in Science: Sally Ride

Sally Ride was the first American woman in space and the third woman overall, behind Russian cosmonauts Valentina Tereshkova and Svetlana Savitskaya.

Ride was born in 1951 in Los Angeles and earned a Ph.D. in physics from Stanford University, where she studied the interaction of X-rays with interstellar medium. She was chosen to be part of NASA Astronaut Group 8 in 1978, which was the first class to include women. She worked as the groundbased capsule communicator for the second and third space shuttle flights and helped develop the shuttle's robot arm.

In 1983, she joined the crew of Challenger for STS-7 to deploy communications satellites and the first Shuttle Pallet Satellite. Ride conducted experiments in the cargo bay and operated the robot arm to deploy and retrieve the Shuttle Pallet Satellite. Her second flight happened the next year, also aboard Challenger. After the deadly Challenger explosion in 1986, Ride was named to the Rogers Commission to investigate the incident. She was also later named to the commission to investigate the Columbia shuttle disaster.

Ride worked at NASA headquarters in Washington, D.C., leading a strategic planning effort for the future of America's space program. She also worked at the Stanford University Center for International Security and Arms Control and founded Sally Ride Science, a company that creates entertaining science content for students. Ride also continued to work for NASA, directing public outreach and educational programs.

During her career, she won NASA's von Braun award, the NASA Space Flight medal, the Lindbergh Eagle and the NCAA's Theodore Roosevelt Award. Ride also posthumously received the Presidential Medial of Freedom. She was also inducted into the National Women's Hall of Fame, the Astronaut Hall of Fame, the California Hall of Fame and the National Aviation Hall of Fame. In 1994, she won the Samuel S. Beard Award for Greatest Public Service by someone under the age of 35.

Ride died in 2012 at age 61 of pancreatic cancer. At that time, it was revealed that the intensely private Ride was a lesbian, living with her life partner, Tam O'Shaughnessy. In 2013, the Navy named a research vessel, RV Sally Ride, after her.



Elizabeth Blackwell

Elizabeth Blackwell, 1821-1910, was the first woman to receive a medical degree in the United States and the first woman on the Medical Register of the General Medical Council.

Blackwell didn't start out in medicine. She first became a schoolteacher, but an interest in medicine kindled after a friend fell ill and remarked that she might not have suffered so much had her doctor been a woman. Blackwell applied to and was rejected from medical schools except for Geneva Medical College, where the male student body voted to accept her.

Blackwell wrote her inaugural thesis on typhoid fever. It was published in 1849 by the Buffalo Medical Journal. The medical community deemed the paper — which showed empathy and advocacy for justice — feminine. In 1852, she began delivering lectures and research on the physical and mental development of girls. She established a dispensary in New York in 1853, which eventually became the New York Infirmary for Indigent Women and Children. Women served as trustees and Blackwell, her sister, Dr. Emily Blackwell, and Dr. Marie Zakrzewska served as attending physicians.



PUBLIC DOMAIN/WIKIMEDIA COMMONS

During the Civil War, the Blackwell sisters helped nurse Union soldiers even though male-dominated United States Sanitary Commission refused to work with the sisters. In response, Blackwell organized the Woman's Central Relief Association, which eventually did work with the USSC.

Blackwell, though educated in the United States, was a British native. In 1858, a clause in the Medical Act of that year recognized doctors with foreign degrees practicing in Britain before 1858, paving the way for her to return permanently to the country in 1869. There, Blackwell established a women's medical school in London, where she worked until her retirement in 1877.

Blackwell was also an active reformer, working for moral reform, hygiene, women's rights and more. She contributed to the foundering of two utopian communities and published Christian moral literature, including the 1878 "Counsel to Parents on the Moral Education of Their Children." During her career, she worked with Florence Nightengale, Sophie Jex-Blake and Elizabeth Garrett Anderson. She worked in active practice and lecturing until her death.

Maya Angelou

Maya Angelou, a Black poet, memoirist and civil rights activist, was born in 1928 in St. Louis.

She was sent at an early age to live with her paternal grandmother, Annie Henderson, in Stamps, Ark. After suffering sexual abuse in her mother's household, Angelou became mute for almost five years. Cloaked in silence, Angelou developed an extraordinary memory, coupled with a love for books and an ability to listen and observe.

At 16, Angelou — then living with her mother and brother in Oakland, California — became the first Black female cable car conductor in San Francisco. Soon after, she gave birth to her son Clyde. In 1959, after a failed marriage and song-anddance career, novelist John Oliver Killens urged Angelou to move to New York to concentrate on her writing. She did, and met Black authors and was published for the first time. In 1960, she and Killens organized the Cabaret for Freedom to benefit the Southern Christian Leadership Conference and was named the SCLC northern coordinator.

She moved to Africa with South African freedom fighter Vusumzi Make in 1961, where she worked as an associate editor at The Arab Observer, an English newspaper. By 1962, her relationship with Make was over and she and her son lived in Accra, Ghana, where she was an administrator at the University of Ghana, a feature editor for The African Review and worked and performed in

Ghana's National Theatre. She became close friends with Malcolm X, and eventually returned to the U.S. in 1965 to help him form the Organization of Afro-American Unity. She was living in Watts during the 1965 riots and, devastated by the deaths of Martin Luther King Jr. and Malcolm X, she wrote. She produced and narrated "Blacks, Blues, Black!" a 10-art series of documentaries about the connection between blues music and Black heritage for the precursor of PBS. This work was followed by her first autobiography and one of her most famous works, "I Know Why the Caged Bird Sings," published in 1969.

This was followed by work as a composer, screenplay writer, authoring short stories and documentaries and poems. Angelou was nominated for a Tony Award for 1973's "Look Away" and appeared in "Roots" in 1977, chalking up more than 30 honorary degrees from universities around the world. She taught at Wake Forest University until 2011 and also lectured around the country, winning a Grammy, directing a feature film ("Down in the Delta"), even receiving the Presidential Medal of Freedom in 2011 from President Barack Obama.

Angelou died in 2014 at 86. Her papers were donated to the Schomburg Center for Research in Black Culture in Harlem.



Frida Kahlo

Magdalena Carmen Frida Kahlo y Calderon was a Mexican painter known for her portraits, self-portraits and works inspired by Mexico.

She was born in 1907 in Mexico City to a German father and a mestiza mother, spending most of her life at the family home which is now the Frida Kahlo Museum.

Kahlo was disabled by polio as a child and also suffered a bus accident at 18 which caused her lifelong medical problems. During the recovery from this accident, she returned to a childhood interest in art. In 1929, she married fellow artist Diego Rivera and spent the late 1920s and early 1930s traveling throughout Mexico and the United States, developing her artistic style that drew from Mexican folk culture, including pre-Colombian and Catholic beliefs.

Kahlo held her first solo exhibit in New York in 1938, which was followed by another in Paris in 1939 that resulted in the Louvre acquiring one of her works, "The Frame." Kahlo continued to work and teach art, landing at the Escuela National de Pintura, Escultura y Grabado. She became a founding member of the Seminario de Cultura Mexicana. However, her fragile health caught up with her, and she died in 1954 at age 47.

Her work remained relatively obscure until the 1970s, when her work was discovered by feminist scholars and the Chicano movement. In 1977, "The Tree of Hope Stands Firm," painted in 1944, became the first Kahlo painting to be sold at auction, fetching \$19,000. A retrospective of her paintings opened in London in



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1982 and traveled the world, followed by 1983's bestselling art history book "Frida: A Biography of Frida Kahlo."

In 1984, Mexico declared her works part of the national cultural heritage, which prohibited their export from the country. Now, her paintings seldom appear in international auctions but have still managed to break records when they do. In 1990, "Diego and I" sold for \$1,430,000 and in 2016, "Two Lovers in a Forest" sold for \$8 million.

Kahlo's life and work have inspired a variety of fashion looks and merchandise. She has become an icon for minority groups and political movements and a symbol of non-conformity and the cultural minority.

Ruth Bader Ginsburg

Joan Ruth Bader Ginsburg was the first Jewish woman and second woman ever to serve on the Supreme Court. She was born in 1933 in New York City and attended Cornell University, Harvard and Columbia.

Ginsburg was one of the few women in her law class at Harvard and, when she graduated from Columbia, she was co-first in her class. After graduation, she taught law at Rutgers and Columbia. She spent much of her career advocating for gender equality and women's rights, arguing before the Supreme Court and volunteering for the American Civil Liberties Union. President Jimmy Carter appointed her to the U.S. Court of Appeals for the District of Columbia Circuit in 1980 and, in 1993, she was appointed to the Supreme Court by President Bill Clinton.

Ginsburg became well known for her passionate dissents in cases, often reflecting more liberal views of the law. She became known as The Notorious RBG, embracing the nickname. Initially, Justice Ginsburg was seen as a moderate consensus builder, but her reputation became more liberal as the court shifted right. When Justice John Paul Stevens retired in 2010, she became the leader of the court's liberal wing, assigning authorship of the often-dissenting

opinion in cases.

One of her more famous opinions was 1996's United States v. Virginia, which struck down the Virginia Military Institute's male-only admissions policy. She emphasized that the government, of which VMI is a part, must show an "exceedingly persuasive justification" to deny entry to women. She was also an influence on her colleagues in Safford Unified School District v. Redding, 2009, in which the court found that a school cannot ask a female student to strip in order to search for drugs. Ginsburg said that some of her fellow justices couldn't appreciate the effect of a strip search on a girl, having never been a 13-year-old girl themselves.

Ginsburg was married to her husband, Martin, for more than 50 years, from 1954 until his death in 2010. The couple had two children, Jane and James. Jane Ginsburg is a professor at Columbia Law School. James Ginsburg is the founder and president of Cedille Records, a classical music recording company. Ginsburg died in 2020 of complications from pancreatic cancer.

