

Sally Ride

Astronaut

May 26, 1951–July 23, 2012

“Young girls need to see role models. You can’t be what you can’t see.”



Major accomplishments:

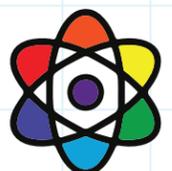
- On June 18, 1983, she became the first American woman in space as a crew member on space shuttle Challenger for STS-7.
- She spent a total of more than 343 hours in space.
- She is the first known LGBT astronaut.

Ride earned a master’s degree and a doctorate in physics from Stanford. She responded to a NASA recruiting ad and was one of 35 people—including six women—chosen from more than 8,000 applicants. Ride was selected as a mission specialist aboard the Challenger.

In 1987, Ride retired from NASA and became a science fellow at the Center for International Security and Arms Control at Stanford. In 1989, she joined the faculty at the University of California, San Diego as a professor of physics and director of the California Space Institute. In 2001, she founded Sally Ride Science, which motivates girls and boys to study science and explore careers in science, technology, engineering and math (STEM).

Ride co-authored several books about space and about climate change with Tam O’Shaughnessy, her life partner of 27 years. In 2013, President Barack Obama awarded Ride a posthumous Presidential Medal of Freedom.

* <https://lgbthistorymonth.com/sally-ride?tab=biography>
https://en.wikipedia.org/wiki/Sally_Ride

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Alan Turing

Computer scientist

June 23, 1912–June 7, 1954

“We can only see a short distance ahead, but we can see plenty there that needs to be done.”



Major accomplishments:

- The father of theoretical computer science and artificial intelligence. He helped break the German Enigma Machine codes during World War II.
- He created intelligence standards for machines; the same principles are used today in CAPTCHA tests.

Alan Turing was a computer scientist, mathematician and theoretical biologist. He came up with the idea of a machine that was able to compute anything that could be computed. This was known as the Turing Machine and led to the modern computer. He designed and built some of the earliest electronic, programmable, digital computers. His work in thermodynamics has helped to explain why patterns such as butterfly wings appear in nature.

Turing played a pivotal role in cracking intercepted coded messages that enabled the Allies to defeat the Nazis in World War II. It has been estimated that this work shortened the war in Europe by more than two years and saved over 14 million lives.

Turing lived at a time when homosexuality was regarded as a mental illness and homosexual acts were illegal. Despite his critical wartime role, he was charged and forced to accept hormone treatment. In 2009, British Prime Minister Gordon Brown made an official public apology and Queen Elizabeth II granted him a posthumous pardon in 2013.

Sofia Kovalevskaya

Mathematician

January 15, 1850–February 10, 1891

“It is impossible to be a mathematician without being a poet in soul.”



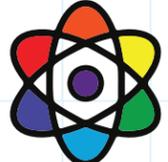
Major accomplishments:

- First woman in Europe to earn a doctorate in mathematics.
- First woman to work as an editor for a scientific journal.
- Contributor to the development of the Cauchy–Kovalevskaya theorem.

Sofia Kovalevskaya was a mathematician and writer who made a valuable contribution to the theory of partial differential equations. She was a pioneer for women in mathematics around the world. According to historian of science Ann Hibner Koblitz, Kovalevskaya was “the greatest known woman scientist before the twentieth century.”

One of her great breakthroughs was her paper on the rotation of an unsymmetrical solid body around a fixed point, now known as the Kovalevskaya top. Her further research on the topic won her a prize from the Swedish Academy of Sciences in 1889.

Kovalevskaya’s marriage was well known to be a marriage of convenience; she needed written permission from either her father or a husband to study abroad, so she wrote up a “fictitious marriage” contract with a young paleontology student, and they both moved to Germany. But after her husband committed suicide, she lived the rest of her life in a “romantic friendship” with actress and playwright Anne-Charlotte Edgren-Leffler.

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James Pollack

Astrophysicist

July 9, 1938–June 13, 1994



Major accomplishments:

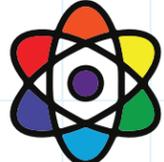
- He was a world-renowned expert in planetary atmospheres, and his work led to many advances in our understanding of the solar system.
- His work on the formation of giant planets ("core accretion paradigm") is seen today as the standard model.

James B. Pollack was an American astrophysicist who worked for NASA's Ames Research Center. He received his master's degree in nuclear physics at the University of California, Berkeley in 1962 and his PhD from Harvard in 1965, where he was a student of Carl Sagan.

He specialized in evolutionary climate change of terrestrial planets (especially the atmospheres of Mars and Venus), and evolution of the giant gas planets. He investigated the possibility of terraforming Mars, the extinction of the dinosaurs and the possibility of nuclear winter.

He explored the weather on Mars using groundbreaking computer simulations of winds, storms and the general climate on that planet. He and Carl Sagan postulated that the seasonal color variations on Mars were caused by wind storms and dust, rather than plant life. A crater on Mars was named in his honor.

He was a recipient of the Gerard P. Kuiper Prize in 1989 for outstanding lifetime achievement in the field of planetary science. He was openly gay.

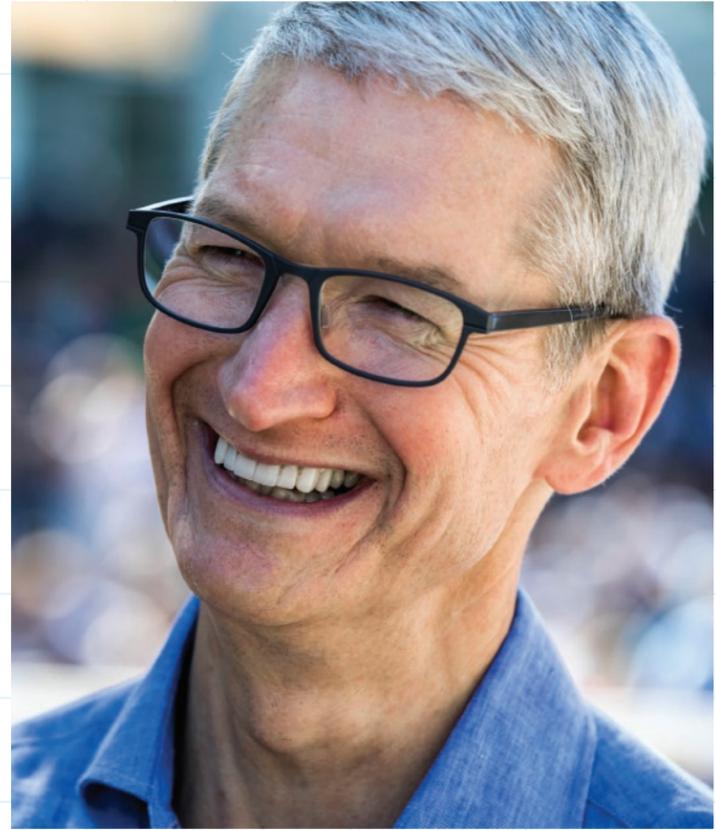
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Tim Cook

Industrial engineer and Chief Executive Officer

Born November 1, 1960

“The sidelines are not where you want to live your life. The world needs you in the arena.”



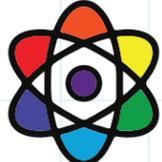
Major accomplishments:

- Cook was the first Chief Executive of a Fortune 500 company to publicly identify as gay.
- In March 2015, he said he planned to donate his entire stock fortune to charity.

Timothy Cook is an American business executive and industrial engineer. Cook is the Chief Executive Officer of Apple Inc., who previously served as the company's Chief Operating Officer, under its founder Steve Jobs. Cook earned a Bachelor of Science in industrial engineering in 1982, and his Master of Business Administration in 1988.

During his tenure as the Chief Executive, he has advocated for the political reformation of international and domestic surveillance, cybersecurity, corporate taxation, American manufacturing, and environmental preservation. Cook has also repeatedly called for the importance of diversity in STEM, especially bringing women into STEM fields.

On October 30, 2014, Cook came out as gay in an editorial for Bloomberg Business. In September 2015, Cook explained what inspired him to publicly reveal his sexual orientation: "Where I valued my privacy significantly, I felt that I was valuing it too far above what I could do with other people, so I wanted to tell everyone my truth".

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Ben Barres

Neurobiologist

September 13, 1954–December 27, 2017

"Ben's mission was to bring equality to how people are treated and promoted in science."



Major accomplishments:

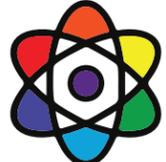
- He transitioned to male in 1997, and became the first openly transgender scientist in the National Academy of Sciences in 2013.
- Barres' path-breaking discoveries of the crucial roles played by glial cells revolutionized the field of neuroscience.

Ben A. Barres was an American neurobiologist at Stanford University. His research focused on the interaction between neurons and glial cells in the nervous system. Beginning in 2008, he was Chair of the Neurobiology Department at Stanford University School of Medicine.

Barres described experiences of gender discrimination in MIT. After solving a difficult math problem that stumped many male students, his professor charged that it was solved for him by a boyfriend. He was the top student in the class, but found it hard to get a willing supervisor for research. He lost a scholarship to a man who had only one publication, while he already had six.

Barres was an outspoken advocate for gender equity in the sciences, not infrequently digressing for a few minutes during his scientific talks to point out the differences he'd personally experienced in how other scientists treated him when they perceived him as a woman versus as a man.

"Until intolerance is addressed, women will continue to advance only slowly," Barres wrote. "The comments . . . about women's lesser innate abilities are all wrongful and personal attacks on my character and capabilities as well as on my colleagues' and students' abilities and self esteem. I will certainly not sit around silently and endure them."

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