

Sally Ride

(1951–2012)

Physicist, education advocate and first US woman in space.

“We talk about women breaking through the glass ceiling, but Sally broke through the atmosphere,” a colleague once said of Sally Ride, the first US woman to fly to space. Rather than coasting on that success, the enigmatic Ride led several more lives — as a physicist, investigator of the *Challenger* and *Columbia* shuttle disasters and tireless advocate for science education — gaining the respect and affection of her colleagues along the way.

Ride, who died from pancreatic cancer on 23 July aged 61, was born in Encino, California. Science and mathematics came easily to her, and when she entered Swarthmore College in Pennsylvania, she studied physics. After a year and a half, she dropped out to try her hand at another early passion: tennis. Wimbledon champion Billie Jean King thought she had the chops to make it in professional tennis, but Ride said in a 2006 interview that she had disagreed after taking “a long, hard look” at her forehead.

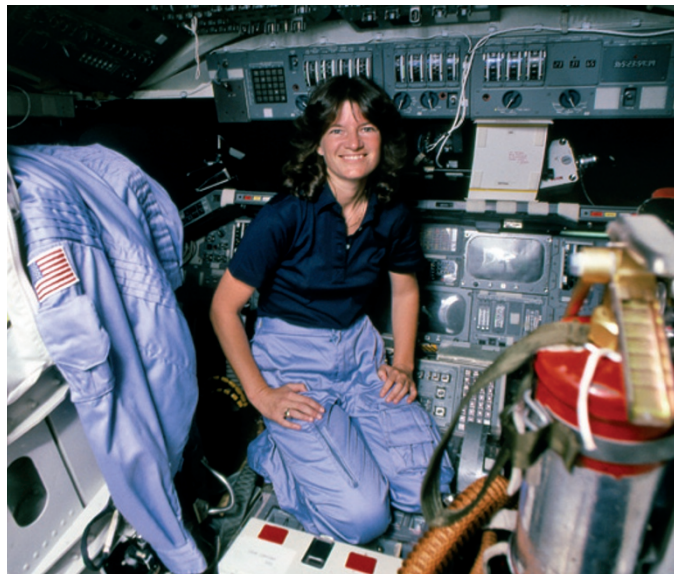
Ride returned to college and took degrees in physics and English from Stanford University in California. She went on to earn a PhD for her research on the absorption of X-rays by interstellar gas. As a graduate student, Ride spotted an advert in the student newspaper announcing that NASA was looking for new astronauts. “The moment I saw that, I knew that that’s what I wanted to do,” she told an interviewer.

Ride beat some 8,000 other applicants to become one of 35 members of the astronaut class of 1978, which included 6 women. The women generated tremendous media attention — and tiresome ribbing from some male colleagues. The women wanted to be accepted for their professional skills; instead, journalists asked them who would do the cooking on the shuttle. Ride found the attention dispiriting. “It’s too bad our society isn’t further along,” she said at a NASA news conference.

Bob Crippen, who piloted the first space shuttle flight in 1981, asked to have Ride aboard his next mission in 1983. She and astronaut John Fabian would operate the shuttle’s 15-metre-long robotic arm, using it for the first time to deploy and retrieve a satellite. Ride’s ability to stay calm under

pressure — a skill her sister, Bear, has attributed to her tennis days — led Crippen to make her flight engineer for the mission. “I never saw Sally flustered,” he says.

Ride’s first flight, on 18 June 1983, went nearly flawlessly, and she marvelled at the view of our planet and its thin, blue



atmosphere. “It’s so clear from that perspective how fragile our existence is,” she said later. “It makes you appreciate how important it is to take care of that atmosphere.”

Crippen was offered two flights for the next year, and he accepted the second only on the condition that Ride would be on the crew — he trusted her to stand in as commander during practices while he was away training for the first mission. That flight, in 1984, was Ride’s last.

She would later put her experience at NASA to use in investigating both the *Challenger* and *Columbia* disasters. She advised the agency on what direction it should take, authoring a report in 1987 that highlighted the importance of studying the Earth from space. “That has turned out to be one of the most important things the agency has done in the last 25 years,” says Roger Launius, a historian at the Smithsonian National Air and Space Museum in Washington DC. Instruments on NASA satellites confirmed the existence of the polar ozone holes, made the first global measurements of atmospheric aerosols and have monitored ice-sheet melting and rising sea levels.

Ride was not one to pull punches. Serving on a NASA review committee in 2009, she announced bluntly at a public meeting that the agency simply did not have enough money to undertake a new human space-flight programme. The audience listened intently — she had tremendous credibility, recalls

fellow committee member Wanda Austin, president and chief executive of The Aerospace Corporation in El Segundo, California. But Ride never let the attention go to her head. “She was just like your sister,” Austin says.

Ride left NASA in 1987 and returned to academia, heading back to Stanford and then to the University of California, San Diego (UCSD). There, she studied how free-electron lasers could be made to produce X-rays similar to those generated when the solar wind slams into comets or planets. She also worked on Urey, an instrument intended to look for signs of life on Mars. When NASA did not fund it, she comforted her colleagues.

Students’ evaluations of Ride’s classes at UCSD were typically 98–100% positive. In 2001, she founded the company Sally Ride Science, based in San Diego, to encourage middle-school students — and especially girls — to pursue science careers. The organization, which she ran with her partner, Tam O’Shaughnessy, enabled students to take images of Earth and the Moon using remote-controlled cameras aboard the International Space Station and NASA’s Gravity Recovery and Interior Laboratory.

Ride never sought the limelight and revealed little about her personal life. “She had no need or desire to get rich on being Sally Ride,” says Jeffrey Hoffman, a member of Ride’s astronaut class, who now teaches astronautics at the Massachusetts Institute of Technology in Cambridge. “She didn’t use her fame as a stepping stone to a big ego trip.”

That this natural introvert withstood the glare of celebrity with such dignity and grace makes her accomplishments even more inspiring. ■

Maggie McKee is a journalist based in Boston, Massachusetts, USA.
e-mail: maggiemckee@gmail.com