



## **Biography:**

### **Ellen Ochoa, Ph.D.**

Astronaut. NASA Leader. Trailblazing Advocate. From her days of soaring through space to leading with precision behind the scenes at NASA, Ellen Ochoa, Ph.D. has left an enduring legacy here on Earth ... one that is benefiting companies and institutions, as well as inspiring our next generation of explorers.

#### 1st Hispanic Female Astronaut in Space

After becoming part of NASA's Astronaut Corps in 1991, Ellen became the first Hispanic female astronaut in space when she flew aboard STS-56/Space Shuttle Discovery in 1993. Three more missions followed – STS-66/Space Shuttle Atlantis in 1994; STS-96/Space Shuttle Discovery in 1999 (first docking to the International Space Station) and STS-110/Space Shuttle Atlantis in 2002. On all her flights, her mission specialist roles ranged from robotic arm operator to payload commander to flight engineer. She's used the robotic arm to deploy and capture free-flying satellites and maneuver spacewalking crewmates, as well as conducted onboard scientific activities that have helped expand knowledge and advance on-Earth technological breakthroughs. She was inducted into the U.S. Astronaut Hall of Fame in 2017.

#### Assuming the Helm at NASA-JSC

In 2013, Ellen became the 11th Director of NASA's Johnson Space Center in Houston, leading the human space flight enterprise for the nation. She was the second female, and first Hispanic, to assume the position. During her five-year tenure, she spearheaded changes to help the Center operate in leaner, more agile and adaptive ways, as well as, launched initiatives on innovation and inclusion. She also oversaw programmatic milestones, such as the first flight test of the Orion spacecraft, the one-year ISS mission of Scott Kelly and Mikhail Kornienko, the selection of four astronauts to train for launch aboard new commercial crew capsules, and a streamlined payload certification process that led to the first DNA sequencing in space.

Prior to becoming Center Director, Ellen served as Deputy Center Director and Director of Flight Crew Operations at JSC. Other noted roles include leading the astronaut office support to the ISS in the mid-1990s, including development of the operations concept, and transitioning astronaut support of Mission Control from short-term shuttle flights to 24/7 support of ISS. She joined NASA in 1988 as a research engineer at the Ames Research Center in California.

#### A STEM Education Advocate

Ellen is passionate about education. The California native earned a bachelor's degree in physics from San Diego State University, along with master's and doctorate degrees in electrical engineering from Stanford University. The University of Pennsylvania, The Johns Hopkins University and Worcester Polytechnic Institute awarded her with honorary doctorates. She also holds three patents for optical systems and has authored several technical papers.

An outspoken advocate for girls and minorities entering STEM fields, Ellen has several K-8 grade books written about her, and has been profiled in textbooks and websites. Six schools across California, Oklahoma, Washington and Texas bear her name.

#### Guiding Others to Excellence

Ellen has shared her experiences in space and executive management via 300+ presentations to a variety of audiences. Plus, she has provided executive guidance throughout her career. She is the Vice Chair of the National Science Board and sits on the boards of Service Corporation International, Mutual of America, and the Gordon and Betty Moore Foundation.

Previously, she chaired the Nomination Evaluation Committee of the National Medal of Technology and Innovation and served on the Federal Reserve Bank of Dallas board, the Stanford University Board of Trustees and the Manned Space Flight Education Foundation, Inc. board. She is a member of the National Association of Corporate Directors, the Latino Corporate Directors Association, Women Corporate Directors, and is a fellow of the American Association for the Advancement of Science, the American Institute of Aeronautics and Astronautics, and the National Academy of Inventors and the Optical Society of America.