



ASK A SPACE SCIENTIST

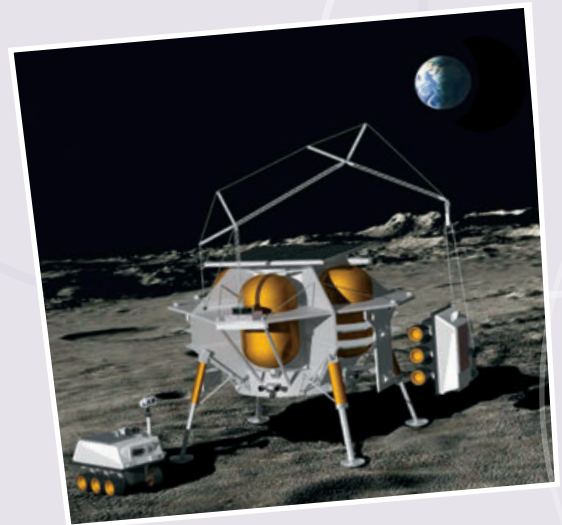
Our universe is full of mysteries, and some of the most mind-boggling are in space. Curious kids asked questions, and we sent them to a space scientist. Have questions about space? Send them to brilliant@usbnc.org (with your name and age).

Which virtues did you have to practice the most during your education to become a NASA scientist?
– Corinne, age 10

Hi, Corinne,

The top three virtues I relied on in pursuit of my goal to be a NASA scientist were patience, perseverance, and graciousness. I was in middle school when I decided that I wanted to work for NASA. I spent 15 years going to university and at other jobs before I was hired at NASA, so it was very important for me to be patient with the process and work hard along the way.

Along that journey, things didn't always go as I planned. I experienced failure, setbacks, and times when I just wanted to quit. I persevered through the hard times and tried to focus on the lessons I was learning. I gave myself grace by letting myself learn and grow, instead of feeling inadequate because I wasn't great at something when I first tried it. I let myself be a beginner and learn. – Julia



Julia Cline leads a team creating software for robotic space cranes like the one in this illustration. The software will enable the crane to investigate surfaces and move objects without a human operator.

COSMIC QUIZ

The Moon missions of the 1960s and 1970s were named for the Greek god Apollo. The new Moon missions planned by NASA are named for his twin sister:

- A) Apple
- B) Amazon
- C) Artemis
- D) Atlantis



Illustration of astronauts on the lunar South Pole



**What inspired you to be a NASA scientist?
What do you love about your job? – Rose, age 11**

Hi, Rose,
When I was a little girl, my Dad would take me outside at night, and we would stargaze. He taught me about the stars, planets, and science. I knew that people who studied space worked at NASA, so that became my goal: work at NASA. I studied astrophysics and aerospace engineering in college, and a few years after graduating, I started my job at NASA.

I love that I get to spend every day thinking and talking about how humans will live and work on the Moon and Mars one day. We get to work on really cool projects. I also love the people that I am fortunate enough to work with—they are the best! Everyone brings enthusiasm and creativity to work every day, and that creates an energetic atmosphere in our laboratory that we use to solve challenging problems. — Julia



The Lunar Gateway illustrated here will be an outpost orbiting the Moon. Astronauts will live and work there while preparing for missions to the Moon and Mars.



JULIA CLINE is a Research Aerospace Engineer at NASA Langley Research Center in Virginia, U.S. She works on autonomous lunar surface construction and space nuclear propulsion for the Mars transit vehicle. She is a STEM outreach enthusiast and enjoys sharing her love of space with kids of all ages.

ON THE WEB

In our Space Ace video interviews, meet two amazing astronauts at Dr. Scotti's STEAMS Station.



LELAND MELVIN was a pro football player and a NASA astronaut. When he went to space, it changed his perspective forever.

PEGGY WHITSON was a NASA astronaut and the first female commander of the International Space Station. She broke other records, too.



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BACH IN TIME

In 1908, American astronomer Henrietta Swan Leavitt used the changing brightness of some stars to calculate the distances to other galaxies. A star's brightness is called:

- A) Glimmer
- B) Luminosity
- C) Starshine
- D) Twinkle

