Career Spotlight

BY ACTUA





Parshati Patel, Ph.D. Astrophysicist, Science Communicator and Consultant

I was a curious kid growing up in India. My fascination with the night sky began during my teenage years when I visited a planetarium. Intrigued by the universe, I absorbed as much information as possible from books. I moved to Canada to earn



an Honours Bachelor's in Astronomy and Physics as well as a Master's and PhD in Astronomy, Planetary Science and Exploration. During my PhD, I gained experience in science communication and education through on-campus public education programs, where I learned to make complex space concepts accessible to everyone. For over a decade, I combined my love for space and explaining science information to work as a Space Science Communicator. I specialize in developing engaging space outreach initiatives, training educators and students and using the art of storytelling to engage the public through media and social media.

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What challenges have you faced and overcome in your career?

I went to an English school but English is not my first language. When I moved to Canada for my undergraduate degree, I thought knowing English would make for an easy transition but I found it hard to keep up. I would shy away from talking to people but once I started working part-time while pursuing my degree, it really helped me improve my skills. I continued to push myself and seize opportunities to enhance my listening and speaking abilities. One opportunity was volunteering to edit audio segments for a space-themed radio show during graduate school. Within six months of starting the position, this led to a paid position where I eventually produced and ran the show. This was my introduction to the field of science communication and outreach. I continued to improve my skills and acquire more experience in the field, which eventually led me to pursue a career in science communication. This is just one of the many challenges I have encountered during my career, but I have always found that overcoming barriers leads to opportunities and experiences I otherwise would never have had.

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What advice would you give to youth?

My advice to the youth is simple yet powerful: do not be afraid to forge your own path if you are passionate about something. Your passions will evolve and change as you gain more experience and knowledge. If you haven't yet found something you are passionate about, keep exploring - you never know which experience will lead you to a new passion. Do not hesitate to carve your own path and break stereotypes! For those interested in pursuing astronomy, knowledge of computer programming is crucial for conducting data analysis, simulation and modeling. Excellent communication skills and subject matter expertise are essential for those interested in science communication. Remember, the power to shape your future lies in your hands.

Why does diversity and representation matter in your field?

Growing up in India, I didn't know anyone pursuing astronomy. I sought a role model who looked like me and shared similar struggles coming from an Indian family. While I couldn't find a woman in astronomy, I learned about Dr. Kalpana Chawla, an Indian American NASA astronaut and aerospace engineer, who has been my role model ever since. Although the field has become more diverse since my childhood, a significant gap still exists. To create a more inclusive, diverse and equitable environment, the STEM community should encourage those underrepresented in STEM and interested in pursuing STEM by providing support, guidance and access to role models for inspiration. By bringing diverse people together, we ensure that their varied experiences and backgrounds are considered, allowing for creativity to thrive and eventually leading to innovative solutions to some of the most complex problems in the universe.