



# Planetary Scientist



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Planetary Scientist

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I spend my time doing many varied tasks that are all related to the study of planetary science. I process and analyze spacecraft data to better understand the surface and interior of Mars, I write computer codes to simulate the behavior of liquid water on the surface of Mars, and I travel to remote regions on Earth that are very Mars-like to study these systems and learn how to live and work in such extreme and (sometimes) hostile environments.

## Areas of expertise:

- Recent water on Mars
- Spacecraft data analysis
- Mars analog field work at different locations around Earth (Arctic, Australia, Chile, Death Valley, Svalbard, Utah)
- Theoretical modeling

## How I first became interested in this profession:

I have always been interested in the study of space. I remember that we learned about the planets one day in third grade and from then I was hooked (even though I never officially studied the solar system again until I was in college)! My friend introduced me to the movie "Space Camp" when I was 10 years old and after that we would set up our own shuttle "cockpit" and re-enact the mission from lift-off to landing. My fascination with all aspects of space only grew as I got older and I continued to learn as much as I could about astronomy, the planets, and all aspects of human space flight.

## What helped prepare me for this job:

Working hard in school was definitely critical to preparing me for my job. Not only did I learn a great deal about a wide variety of subjects but I also learned how to work effectively on my own, as well as in a group, which is very important.

## My education and training:

- B.S., Astrogeophysics, Colgate University
- M.S., Space Studies, Minor in Geology, Univ. of North Dakota
- Ph.D., Planetary Science, Univ. of Colorado

## My career path:

- Attended college including many summer internships doing planetary science and astronomy research (Williams College, Cornell University, Space Telescope Science Institute, US Space Camp, NASA Astrobiology Academy).
- While in college, taught introductory astronomy at both Colgate Univ (3.5 years) and the Univ. of Colorado (2 years)
- Completed Ph.D. and began post-doctorate position at NASA Ames.

## What I like about my job:

I like that every day I get to come to work and do something different than what I did the day before. Each day is a new challenge and offers me the opportunity to discover something new about the world and universe we live in. I work on a variety of projects with many great people, which lets me learn about many different things all at once and I like to share that knowledge with others.

## What I don't like about my job:

Sometimes there is a lot of paperwork associated with the government bureaucracy, but if you just learn to work within the system then it can be OK.

## My advice to anyone interested in this occupation:

Work hard in school and learn as much as you can! Armed with knowledge and dedication, you will succeed and can make substantial contributions to the scientific community.

## Additional Resources:

- American Institute of Biological Sciences  
<http://www.aibs.org>
- American Physiological Society  
<http://www.faseb.org/aps>
- American Society for Biochemistry and Molecular Biology  
<http://www.biophysics.org/biophys/society/biohome.htm>
- American Society for Microbiology  
<http://www.asmsusa.org>
- Astrobiology Summer Academy  
<http://academy.arc.nasa.gov/>
- Biotechnology Industry Organization  
<http://www.bio.org/welcome.html>
- Education Pays Calculator  
<http://www.educationpays.org/calc.asp>
- Graduate Student Researchers Program  
<http://spacelink.nasa.gov/Instructional.Materials/NASA.Educational.Products/Graduate.Student.Researchers.Program.Brochure/.index.html>
- MATHCOUNTS Competition  
<http://mathcounts.org/>
- Minority University Research and Education Programs  
<http://mured.nasaprs.com/>
- NASA Cooperative Education Program for college students  
<http://spacelink.nasa.gov/Educational.Services/NASA.Education.Programs/Student.Support/NASA.Cooperative.Education.Program/.index.html>
- NASA Jobs  
<http://nasajobs.nasa.gov/>
- NASA Office of Life and Microgravity Sciences and Applications  
<http://www.hq.nasa.gov/office/olmsa/>
- NASA SHARP Internship Program for high-schoolers  
<http://www.mtsibase.com/sharp/>
- NASA Student Employment  
[http://nasajobs.nasa.gov/stud\\_opps/employment/index.htm](http://nasajobs.nasa.gov/stud_opps/employment/index.htm)
- NASA Student Involvement Program student contests  
<http://www.nsip.net/index.cfm>
- Order NASA career videos such as "Engineers: Turning Ideas into Reality," "Careers: Aerospace Engineer" or "Reaching for the Stars" from NASA CORE.  
<http://core.nasa.gov>
- Student's Guide to Astrobiology  
<http://www.astrobiology.com/student.html>
- Tech-Interns.com  
<http://www.tech-interns.com/>

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