



Space Biologist



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I provide input and science oversight for the development of a cell culture system destined for the International Space Station (ISS). Much of my activities center around reporting project progress, acting as a liaison on diverse issues, writing test plans, and ensuring that NASA gets a quality product. In addition, I oversee our labs at NASA Ames, where I direct the testing done in-house. All of this work is done as part of a team, and the team takes part in all of the decision making.

Areas of expertise:

- Cell biology
- Space life-science hardware development

How I first became interested in this profession:

I have been interested in living things and space since childhood. I was always bringing "critters" home, much to my mother's distress! The study of Earth and the universe will always provide surprises and fascination for me.

What helped prepare me for this job:

My time spent in a research environment, and my ability to write and communicate clearly with others.

My role models or inspirations:

My family is inspiring; my parents immigrated from Chile when my brother and I were very young. All four children have done well in our careers and we all give back to the community through volunteer work or other involvement. Our professions include a nurse, a bilingual teacher, a biochemist and a cell biologist. I credit our success to our dedicated parents and our cultural heritage.

My education and training:

- A.S., Animal Health Technology, Foothill College
- B.A., San Jose State University
- M.P.A., San Jose State University, in progress
- Additional advanced training in immunology, U.C. Berkeley Extension

My career path:

- 2 years Veterinary medicine
- 3 years in biotechnology, researching monoclonal antibodies and immunology
- 12 years working on human immunology research projects at a research institute in Palo Alto, CA
- Fall of 2000-present participation in gravitational biology and space sciences at NASA Ames

What I like about my job:

I feel privileged to be a part of the space program and to contribute to space life sciences research. I also enjoy working as part of a team on a challenging project.

What I don't like about my job:

Sometimes the paperwork side of it can be overwhelming.

My advice to anyone interested in this occupation:

Get as much education as possible, hopefully at the graduate level. During your college years seek out internships at NASA centers (and the Astrobiology Academy, too). Follow your heart, your passion, and things that interest you to pursue as a career.

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
- 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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