



Astrophysicist



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Astrophysicist

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I think of problems to solve, propose solutions to problems, use the telescope to gather data, analyze the data, and present the results in scientific journals and at conferences.

Areas of expertise:

- Infrared astronomy
- Star and planet formation
- Interstellar dust

How I first became interested in this profession:

I was inspired by the Apollo Program. I lived in Key West, Florida until I was thirteen, and I remember watching the Apollo rockets on clear days, as they arched overhead from their Cape Kennedy lift-off. I would stand there looking upward, promising myself that someday I would be a part of NASA, the great agency that could take us into space.

What helped prepare me for this job:

As a teenager, I spent every spare minute at the Fernbank Science Center in Atlanta, Georgia, where I was surrounded by scientists. In college, I was often the only woman in my aerospace engineering classes. I found out that I was a very determined person, and that helped me overcome the obstacles that being in a male-dominated environment presented. College life was demanding and there was little time off. I wish I would have known then what I know now — that the long hours and hard work were well worth it.

My role models or inspirations:

My sister has always been a role model, because she got her Ph.D. in statistics and inspired me to stay in school. The scientists at the Fernbank Science Center were also a great source of inspiration to me.

My education and training:

- B.S., Aerospace Engineering
- M.S., Aeronautics and Astronautics
- Ph.D., Astrophysics

My career path:

- Twenty years as an astrophysicist at NASA

What I like about my job:

I get the freedom to be as scientifically creative as I can be. I get to choose the projects I want to investigate. The universe is a puzzle, and I get to find some of the pieces.

What I don't like about my job:

I sometimes have to deal with government rules and responsibilities that take time away from my research.

My advice to anyone interested in this occupation:

Long hours and dedication to your studies now will put you in a good position later, so don't take the easy road. Follow your dreams and believe in yourself. Even when you think you aren't good enough for the task ahead of you, be confident. You'll surprise yourself!

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>
- Earth to Orbit: Engineering Design Challenges
<http://eto.nasa.gov/>
- 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>
- Revolutionary Vehicle Concepts and Systems student competition
<http://avst.larc.nasa.gov/competitions.html>
- Student's Guide to Astrobiology
<http://www.astrobiology.com/student.html>
- Tech-Interns.com
<http://www.tech-interns.com/>

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Thank you.

