National Aeronautics and Space Administration

Space Scientist

Dr. Jack J. Lissauer
Space Scientist

NASA Ames Research Center

I come up with new models for how planetary systems form and what makes them stable. I study Saturn's rings by observing and developing theories, and I supervise the research of graduate students.

Areas of expertise:

- Planetary science
- Celestial mechanics

How I first became interested in this profession:

I've always liked math and science, but I first became interested in space in the first grade when we studied the solar system.

What helped prepare me for this job:

Lots of research experience and education have helped prepare me for my job.

My role models or inspirations:

My role models have been my teachers, advisors at college and at work.

My education and training:

- B.S., Mathematics, Massachusetts Institute of Technology (MIT)
- Ph.D., Applied Mathematics, University of California, Berkeley
- Four years post-doctoral training in planetary astrophysics

My career path:

- Professor at State University of New York (SUNY) Stony Brook for nine years
- Space scientist at NASA Ames for five years

What I like about my job:

The freedom to do fun things, like figure out what I want to know about the universe, while getting paid for it!

What I don't like about my job:

I have to fill out lots of paperwork in order to get money for my travel. This takes time away from my research.

My advice to anyone interested in this occupation:

If you have a passion for it, go for it. But, it's not easy! Study lots of math and physics.

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.asmusa.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/

Please take a moment to evaluate this product at:
http://ehb2.gsfc.nasa.gov/edcats/educational_topic

Your evaluation and suggestions are vital to continually improving NASA educational materials.
Thank you.