



Principal Investigator



Dr. Victoria Meadows
Principal Investigator
NASA Astrobiology Institute

I lead a team of 35 scientists from many different fields who must all work together to develop a computer model of the types of planets that are most likely to harbor life. A lot of my work is administration, management and mentoring, so I “enable” more science than I get to do myself, but I still do get to do some science! That’s 50% of my job; the other 50% is as the Solar System Observations scientist for the Spitzer Space telescope, where I serve as the liaison between the planetary science community and the Spitzer mission.

My areas of expertise

- Remote-sensing analysis of infrared spectroscopy of planetary atmospheres
- Modeling of extrasolar terrestrial planet spectra and the nature and detectability of potential remote-sensing signs of habitability and life
- Development of self-consistent terrestrial planet models for astrobiology

How I first became interested in this profession

About seven years ago I got interested in studies of the habitable zone around Stars, and that interest eventually led to the successful proposal for the NAI team.

What helped prepare me for this job

A grounding in studying planets from a distance (remote-sensing observations).

My role models or inspirations

For this particular job, I didn’t have any!

My education and training

- Ph.D., Astrophysics, University of Sydney, Australia
- B.S. (Hons) Physics, Class 1 Honors, University of New South Wales
- I lead a NASA Astrobiology Institute Lead Team

My career path

- Principal Investigator, NASA Astrobiology Institute
- Solar System Observations Scientist, Spitzer Science Center
- Cognizant Scientist for Uplink, SIRTf Science Center
- Research Scientist, Jet Propulsion Laboratory
- National Research Council Resident Research Associate, JPL
- Postdoctoral Scholar, JPL

What I like about my job

It’s an incredibly exciting research project, to help with the search for Life beyond the solar system... what could be more interesting than that?

What I don’t like about my job

I have to do a lot of work that ISN’T scientific research!

My advice to anyone interested in this occupation

I think astrobiology is a very exciting field, but it is quite different to more “traditional” science. Having a good grounding in one field, but an interest in other science fields, and being willing to learn how to communicate with scientists in different fields (both to understand their work, and to have them understand your work) is crucial.