



SPACE

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WHO IS AN ASTROBIOLOGIST?

Field Astrobiology
Type Research
Level of study PhD



What is it about?

An astrobiologist is a person who studies the possibility of life beyond Earth. Astrobiologists try to understand how life originates and how life can survive in many different types of environments. This often involves the study of extreme life right here on Earth. They study different planets and moons to see if conditions there might support life. Some astrobiologists are involved in projects which search for radio signals from intelligent life in the Universe, while others look for places where the simplest forms of life may exist. An astrobiologist is usually an expert in biology as well as in astronomy.

What would I do every day?

In order to find out if life can exist in other worlds, you spend a lot of time in laboratories on your home planet, testing and recording the lifecycle of bacteria that can survive in harsh conditions, and even looking at fossils of the earliest life forms and trying to deduce how they arrived on Earth.

Where can I work?

Astrobiologists work at Universities, government-funded agencies (such as ESA) and private research institutions (such as the Scripps Research Institute).

Although it is a small field with persistence and hard work, you are likely to find a job in this field!

How much and what do I need to study?

Astrobiology is an interdisciplinary field that requires a comprehensive, integrated understanding of biological, planetary, and cosmic phenomena. To prepare yourself for entry into the field of astrobiology, you can study any relevant discipline. Most astrobiologists have focused their studies in science, technology, engineering, and mathematics. However, some astrobiologists have academic backgrounds in the humanities and social sciences, such as history and psychology.

This is a job for me if...

...the idea of life on other planets interests you – you are fascinated by the origins of life on Earth, whether there are other worlds similar to it, and how life must have originated there. Most astrobiologists share these traits:

Flexible: You're open to change and think variety is the spice of life.

Persistent: You keep pushing through, even when faced with tough obstacles.

Outside the Box Thinker: Your creative brainpower gets a workout as you come up with innovative ideas.

Learn more about what an astrobiologist does with Karen Olsson-Francis

Image: *Jupiter's moon Europa*

Credit: *NASA/JPL-Caltech/SETI Institute*



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