

# WHAT IS LIFE, AND HOW DO WE SEARCH FOR IT ON OTHER WORLDS?

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## **Abstract**

One of the main goals of astrobiology is the search for another type of life in our solar system. The planet Mars and Europa, one of the moons of Jupiter, are the most likely targets for this search. With only one example of life on Earth it is not too surprising that we lack a precise definition of life or a clear strategy for how to search for it on other worlds. Studies of the limits of life and life in extreme environment may help us develop a search strategy for life on other worlds. Fossils are not enough. We will want to determine if life on Mars or Europa was a separate genesis from life on Earth. For this determination we need to access intact alien life; possibly frozen in the deep old permafrost of Mars or the icy surface of Europa.