

A photograph of an astronaut in a white spacesuit kneeling on the reddish-brown surface of Mars. The astronaut is wearing a helmet with a clear visor and is looking down at a small, cylindrical sample container held in their gloved hand. In the background, a large, transparent geodesic dome structure is visible, likely a habitat or research station. The sky is a hazy orange-red, and the terrain is rocky and uneven.

**Bioastronautics** is the study of the effects of spaceflight on biological systems, including the physiological and psychological effects on humans and the potential for life to exist and thrive in extraterrestrial environments

**Space Bioprocess Engineering** is the multi-disciplinary approach to design, deploy, and manage biological systems for sustaining human presence beyond Earth

**Astrobiology** is the study of the origin, evolution, distribution, and future of life in the universe