

Organoids in Space: Applications on Earth and Beyond Abstract
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With the recent bounds taken by scientists at NASA to grow human brain organoids and prepare them to be sent to space, endless potential has since been opened with regards to research of the human body. Organoids may not only provide invaluable insight into the affects that space travel has on various body systems, but their use in space may also accelerate their growth and increase their value for more general organoid research on Earth. This project explores other organ systems that may be replicated and then studied with organoids, all of which have direct value and importance for study in space and on Earth. These systems are the skeletal, immune, and cardiovascular systems. By implementing these research projects, NASA researchers may not only explore the affects that factors such as microgravity will have on organs long-term, but they may also provide invaluable insight into diseases and disorders that plague humans all over Earth.