

# Telemetry-based biology for the Artemis era and beyond

*A NASA Ames Research Center and Space Biology Workshop*

## BUS

Perspectives from CubeSats and other autonomous payloads.

## HARDWARE

Small, high-throughput, robust and meaningful: how do we get there?

## DATA TRANSFER

Advances in deep-space data transfer to support autonomous biological payloads.

## THE MEAT IN THE CAN

Scaled-down cellular, tissues, and organism models that to achieve NASA Space Biology science objectives.

## OBJECTIVES

Human space exploration is going beyond low-Earth orbit. To inform this next era of spaceflight, the Space Biology field aims to characterize the unique stressors that exist on the Moon and in transit to, and on the surface of, Mars.

Autonomous biological payloads, such as CubeSats, have opened new avenues of experimentation. The aim of this workshop is to explore the past and future of autonomous payloads and deliver a White Paper to support the upcoming National Academies Decadal Survey.

This new era of telemetry-based biology, experiments without sample return, will contribute to safe and successful missions in the Artemis era, and beyond.

## AGENDA AND REGISTRATION

Date: 18 August, 2021; 9AM-1PM PDT (12PM-4PM EDT)  
Format: Virtual (NASA hosted Microsoft Teams)

Registration: <https://forms.gle/vxfGuxUJoSTw8cJu9>

