

HRP



Researchers: Apply Now to Help Advance Tissue Chip Research for Space Exploration



Credit: NASA

The NASA-funded Translational Research Institute for Space Health (TRISH) is now accepting research proposals to advance remote biomarker analysis capabilities in microphysiological systems (MPS), also known as tissue chips, for space exploration.

What are we seeking?

This solicitation seeks innovative solutions to improve in-situ measurement technologies for use during future deep space missions, where traditional sample return to Earth may not be feasible.

This solicitation falls under TRISH's SENTINEL (Science ENterprise to INform Exploration Limits) program. By advancing the MPS platform, TRISH aims for a new way to gather personalized astronaut data without needing a researcher on Earth to tend the physical samples.

Proposals for this solicitation focus on technologies capable of analyzing a wide range of biomarkers, bioindicators, or biosignatures without requiring sample return. TRISH is prioritizing methods that are non-invasive, that do not destroy the sample, and that allow for data collection over multiple timepoints separated by days or weeks. Such systems should be adaptable and not restricted to specific laboratory setups. In addition to biomarkers, proposers may address environmental factors, cell function, and tissue health in advanced biological constructs.

If you have a research idea that fits with this open solicitation, follow the steps below to submit a proposal for this Remote Biomarker Measurements in Microphysiological Systems opportunity:

1. **Learn about TRISH's [SENTINEL initiative](#).**
2. **Read [this solicitation](#)**, which requires a full proposal to be considered. Please refer to the solicitation for submission requirements.
3. **Watch the [pre-proposal webinar recording](#)** via the solicitation available on TRISH's GRID (Grant Research Integrated Dashboard).
4. **Submit a proposal through GRID.** Proposers must submit a full proposal for TRISH to review. Proposers considering applying must register in the system for award management (SAM) database (www.sam.gov) to ensure ability to receive funds if selected.

Who can submit a proposal? All categories of U.S. institutions and companies are eligible to submit proposals. Principal investigators may collaborate with universities, the private sector, and federal, state, and local government laboratories. Please visit the [Remote Biomarker Measurements in Microphysiological Systems solicitation](#) for full details.

Research Duration: One year.

Award: Projects can reach a total amount of \$400,000.

Resources: For more details, watch a pre-proposal webinar recording, which is available via the [solicitation here](#).

Deadline: Full proposals are due 11:59 p.m. ET on March 13, 2025.

Background on TRISH: TRISH is a virtual institute empowered by the NASA Human Research Program to help solve challenges of human deep space exploration. TRISH pursues and funds research to deliver scientific and technological solutions that advance space health and help humans thrive wherever they explore, in space or on Earth. [Learn more about TRISH.](#)

Questions? Follow the [link here](#) for a form and select "open solicitation" to submit questions.

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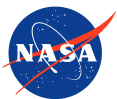
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