



2026 *EXPAND* Data Analysis

Pre-proposer's Briefing

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TRANSLATIONAL
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SPACE HEALTHTM

Agenda

Objective: provide details about the 2026 EXPAND Analysis Request for Proposals and answer proposer questions

- The TRISH Mission and What Does TRISH fund?
- TRISH EXPAND Initiative
- 2026 EXPAND Data Analysis
- FAQs
- Questions

TRISH MISSION

To relentlessly seek and support high-impact scientific, technological, clinical, and psychological advances that will enable any human to explore space safely.

WE COMPLEMENT NASA'S EFFORTS

NASA

Steady Progress in
reducing space
health risks



TRISH

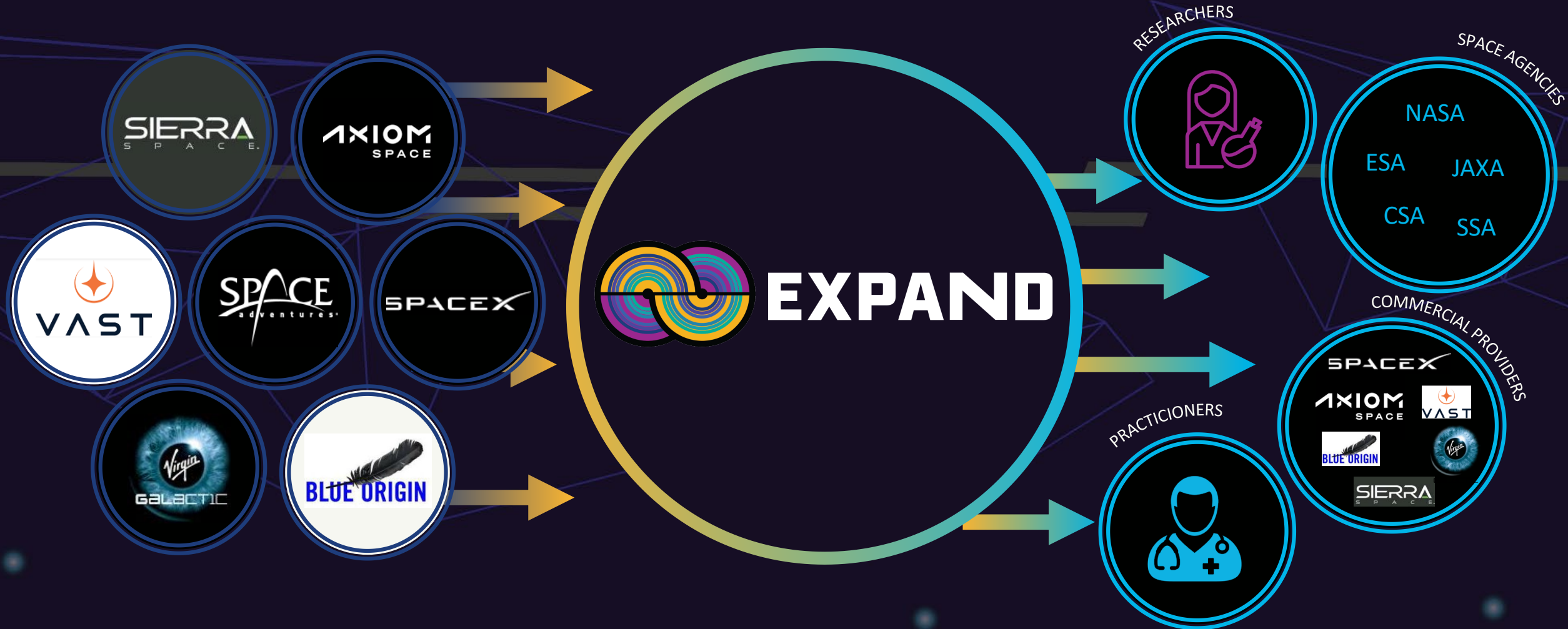
Risk taking for
potential GIANT
LEAPS

Enhancing eXploration Platforms and ANalog Definition (EXPAND)

Non-government commercial space human research program with database and sample archive

MULTIPLE FLIGHTS & PROVIDERS

USABLE DATA & NEW TECH



Commercial vs NASA Spaceflight Missions

	Commercial	NASA
Relevant Hazards	<ul style="list-style-type: none"> • Altered gravity fields • Isolation & confinement • Closed & hostile environment 	<ul style="list-style-type: none"> • Altered Gravity Fields • Isolation & Confinement • Closed & Hostile Environment • Radiation Exposure • Distance From Earth
Demographics	<ul style="list-style-type: none"> • General population, one-time experience • Government sponsored • Launch operator employee 	<ul style="list-style-type: none"> • Highly screened, high performing career astronauts
Mission Duration	<ul style="list-style-type: none"> • Under 30 days 	<ul style="list-style-type: none"> • 6-12 months on ISS • 14 days (early Artemis) to 1+ years (late Artemis)
Spaceflight Exposure Frequency	<ul style="list-style-type: none"> • Currently ~6/year (orbital) and growing 	<ul style="list-style-type: none"> • 14/year on ISS • 4-6/year on Artemis
Training	<ul style="list-style-type: none"> • Part-time preparation to meet training requirements 	<ul style="list-style-type: none"> • Full-time and continual preparation for spaceflight

Research “Menu” Approach



ESSENTIALS

MINIMAL CREW TIME & UPMASS



BENCHMARKING

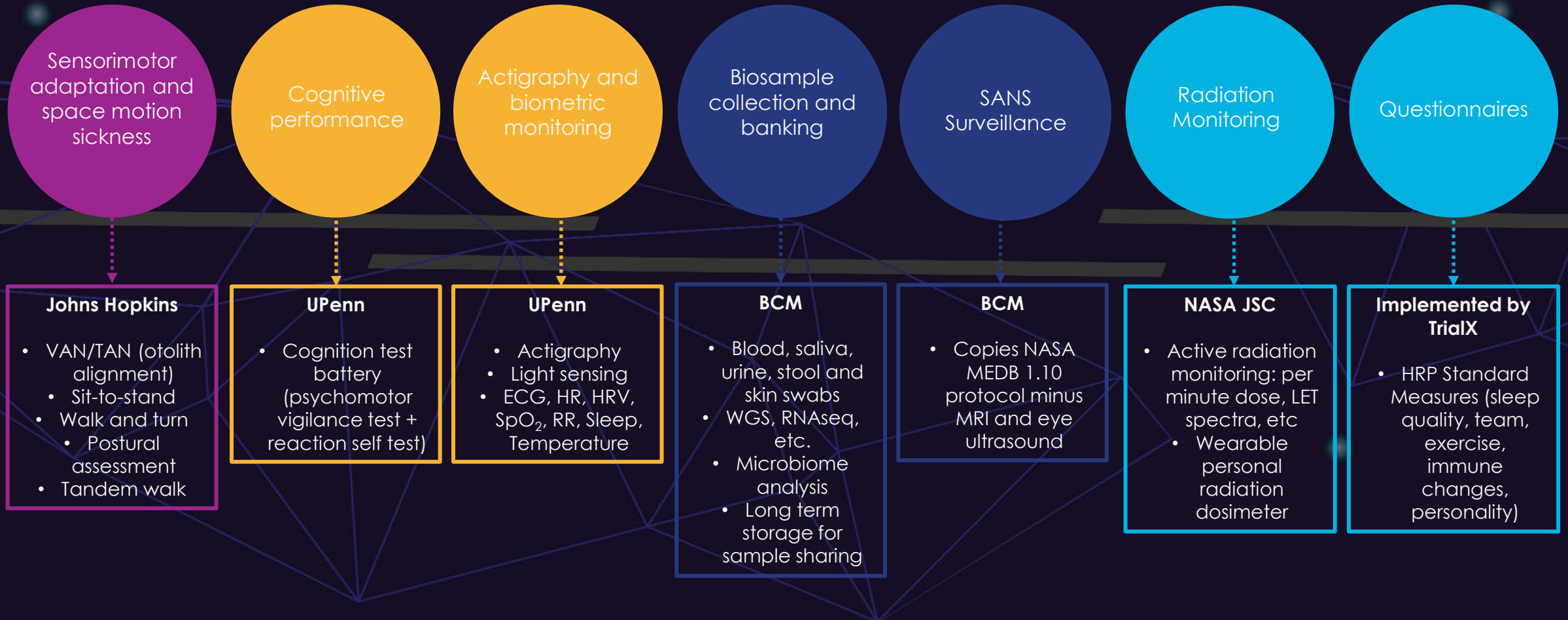
SOME CREW-TIME & UPMASS



EXPEDITIONARY

GROUNDBREAKING; REQUIRES
MORE CREW TIME (PRE/POST/DURING)
AND UPMASS

EXPAND Essential Measures



Available Data Resources

TRISH EXPAND Database has data available from both orbital and suborbital missions. Free-flyer orbital missions that do not dock with the International Space Station (ISS) (i.e. Polaris Dawn and Fram2) are 3-5 days long and orbital missions that dock with the ISS (i.e. Ax-2, Ax-3, Ax-4) are 8-21 days long. Orbital missions have 4 crew. Suborbital missions (i.e. NS-28, NS-30, NS-31, NS-32, NS-33, NS-34, NS-36) are 10 minutes long, spending 60 seconds in microgravity. Suborbital missions have 6 crew members. Data collection is limited to wearable sensor and actigraphy data for suborbital flights.

Essential Measures	Pre-flight	In-flight	Post-Flight
Cognition, Alertness, and Mood Survey	L-90±60, L-45, L-30, L-15, L-3	In-flight	R+0, R+2, R+7, R+30
Wearable Sensor and Actigraphy Data	L-3 to L-0	In-flight	R+0 to R+3
Questionnaires (NASA Essential Measures Sleep Quality and Team)	L-90±30	FD+4±1	R+0, R+4±1
Spaceflight-Associated Neuro-ocular Syndrome (SANS) Surveillance	L-60±30		R+0±1
Sensorimotor Function and Space Motion Sickness	Pre-flight	In-flight	R+0±1
SpaceOmics (Whole Genome Sequencing (WGS), RNA, scRNA, Metagenomics, Proteomics)	L-90±60, L-30±30, L-3±2		R+0±1, R+14±7, R+30±7
Radiation Measurement Data		In-flight	
Environmental Data		In-flight	

L = Launch (days before or after launch to space)

FD = Flight Day (which day(s) in flight)

R = Return (days before or after return to Earth)

Note: Data availability may vary across flights based on mission specifics.



EXPAND Data Analysis

Release Date: January 15, 2026

Step-1 Proposals Due: February 19, 2026 at 11:59 pm ET

Step-2 Proposal Notification Status: March 12, 2026

Step-2 Proposals Due: May 14, 2026 at 11:59 pm ET

Estimated Selection Announcement: October 2026

Anticipated Project Start Date: November 2026

This Request for Proposals (RFP) seeks submissions for secondary analyses of de-identified astronaut health and performance data (EXPAND Essential Measures). The goal is to support hypothesis-driven research that advances the scientific community's understanding of spaceflight-related health changes during short-duration missions and/or informs the development of countermeasures for NASA's human spaceflight risks.



Utilizing EXPAND Essential Measures to Address HRR Risks



Award Information

Award Amount: **No direct funding** will be disbursed to selected proposers under this call.

Selected investigators will receive a non-monetary award

consisting of:

- Secure **access** to the requested **de-identified EXPAND datasets**, and
- Limited technical support (a “**data concierge**”) to facilitate understanding of **data dictionaries** and **study protocols**.

Project Duration: up to 12 Months





Required Characteristics (1/2)



The list of requirements below serves as a guideline for proposing teams, outlining the key aspects that focus on delivering decisive results that support risk reduction or inform health maintenance strategies for long-duration exploration missions:

- Propose research questions that can be answered using existing datasets. **No new data collection from human subjects is supported by this solicitation.**
- Clearly and explicitly **map objectives** to one or more HRR risks and associated gap(s).
- Formulate **testable questions** that can be evaluated using EXPAND data.



Required Characteristics (2/2)



- Describe how the analysis outcomes will support **risk mitigation**, lead to information that could **close the identified gap**, and/or **inform a future countermeasure**.
- Identify and clearly **justify the type(s) of data needed** for the planned analysis.
- Proposals must be hypothesis-driven with a clear connection to **HRR risk reduction**. While proposals may include exploratory or descriptive analyses as secondary aims to support the primary hypothesis being tested, the primary focus and the bulk of the analysis effort must target a **testable, pre-specified hypothesis tied to risk mitigation**.



Additional Characteristics



Preferred

Proposals that contain relevant preliminary data are preferred.

Declined Without Review

- Proposals submitted without a well justified, hypothesis-driven approach.
- Proposals that focus purely on exploratory data mining without a connection to HRR risk reduction.

Frequently Asked Questions

Q. When will the funding decisions, regarding proposals, be made?

A. Announcement of awards will be made in October 2026.

Q. Can I request an extension for submitting my application?

A. **Extensions will not be given.** It is strongly suggested that you begin your application preparation early and familiarize yourself with the solicitation and TRISH Grant Research Integrated Dashboard (GRID).

Q. Is there a required format for biographical sketches?

A. A NIH or NSF biosketch format is acceptable, but **there is no required format.** A template has been provided alongside the solicitation for the proposer's convenience.

Q. I cannot find the answers to my questions in the solicitation documents or the FAQ. Who can I ask for assistance?

A. Please ensure that you read both the TRISH solicitation and this FAQ in their entirety before contacting TRISH with questions. For additional information, please see <https://trish.my.site.com/s/concierge>.

Frequently Asked Questions

Q. Who is eligible to submit proposals?

A: All categories of institutions and companies are eligible to submit proposals. **Proposals will be accepted from only United States (U.S.) institutions and companies.** Note that this list may be periodically updated and affect selection. Compliance with the Texas Genomic Act of 2025 is also required. Institutions and companies not in compliance with this Act are not eligible to participate.

Q. Are participants required to be registered in the system for award management (SAM)?

A: Proposers considering applying **must be registered in the system for award management (SAM) database.** It is recommended that new registrations on SAM are started as soon as possible (at least 30 business days) in advance of any due dates to allow sufficient time to complete SAM registration before registering in the TRISH Grant Research Integrated Dashboard (GRID - <https://spacehealth.bcm.edu/>). A Unique Entity Identifier (UEI) will be issued as part of the SAM.gov registration process. An entity must provide its unique entity identifier (UEI) in each application it submits to TRISH.



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Questions?

