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Translational Research Institute for Space Health (TRISH)



2026 EXPAND Data Analysis Request for Proposals

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A. About TRISH



The [Translational Research Institute for Space Health](#) (TRISH) is an applied space health research catalyst supported by the [NASA Human Research Program](#) (HRP) that funds high-impact scientific studies and technologies to keep astronauts healthy during deep space exploration. TRISH relentlessly pursues and funds novel research to deliver high-impact scientific and technological solutions that advance space health and help humans thrive wherever they explore, in space or on Earth. TRISH support focuses on maintaining and improving human health in space. Since its inception, TRISH has funded over 150 projects that have advanced medical science for both our world and the worlds that

lay beyond. As the only institute dedicated to promoting space health discoveries and technologies, TRISH is accelerating research that will benefit all people with a future in deep space and here on Earth.

Founded on October 1, 2016, TRISH works in partnership with NASA's HRP through Cooperative Agreement NNX16AO69A. Led by Baylor College of Medicine's Center for Space Medicine, TRISH's consortium leverages partnerships with the California Institute of Technology (Caltech) and the Massachusetts Institute of Technology (MIT). More details on TRISH, its mission and funding opportunities can be found at <https://www.bcm.edu/spacehealth>.

TRISH recognizes the need to encourage innovation among the space health community, to attract cutting-edge technologies and high-risk, high-reward ideas, and to translate existing technologies for use in space flight. Our primary goal is to help mitigate [NASA HRP's Human Research Roadmap \(HRR\)](#) Risks and enable future Artemis missions and deep space exploration.

B. About EXPAND

TRISH developed a program enabling space health research through partnerships with commercial space providers and their customers. Initiated with the Inspiration4 mission in 2021, TRISH launched the [Enhancing eXploration Platforms and ANalog Definition](#) (EXPAND), the first-of-its-kind research program to study human health and performance in private spaceflight participants. TRISH's EXPAND Program collects pre-flight, inflight, and post-flight data from private spaceflight missions and houses it in a centralized database.

TRISH has developed a complement of projects that are deployed across commercial spaceflight missions to standardize and ensure that essential research data is collected and remains the same between missions. This complement has been designed to maximize the collection of valuable information while minimizing the crew time and up-mass requirements. Given that all current commercial spaceflight missions are short in duration, these projects have been selected based on physiological changes expected in missions less than one month in duration. This focus on short-duration missions means that the available data captures acute physiological responses rather than adaptation over extended periods. The data collection is also harmonized to NASA's Standard Measures, insofar as possible, to allow for relevant comparisons to existing NASA astronaut data. Data are stored in the EXPAND Database which includes physiological, omics, and environmental data as well as biospecimens across missions.

TRISH has established a Data Privacy and Release Board (DPRB) to ensure the maintenance of privacy of the spaceflight participants when access is granted to spaceflight data and rare biosamples. The DPRB is a group with a broad range of institutional and scientific disciplines to ensure a well-rounded board. The purpose of the DPRB is to review data and biosample requests that have undergone TRISH-approved peer review.

In future years TRISH plans to continue to grow its relationships with commercial spaceflight companies and continue to offer EXPAND as a complement of scientific studies that can bring benefit not only to support future Artemis goals but also to enable better health delivery on Earth.

C. Opportunity

Through this Request for Proposals (RFP), TRISH seeks to grant data access to proposals that utilize existing EXPAND data to accelerate the generation of evidence addressing HRR risks and deliver insights to support astronaut health and performance during current and future exploration missions. This opportunity specifically invites proposals for secondary analysis of de-identified astronaut health and performance data from EXPAND Essential Measures. Successful proposals will demonstrate how their analysis will meaningfully contribute to NASA risk reduction for human health during spaceflight by, for example, answering a key hypothesis, or filling an important knowledge gap.

This is the first time that TRISH is soliciting requests to use this data for hypothesis-driven research that will further the scientific community’s understanding of space health changes faced during short-duration missions and in a non-governmental astronaut subject population. While no funding will be distributed as a result of this call, TRISH is providing limited access to data by enabling peer review, a requirement for researchers seeking access to EXPAND data.

1. Available Data Resources

TRISH’s EXPAND Essential Measures encompass a range of core health and performance variables collected across multiple private astronaut missions and analog studies. Currently available datasets include wearable sensor data (e.g., actigraphy from smartwatches for sleep and activity patterns, heart rate data, blood oxygen saturation (SpO₂), respiratory rate), cognitive performance test results, standardized questionnaires (e.g., mood, stress, team dynamics, symptom tracking), vertical alignment nulling (VAN), torsional alignment nulling (TAN) tests ([PMID: 38862026](#)), and SpaceOmics multi-omics measurements ([PMID: 40368955](#)). Though they may vary significantly, data points are typically available for 10-20 subjects for the pre-flight, in-flight, and post-flight time points listed in Table 1 below.

Table 1. Available EXPAND Data for Request

<u>Essential Measures</u>	<u>Pre-flight</u>	<u>In-flight</u>	<u>Post-Flight</u>
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 (accelerometer, heart rate, heart rate variability, blood oxygen saturation, respiration rate)	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 Syndrome (SANS) Surveillance (optical coherence tomography imaging)	Neuro-ocular (optical coherence tomography imaging)	L-60±30		R+0±1
Sensorimotor Function and Space Motion Sickness (VAN and TAN tests, sit-to-stand, posture and sway, and tandem walk assessments)		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 (dose per minute and Linear Energy Transfer (LET) spectra)			In-flight	
Environmental Data (CO ₂ , noise levels)			In-flight	

Table Key:

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.

Data is available from both orbital and suborbital missions. Free-flyer orbital missions that do not dock with the International Space Station (ISS) (*i.e.* Fram2) are 3-5 days long and orbital missions that dock with the ISS (*i.e.* Ax-2, Ax-4) are 8-21 days long. Orbital missions have 4 crew members. Suborbital missions (*i.e.* NS-28, NS-31, NS-33, NS-36) result in approximately 5 minutes of microgravity. Suborbital missions have 6 crew members. Data collection is limited to wearable sensor and actigraphy data for suborbital flights.

The nature of each hypothesis will determine the data that is made available for each investigation. Proposers must clearly justify the types of data that are needed to answer their hypothesis in their proposal. Proposers that are awarded access to data following merit review and DPRB approval will work with TRISH to identify the timepoints needed to answer their hypothesis.

All datasets are de-identified and aggregated in the EXPAND database for research use.

2. Proposal Characteristics

Proposers should propose high-impact, hypothesis-driven, and outcome-focused analyses of TRISH's EXPAND datasets to advance understanding and/or countermeasure development for NASA's human spaceflight risks. The focus is on delivering actionable results that support risk reduction or inform health maintenance strategies for long-duration exploration missions.

Required Characteristics of a successful proposal:

- Propose research questions that can be answered using existing EXPAND datasets. **No new data collection from human subjects is supported by this RFP.**
- Design research questions appropriate to the constraints of short-duration missions and acknowledge in their proposals how mission duration may constrain their findings.
- Clearly and explicitly map objectives to one or more HRR risks and associated gap(s) and describe how the project will address the mapped gaps.
- Identify and clearly justify the data needed for the planned analysis.
- Request only the data required to answer the proposed research question(s).

- Develop hypothesis-driven proposals 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.

Preferred Characteristics:

- Proposals that contain relevant preliminary data are preferred.

Characteristics of proposal that will be declined without review:

- Proposals submitted without a well justified, hypothesis-driven approach will be declined.
- Proposals that request data outside the scope of the proposed research will be declined.
- Proposals that focus purely on exploratory data mining without a connection to HRR risk reduction will be declined.

D. Selected Proposals Information

This RFP will provide access to EXPAND data in lieu of a monetary grant. 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.

No direct funding will be disbursed to selected proposers under this call. All costs for the research effort (*e.g.*, investigator salary, computing, *etc.*) must be covered by the proposing team’s institutions or other funding sources. Therefore, no budget is required.

Projects are expected to begin by January 2027, following selection and the signing of any required agreements must occur within 60 days of selection notification. The period of performance for each project will be up to 12 months from the start date, by which time the analysis should be completed and a final report submitted to TRISH.

Multiple proposals may be selected under this RFP, subject to proposal quality and the capacity of available data and resources. It is possible that no projects will be selected if none are deemed sufficiently meritorious. Selected proposers will enter into a data use agreement outlining the terms of access to EXPAND data, including requirements to maintain data security and to refrain from any attempt at re-identification of participants. Data access will be provided either via a secure TRISH-approved cloud platform or through encrypted transfer of datasets, at TRISH’s discretion.

Results (and any new data derivatives such as concatenated and normalized cross-mission data files) must ultimately be provided back to TRISH and be placed into the EXPAND database within 90 days of project completion.

E. Eligibility

All categories of United States (U.S) institutions and companies are eligible to submit proposals. Proposers must ensure that their proposal complies with all applicable requirements of the Bulk Data Transfer Rule and the [Texas Genomic Act of 2025](#).

Principal Investigators (PIs) may collaborate with universities, the private sector, and federal, state, and local government laboratories. In all such arrangements, the applying entity is expected to be responsible for administering the project according to the management approach presented in the proposal. For our policy on international proposers and institutions, please refer to the [FAQ](#) and [FAR Supplement](#).

F. Pre-Proposal Briefing

A pre-proposal virtual briefing will be held on **March 26, 2026 at 1:00 PM ET**. The pre-proposal briefing will provide interested proposers with the opportunity to ask questions in order to better understand the intent, scope of work, and selection criteria. This meeting will be open to the public and accessible with an internet connection. Please find below the link to join the pre-proposal virtual briefing: <https://events.teams.microsoft.com/event/acb4d235-ba68-49e7-9a0a-34f09464b3c2@a83dba53-124d-4d32-88f0-b72889a9e926>

G. Application and Submission Information

This RFP uses a two-step proposal process.

Any proposals not submitted through the TRISH Grant Research Integrated Dashboard (GRID) and sent directly to TRISH by email, fax, or other means will not be considered. Format and template will be available on GRID and are detailed below.

1. Registration on TRISH GRID

To submit a proposal, investigators must register on the [TRISH GRID website](#). Registration is free.

- Go to <https://spacehealth.bcm.edu/> and follow these [instructions](#).
- Fill in the requested information and click the “Create Account” button at the bottom of the page.
- Verify your email via the “Send verification link” button at the top right. Email verification is required to submit an application. You will receive an email from noreply@smapply.io to “Confirm Your Email Address.” The website will state that your email address has been verified.
- Click the “Continue” button.

2. Step-1 Proposal Instructions

The deadline for Step-1 proposal submission is **April 23, 2026 by 11:59 PM ET**. Proposals received after the deadline will not be reviewed.

Proposers considering applying must be registered in the system for award management (SAM) database (www.sam.gov). 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 GRID. A Unique Entity Identifier (UEI)

will be issued as part of the SAM.gov registration process. An entity must provide its UEI in each application it submits to TRISH.

To initiate a Step-1 proposal:

- After you have registered and verified your email, login to your GRID account.
- Click “Programs” in the top navigation bar.
- Select “**2026 EXPAND Data Analysis Request for Proposals**” and click “Apply.”
- Complete the tasks listed under “Your tasks.” When all sections are marked as complete, you will be able to review and submit your proposal.

Requests for assistance in accessing and/or using this website may be sent to [TRISH's Cosmic Concierge](#) by selecting “Open Solicitation” from the drop-down menu. Any emails from the GRID will come from noreply@smapply.io. Please check your Spam folder if you are not receiving emails from the GRID.

3. Step-1 Proposal Requirements

Step-1 proposals submitted to this RFP should include a synopsis of the intended research, with the total length of the Step-1 proposal not to exceed one 8 ½ by 11-inch pages using a standard 12-point font and one-inch margins.

All Step-1 proposals must include the following components. Proposals that do not address each item may be considered incomplete and may not advance for further review.

Research Question

Clearly state the primary research question or hypothesis to be addressed. The question should be specific, feasible, and appropriately scoped for the proposed work.

Relevance to HRR Risk

Explicitly describe how the proposed research question relates to a high-risk research (HRR) concern or priority area. Include a brief justification of the relevance and potential contribution to understanding or mitigating HRR risks.

Data Requirements

Identify the data elements or types of data needed to answer the research question.

Potential Downstream Utility

Briefly describe the potential impact or utility of the proposed research outcomes. This may include how the results could inform future research, policy development, operational decisions, or HRR risk mitigation strategies.

References to support the scientific/technical validity of the proposed research can be included (no page limit). No additional documents should be uploaded with the Step-1 proposal. Project personnel are not considered binding for Step-1 and can be adjusted later in an invited Step-2 proposal.

Step-1 proposals are prepared by the PI or a designated representative of the PI. TRISH does not require institutional sign-off at the Step-1 level. The proposer must follow their institution's

policy regarding institutional sign-off; GRID allows for an authorized organizational representative to sign-off, if applicable.

Proposals that do not conform to these requirements may be declared noncompliant and declined without review. Following the successful submission of a Step-1 proposal, TRISH may invite a proposer to submit a Step-2 proposal. Proposers will be notified via email from GRID (noreply@mail.smapply.net) regarding Step-1 proposal status.

4. Step-2 Proposal Instructions

Proposers will be notified via email from GRID (noreply@mail.smapply.net) regarding Step-1 proposal status. If invited to submit a Step-2 proposal, click on the link within the email to initiate the Step-2 proposal. The system will guide proposers through submission of all required proposal information.

The deadline for Step-2 proposal submission is **July 16, 2026 by 11:59 PM ET**. Proposals received after the deadline will not be reviewed.

Proposals that do not conform to the requirements listed below may be declared noncompliant and declined without review.

Each section of the proposal listed below should conform to the stated page limits (if no page limit is given, use space as needed). **Excess pages in a section (and proposal sections not clearly identified and included in the list below) will be redacted and the proposer notified.**

5. Step-2 Proposal Requirements

a) Application Form

All proposals **must be** in the format given below. Key project information must include:

- Principal investigator (PI)
- Contact information (email, phone, mailing address)
- Proposing institution
- Team members and/or Collaborating Institutions (if any)
- Project title
- Proposed start/end dates
- Technical point of contact
- Authorized Organizational Representative (AOR) and contact information
- Proposed start/end dates

Proposals are prepared by the PI and submitted by the PI or an authorized representative from the PI's institution. TRISH does not require institutional sign-off at the time of proposal submission, but PIs must follow their home organization's institutional policies. **Proposals will not be accepted after the listed due dates.**

b) Project Description

The Project Description is the main narrative of the proposal. The maximum page limit is 6 pages, using 8 ½ by 11-inch pages, a standard 12-point font and one-inch margins. It should provide a clear and compelling description of the proposed analysis project.

The Project Description must include the following **required** sections (which need not be separately titled, but all topics must be addressed in the narrative):

Background and Rationale (HRR Risk/Gap Framing)

Describe the context and motivation for the analysis. Identify the specific HRR risk(s) and gap(s) being addressed, with references to the official risk/gap identifiers (e.g., “Risk of XYZ, Gap ID XYZ-1”). Briefly explain the current state of knowledge for this risk and why the proposed analysis is needed, (i.e., how it will reduce a key uncertainty or inform development of a countermeasure). Clearly state the hypothesis or central question to be tested. Include any preliminary data or literature evidence that supports the premise. Emphasize the relevance to exploration missions: why is resolving this question important for long-duration human spaceflight? The rationale should make clear how the EXPAND data offers a unique or timely opportunity to address the problem. Proposers should provide a strong scientific rationale linking the research question and data to answer it to the HRR.

Specific Aims and Objectives

Enumerate the specific aims of the analysis. Each aim should correspond to a testable question or a set of analyses that will produce a result related to the stated hypothesis. The objectives should be feasible to achieve within the project period using the available data. Where possible, tie each aim to a particular HRR gap closure or milestone. Proposals should take into account the realistic length of missions and when data was collected (i.e., pre-flight, inflight, or post-flight).

Analysis Plan and Methodology

This plan is the core description of how the data will be analyzed to achieve the stated aims. Provide a step-by-step plan of the analysis, including

- what data transformations or preprocessing will be done such as filtering noise from sensor data, scoring cognitive tests, normalizing across subjects;
- what statistical tests, models, or computational methods will be applied; and
- how the results will be interpreted in relation to the hypothesis.

If multiple aims are present, describe the approach for each aim. Clearly delineate any primary outcomes versus secondary analyses. The plan should address how you will account for potential confounding factors or covariates. Special attention should be given to realistic constraints of the EXPAND database, including:

- Sample size limitations: crew sizes and participant enrollment for individual missions are typically fewer than 5 individuals. Proposals should describe analyses that are either appropriately powered or acknowledge effect sizes that can be reliably detected.
- Non-independence: crew members from the same mission may share environmental and operational exposures. Proposals should account for mission-level clustering in statistical models.
- Missing data: not all measures are collected for all crew members or at all timepoints. Proposals should describe how they will handle or account for missing data in analyses.
- Acute-only timeframe: missions are short-duration and proposals should avoid research questions designed to detect slow physiological adaptations or long-term trends.

While not required, TRISH encourages transparency practices such as pre-registering an analysis protocol (for example, in an Open Science Framework registry) or otherwise committing to a defined analysis plan before accessing the data. Pre-registration helps ensure that analyses follow a prespecified approach, increasing confidence that results

reflect the intended research questions rather than post hoc exploration. The methodological rigor and feasibility of the analysis plan are critical review factors; ensure that the analysis techniques are appropriate to the data and the question. Proposals should demonstrate that the team can deliver valid results from the chosen approach.

Anticipated Results and Interpretation

Describe the types of results expected. Explain how you will interpret outcomes relative to the hypothesis; what findings would support or refute the hypothesis? Discuss the potential implications. For example, if a certain trend is observed, how might that inform risk posture or countermeasure development for long missions? Conversely, acknowledge what null or negative findings might mean. This section should tie back to the HRR risk. Explicitly state how the findings will contribute to reducing that risk or closing the knowledge gap.

Impact and Next Steps

While this is a data analysis project, discuss how the results could be translated into practice or inform future hypothesis-driven scientific study. For instance, could findings be used by NASA HRP to update an HRR Risk's Evidence Report or to refine a health standard? Could it lead to recommending a new countermeasure or experiment? Proposers should demonstrate an understanding of how their scientific results fit into the bigger picture of exploration missions. If applicable, mention any follow-on studies or validation studies that would logically come after this analysis.

Contingency Plans and Alternatives

Identify the key risks in the project's execution and your contingency plans. For example, if the data quality is lower than expected, how will you adapt? If an analysis assumption is violated, what alternate methods will you use? By showing awareness of potential problem areas and proposing alternatives, you will strengthen the feasibility of the project.

Timeline

Provide a brief timeline of the work across the 12-month period. Identify major milestones (e.g., data obtained and cleaned by month 2, preliminary analysis of Aim 1 by month 4, etc.). This ensures the project is structured to finish on time. The timeline should be realistic given the complexity of the analysis and the project duration.

c) References

References must be included and support the scientific/technical validity of the proposed research (no page limit).

d) Biosketches

The PI is required to include a biosketch describing their qualifications, capabilities, and experience delivering similar research products and outcomes from previously supported research. Biosketches for other team members may be included at the discretion of the PI however, all individuals with critical management or technical roles must be identified as Team Members in the proposal. Although TRISH does not require a specific biosketch format, we recommend using the NIH biosketch template found [here](#).

e) Description of Institution/Organization, Resources, and Equipment

This section must describe the organization's current activities or projects, relevant partnerships and collaborations, and any features that differentiate the organization. It must also describe any existing facilities and equipment that are required for the proposed project and whether the team already has access or how they plan to gain access (2 pages maximum).

f) Current and Pending Support

The PI must provide all ongoing projects and pending proposals (regardless of salary support) in which they are performing or will perform any part of the work. The PI may also include similar information for team members with significant effort. This section must provide the following for each current and pending project:

- Title of funded project or proposal title;
- Name of PI on award or proposal;
- Program name (if applicable) and sponsoring agency or organization, including a point of contact with their telephone number and email address;
- Performance period;
- Total amount received by that investigator (including indirect costs) or the amount per year if uniform (e.g., \$50K/year); and
- Time commitment by the investigator for each year of the period of performance.

g) Management Approach

The management structure for the proposal personnel should be provided. In particular, plans for distribution of responsibilities and arrangements for ensuring a coordinated effort should be described. The plan should include:

- A project schedule that identified anticipated key milestones for accomplishments and dependencies between tasks;
- The management structure for the proposal personnel;
- Any substantial collaboration(s);
- Any proposed use of consultant(s); and
- **A description of the expected contribution to the proposed effort, by task and subtask, by the PI and each person identified in one of the additional categories.**

h) Data Management Plan

Each proposal must include a Data Management Plan (DMP) including a Software Sharing Plan (if appropriate) that describes how results generated by data provided from the EXPAND Database will be shared and preserved through the course of the project, in a reusable de-identified format. DMPs must provide a plan for secure storage of data and results throughout the project. DMPs must provide a plan for making all research data underlying results and findings in publications digitally accessible at the time of publication. DMPs are expected to include publication in peer-reviewed journals as well as plans to deposit study data in NASA data archives, as requested. Following project completion, all data must be deleted to ensure database participant security and privacy. The DMP is limited to 2 pages and proposers must use the template provided.

TRISH has plans to store research-related data sets, and these data sets must be stored in a secure manner and for potential delivery of TRISH products to NASA. The data and information obtained from this program will be used to generate a knowledge base that will inform a unified human physiologic response to risks in spaceflight. Participation in the sharing of data will be expected from proposers approved for data access under this RFP.

Applicants must commit to sharing and making protocols and methodologies, data (analyzed, secondary, or other), tools, and resources available to TRISH consistent with achieving the goals of the program. Adjustments for coordination of research plans, validation of models, materials, methods, and data; and sharing with the research community will be established by TRISH and applicable NASA policies. All proposers must be willing to agree to and sign the TRISH Data Sharing Agreement.

i) Letters of Collaboration and Resource Support

Every person who is expected to have a significant role (*i.e.*, assigned responsibilities appropriate to a defined category of personnel), regardless of their organizational affiliation, in the execution of the proposed effort, or who will be receiving payment for their contributions, should be identified by being added as a Collaborator on the proposal.

In GRID, PIs should click on the “Add Collaborator” button on the application’s first page. Adding a collaborator within the GRID application will generate an invitation to the individual whom has been identified, facilitating account creation in GRID. Creation and verification of a GRID account from this email invitation will indicate collaborator acceptance.

Letters of resource support are only required if there is a facility or resource essential to the proposal not under the control of a Proposal Team member. Submitting the statement of commitment, the team member confirms that any facilities or resources needed for the proposal are readily available for the proposal team members(s) requiring its use. Appropriate institutional commitment to the program includes the provision of adequate staff, facilities, and educational resources that can contribute to the planned program.

j) Assurance of Compliance

Selected proposers will be expected to conduct the analyses in accordance with any ethical or regulatory standards (Institutional Review Board (IRB), or equivalent governing body). Documentation may be required from the proposer’s institution confirming that the work with de-identified human data is not Human Subjects Research or is exempt.

k) Instructions for Preparation of Invited Step-2 Proposals

Section	Required?	Page Limit	Location
Table of Contents	Optional	As needed	
Project Description	Yes	6	G.b.
References and Citations	Yes	As needed	G.c.
Biosketches	Yes	As needed	G.d.
Description of Institution/Organization, Resources, and Equipment	Yes	As needed	G.e.
Current and Pending Support	Yes	As needed	G.f.
Management Approach	Yes	As needed	G.g.
Data Management Plan	Yes (including Software Sharing Plan if experiment produces any software or code, including high-level languages)	2	G.h.
Budget Form and Budget Justification	No	NA	
Statement of Commitment and Letters of Resource Support	Yes, if resources or facilities are not directly under control of a Proposal Team member	As needed	G.j.
Assurance of Compliance	Yes, if applicable/available	As needed	G.k.

H. Review and Selection

It is the policy of TRISH to ensure impartial, equitable, and comprehensive proposal evaluations based on the evaluation criteria for scientific and technical merit, potential contribution, and relevance to TRISH mission.

1. Compliance Matrix

All Step-1 and Step-2 proposals must comply with the general requirements described in this document. Upon receipt, proposals will be reviewed for compliance with these requirements including:

- o **Proposals will not be accepted after the due dates and times listed in this RFP.**
- o All required sections and forms are included, page limits are not exceeded, and fonts/margins are acceptable.
- o Submission of all other appropriate information as required in this document.

Note: At TRISH's discretion, non-compliant proposals may be withdrawn from the review process and declined without further review. Excess material beyond the page limits specified in this document will be redacted and the PI notified.

2. Step-1 Review – Relevance Screening

All compliant Step-1 proposals will undergo an initial programmatic relevance screening conducted by the TRISH Science Office. This review will assess the proposal's alignment with the goals and scope of this RFP, including:

- Verification that the proposed research addresses one or more HRR risk(s) and gap(s);
- Confirmation that the proposed use of EXPAND data is appropriate and feasible;
- Evaluation of whether the required data and other resources are available to support the proposed analysis;
- Evaluation of whether the scope of the project falls within the intent of the RFP.

TRISH will also consider the proposal's overall fit with TRISH's mission and HRP priorities as part of this screening. Only proposals that meet this programmatic relevance criteria will advance to external merit review.

For proposals declined during Step-1 review the proposer will receive a notification by email indicating the proposal is not going to be reviewed. Proposal feedback will not be provided at this phase.

3. Step-2 Review - External Scientific & Technical Merit and Programmatic Reviews

Compliant Step-2 proposals that are within scope of the TRISH mission and passed programmatic relevance screening will be considered for technical and scientific merit review.

The overall evaluation process for Step-2 proposals submitted in response to this RFP will include two reviews. The **External Scientific & Technical Merit Review** will be a merit review conducted by a panel composed of scientific or technical subject matter experts. Proposals that are highly rated in the merit review process will undergo a **Programmatic Review** for programmatic and operational alignment. The **Programmatic Review** will be conducted by TRISH science management and overseen by TRISH's Scientific Research Director.

All of the following criteria will be used in determining the merit score:

- **Significance and Relevance to HRR Risks:** Does the proposal target a significant HRP human health risk and specific gap? Are the objectives aligned with NASA's needs for risk reduction?
- **Scientific Merit and Innovation:** Are the hypotheses and approaches scientifically sound? Is the analysis rooted in solid scientific theory, and does it propose to test clear, falsifiable hypotheses? Does the project innovate beyond what's been done before either by analyzing a new data combination, using a novel method, or addressing a question not previously answered?
- **Approach and Feasibility:** Is the analysis plan well-designed and achievable with the proposed data within the 12-month period? Reviewers will consider the appropriateness of the chosen data to the questions; the adequacy of the statistical or computational methods; identification of potential pitfalls and alternate strategies; and whether the study is likely to yield interpretable results. The plan should be sufficiently detailed to instill confidence that the analysis can be carried out. Feasibility also includes whether the EXPAND dataset as described can support the analysis. If a proposal overestimates the data's capabilities (e.g., trying to draw broad conclusions from very few subjects), it will be flagged.
- **Data Fit and Ethical Considerations:** This criterion looks at how well the proposers have planned to use the EXPAND data. Are they requesting the right data for their question, and have they demonstrated understanding of the data's structure and any limitations? Also, are data privacy and human subject considerations adequately addressed?
- **Reproducibility and Data Sharing Plan:** Although the DMP will undergo programmatic review, the peer reviewers will also comment on whether the plan for sharing code and results is adequate. A commitment to open science (sharing analysis code, registering analysis plans, etc.) can positively reflect the project's rigor.
- **Proposing Team and Management:** Have the proposing company or institution and individuals assigned to the effort demonstrated experience in completing similar projects on time?

4. DPRB Review

Following the Step-2 review process, TRISH will select a subset of the highest-scoring Step-2 proposals based on scientific merit, programmatic and operational relevance review to advance to the DPRB review. This review serves as an additional subject protections review and is one of the required steps for the release of EXPAND data.

The DPRB review includes verification that:

- The proposing institution holds or will obtain an Institutional Review Board (IRB) approval or exemption, as appropriate;
- All required data use agreements and confidentiality documents are completed and signed; and
- The proposed use of EXPAND data complies with all applicable ethical, privacy, and participant protection requirements.

Only proposals that successfully complete DPRB review and all associated documentation requirements will be authorized to receive EXPAND data.

5. Selection

Project selections will be made to proposers whose proposals are determined to be the most programmatically relevant to TRISH, as determined through internal and external review and

consistent with instructions and evaluation criteria specified in this document, and availability of funding to administratively support data requests. Proposers may be asked to modify sections of the research plan based on the review process, or to work with other experts to ensure the feasibility of the project. Because the EXPAND dataset contains potentially identifiable information, TRISH will implement a formal review and vetting process for all selected teams to ensure data security measures and compliance prior to data access approval.

I. Award Information

While no funds are awarded through this RFP, all scientific and administrative tasks including data collection and data release have been supported by federal funding and thus are subject to TRISH's reporting requirements outlined below.

1. Selection Notices

At the end of the selection process, each proposing organization will be notified of its selection or non-selection status. Selection notification will be made by a letter signed by the TRISH Selection Official. Selection letters are not an authorization to begin performance. The selected organization's business office will be contacted by a TRISH representative.

2. Administrative and National Policy Requirements

All projects are subject to the provisions detailed in 2 CFR Parts 200 and 1800 (*i.e.*, for higher education, hospital, and non-profit entities) and 14 CFR 1274 (*i.e.*, for commercial firms).

3. Investigator Requirements

Selected PIs will be expected to follow a number of reporting procedures, as delineated below:

a) Publications

For TRISH-supported research, the support received from TRISH must be clearly identified in all publications, invention disclosures, copyrights, and patents, using the following phrase: "This work is supported by the Translational Research Institute for Space Health through NASA Cooperative Agreement NNX16AO69A. This publication utilizes data from the EXPAND database." All external requests for data submitted after publication must be directed to TRISH for review, approval, and fulfillment to ensure consistent data governance, appropriate oversight of data use, and compliance with data use agreements.

b) Restrictions on Use of Generative Artificial Intelligence (AI)

In accordance with TRISH data security and privacy policies, no TRISH-supplied research data, including derived or de-identified datasets, protocols, biomaterials, models, or research results, may be shared, entered into, processed by, or uploaded to generative AI platforms, such as but not limited to GPT-based systems (including OpenAI's ChatGPT, Gemini, or similar large language models), unless specifically authorized by TRISH for this purpose. All data management workflows must ensure that no project team member utilizes generative AI tools for any handling, curation, or analysis of TRISH data unless and until such platforms are formally cleared and approved for TRISH research applications.

c) Intellectual Property (IP) Reporting

Selected institutions must report each invention disclosure or patent application resulting from their TRISH research grant to **both** TRISH and NASA within 60 days of investigator disclosure to the home institution.

For NASA: Both the electronic and paper version of the NASA Form 1679 may be accessed at the electronic New Technology Reporting website at <http://invention.nasa.gov>. In the field designating contract number, please cite NNX16AO69A. See 2 CFR 1800.908 and 14 CFR 401.14 for additional information.

For TRISH: In addition to reporting on intellectual property on the annual project report, please also send copies of the institutional invention disclosure AND NASA Form 1679 or the summary from the online disclosure at [NASA's New Technology Reporting System](#) via email to spacehealth-info@bcm.edu.

d) Deliverables and Delivery of Secondary Data

The purpose of these projects is to offer insights into space health and demonstrate how their analysis contributes to risk reduction by producing clear results that define a path to use of the knowledge gained to solve a known risk to human health in long-duration spaceflight. The expected deliverable is a detailed report on further insights and outcomes that can be extrapolated from the data.

All analyzed data must be resubmitted into the EXPAND database by the end of the 12-month project timeline and may be incorporated into the database and available for request in accordance with the data sharing agreement. Proposers are expected to work with TRISH early in the project to ensure a seamless transition of analyzed data into the EXPAND database.

e) Final Report and Data Removal Attestation

A final report must be provided to TRISH at the end of the performance period, including a detailed listing of all peer-reviewed publications and IP pursued. The final report is a requirement for eligibility for future TRISH solicitations.

The information in the final report will consist primarily of:

1. A statement of the specific objectives;
2. The significance of the work;
3. The background;
4. An overall progress during the performance period;
5. A narrative discussion of technical approaches, including problems encountered;
6. The accomplishments and impacts;
7. An appendix with bibliography, copies of all publications and reports, and intellectual property disclosures. Any publications or other public materials containing data are particularly important to include in this section;
8. An attestation that all EXPAND primary and analyzed data generated by this project has been deleted from all local and cloud hardware in accordance with the Data Sharing Agreement.

f) Non-Compliance with Investigator Requirements and Data Sharing Agreement

Non-compliance with the TRISH investigator requirements or data sharing agreement will be considered in future decisions and may result in ineligibility from future EXPAND data requests, funding under any future TRISH RFPs, and will be reported to NASA.

TRISH encourages interface between the selected proposer and TRISH to ensure timely completion of the work, as needed. TRISH reserves the right to revoke data access and terminate projects deemed to have missed key aims, deliverables, timelines after TRISH review, as per NASA regulations, [Section § 1260.161](#).

Resolution of concerns during the pre-award and post-award phases is under the purview of the TRISH Science Office at <https://trish.my.site.com/s/concierge>.

J. Section VII. Summary of Key information

Duration	12 months
First day for submission of proposals	March 16, 2026
Last day for submission of Step-1 proposals	April 23, 2026 at 11:59 pm ET
Last day for submission of Step-2 proposals	July 16, 2026 at 11:59 pm ET
Selection Announcement	November 2026
Submission Medium	Electronic proposal submission through the TRISH GRID is required.
Web site for submission of proposal via TRISH GRID	https://spacehealth.bcm.edu/
TRISH point of contact concerning this call for proposals	spacehealth-info@bcm.edu