Ground-Based Venous Thromboembolism (VTE) Pathophysiology and Analog Solicitation

Pre-proposal Briefing

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AGENDA

Objective: provide details about the Ground-Based Venous Thromboembolism (VTE) Pathophysiology and Analog solicitation and answer proposers' questions

- The TRISH Mission and What Does TRISH fund?
- Ground-Based Venous Thromboembolism (VTE) Pathophysiology and Analog Solicitation
- FAQs
- Live Question & Answer Session

Baylor College of Medicine

Massachusetts Institute of Technology

Caltech

TRISH MISSION

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

COMPLEMENTING NASA'S EFFORTS

NASA
Steady progress in reducing space health risks

TRISH
Risk taking for potential GIANT LEAPS

Baylor College of Medicine

Massachusetts Institute of Technology

Caltech

Ground-Based VTE Pathophysiology and Analog Solicitation

Release Date: June 16, 2026
Full Proposals Due: August 18, 2026 at 11:59 pm ET
Estimated Selection Announcement: December 2026
Anticipated Project Start Date: January 2027

This solicitation seeks to advance our understanding of VTE pathophysiology in the context of spaceflight-associated hemodynamic changes and to develop and validate ground-based analogs that replicate these conditions.

Award Information

Funded as research grants. Proposals may request up to $500K in total costs (direct + indirect) over a performance period of up to 15 months.

- Awards can begin as early as January 2027, must be initiated by March 2027, and must conclude by March 31, 2028.
- A minimum 10% cost-share is required, added on top of the requested budget, and may be cash or in-kind from non-Federal third parties.
- Indirect costs are capped at negotiated federal rates. Budgets must include travel to the annual NASA HRP Investigators' Workshop.
- Multiple awards, partial funding, or no award are all possible, contingent on fund availability and proposal quality.

Focus Areas / Deliverables

Two focus areas (proposals address one or both):

- Pathophysiology studies advancing mechanistic understanding of thrombus formation under retrograde venous flow, stasis, or vessel distention relevant to spaceflight.
- Development and validation of ground-based analogs and model, including in-silico, in-vitro, ex-vivo, in-vivo, human-subject, and hybrid approaches, that reliably reproduce key in-space hemodynamic conditions and enable investigation of venous thrombus formation and progression.

Deliverables should fit the focus area:

- Pathophysiology proposals deliver mechanistic characterization data and analyses
- Analog proposals should deliver a validated analog protocol, population variability datasets, and characterization reports.

Required Characteristics

Proposals must:

- Clearly address at least one of the focus areas.
- Demonstrate relevance to spaceflight-associated VTE risk.
- Utilize a ground-based research approach.
- Include a sound scientific or technical rationale and a feasible study design.
- Define measurable outcomes and deliverables appropriate to the proposed work.
- For analog-development proposals, include an approach for validation of the proposed analog or model.

Additional Characteristics

Preferred:

- Address both focus areas through an integrated approach.
- Utilize existing datasets, biospecimens, or research resources when appropriate.
- Produce data, protocols, or models that can support future research efforts.

Declined Without Review:

- Focus primarily on cardiovascular or vascular biology questions that are not directly related to the in-space VTE.
- Rely on new prospective spaceflight experiments rather than ground-based research approaches.
- Rely on asking for access to NASA data that the proposing team does not already have access to.
- Emphasize descriptive observations without advancing mechanistic understanding or model development.
- Propose analogs or models that do not address the key hemodynamic changes associated with spaceflight, such as venous stasis, retrograde flow, or vessel distention.
- Have limited applicability to future studies of spaceflight-associated VTE risk.

Frequently Asked Questions

Q. When will the funding decisions, regarding proposals, be made?
A. Estimated announcement of awards around December 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. Yes. A link has been provided in the solicitation.

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. I just submitted a similar grant to another funding organization. Can I also apply to this RFP?

A. TRISH does not restrict the number of submissions for a similar proposal submitted at the same time as to other funding organizations. We recommend that you also check with the other funding organization regarding their guidelines on this matter.

Q. How can I find more information about the latest spaceflight research results? What about current research?

A. Evidence Reports are provided that review the human system risks to spaceflight. General research plans are available by reviewing the tasks within the Human Research Roadmap as well. Evidence Reports are found on the NASA's Human Research Roadmap: https://humanresearchroadmap.nasa.gov/Evidence/ Lastly, the NASA Task Book also provides a summary of past and current NASA-funded studies going back to 2004 (including TRISH, NSBRI, HRP, and Space Life and Physical Sciences Research and Applications) https://taskbook.nasaprs.com/Publication/welcome.cfm

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Questions?