Translational Research Institute for Space Health

About the Institute
ABOUT THE INSTITUTE

The Translational Research Institute for Space Health (TRISH) is a Baylor College of Medicine-led consortium with the California Institute of Technology and the Massachusetts Institute of Technology.

Partnered with NASA through a cooperative agreement, TRISH seeks and funds new health technologies to predict, protect and preserve astronaut health during deep space exploration missions.

TRISH has 3 core programs:

- **Translational Research Program (TRP)**
- **Scientist Program**
  - Postdoctoral Fellowship Program
  - Faculty/Scientist Exchange
- **Supporting Program**
  - Workshops, Red Risk School, etc.

TRISH benefits:

- Multiple diverse funding opportunities
- Non-dilutive federal funding
- Facilitated access to our community of experts and investors
- Access to Spaceflight and Space Analogs
- High risk threshold

To find out more info about TRISH, visit [www.bcm.edu/spacehealth](http://www.bcm.edu/spacehealth)
TRISH FUNDING PROFILE

TRISH recognizes that it’s not always one size fits all. And, our portfolio reflects that.

TRISH offers different types of funding vehicles with varying term lengths. Some grant opportunities are announced via a traditional solicitation, at least annually, while other opportunities may be submitted anytime with quarterly reviews. Some solicitations require panel reviews and some grants may be awarded at the director’s discretion, but all proposals undergo rigorous peer review.

Different from most grant organizations, TRISH is focused on early stage (needs proof of concept, for example) and late stage (ready to go to market or to space, for example) research; we do not fund incremental scientific research.

Successfully completing a TRISH-funded project could position the investigator for continuation of funding by the NASA Human Research Program.

To find out more info about TRISH funding mechanisms, visit https://bit.ly/2uymHE9
TRANSLATIONAL RESEARCH PROGRAM GRANTS

The Translational Research Program (TRP) Grants is TRISH’s core grant program with varying announcement and review cycles and is composed of the following grants:

Solicited annually (at a minimum):
- Small Openly Competed (SOC) Grants
- Industry Grants

Submit anytime, reviewed quarterly:
- Synergy Grants

Submit anytime, reviewed as received:
- Focused Investigation Program (FIP) Grants

Solicited occasionally:
- Program Grants (Tcores)

To find out more info about TRISH funding mechanisms, visit https://bit.ly/2uymHE9
SMALL OPENLY COMPETED (SOC) GRANTS
Solicited annually, topics are different for each call for proposals. SOC grants are best suited for a single principal investigator (like an NIH R01 or R03).

Schedule: Annually, at a minimum
Annual Funding Amount: Approximately $400K
Duration: 2-3 years
Review: Programmatic relevance reviews, scientific peer reviews and recommendations by our Scientific Advisory Board

FOCUSED INVESTIGATION PROGRAM (FIP) GRANTS
FIP grants are unsolicited proposals. This funding vehicle is best suited for pilot or proof-of-principle projects with a small amount of funding and a short duration.

Schedule: Unsolicited or directed
Annual Funding Amount: Generally ≤ $100K but can be more
Duration: 6-18 months
Review: Programmatic relevance and external scientific peer reviews
INDUSTRY GRANTS
Facilitated by the Consortia for Improving Medicine with Innovation & Technology (CIMIT), industry grants offer non-dilutive funding to U.S.-based companies to develop space-compatible health solutions from their already existing technologies. 100% of matching funds is required to maximize the institute’s federal dollars.

Schedule: Solicited - specific topics with each solicitation
Annual Funding Amount: Variable, but up to $250K per year
Duration: Variable, but generally 6-12 months
Review: Subject to programmatic relevance and scientific peer reviews

SYNERGY GRANTS
Intended to permit sharing of resources and personnel across Space Health-funded projects to allow researchers to get the most value from each project.

Schedule: Unsolicited
Annual Funding Amount: $25K but can be more
Duration: Approximately 6-12 months
Review: Internal scientific and programmatic relevance review

To find out more info about TRISH funding mechanisms, visit https://bit.ly/2uymHE9
TRANSLATIONAL RESEARCH PROGRAM GRANT - facilitated by NRESS

Facilitated by the NRESS, TRISH is seeking proposals on the 6 topics below. TRISH offers non-dilutive funding and invites all categories of U.S. institutions and companies to submit proposals to develop space-compatible health solutions from their already existing technologies. Requires 10% cost sharing.

TOPICS

- Predictive algorithms of health, behavior, and medical
- Improving resilience through nucleotide-based therapy
- Non-pharmacological improvement of human performance
- Multipurpose edible plants for spaceflight applications
- New materials for shielding medications
- Test your expired medications

FUNDING

Budget up to $400,000 annually with a project duration of 2-years

KEY DATES

March 16 – BRASH1801 Solicitation Announcement
March 28 - Pre-proposal Webinar
April 16 – Step-1 Proposals due by 5:00 p.m. ET
April 27 - Notifications Sent
June 25 – Step-2 Proposals due by 5:00 p.m. ET
November - Selections Announcement

To find out more info or to apply to BRASH1801, visit https://bit.ly/2Fbw4O0
INDUSTRY GRANT - facilitated by CIMIT

Facilitated by the Consortia for Improving Medicine with Innovation & Technology (CIMIT), TRISH Industry Grants offer non-dilutive funding to U.S.-based companies to develop space-compatible health solutions from their already existing technologies. The grant is focused on 2 topics:

- **Deep Artificial Intelligence Medical Support**
  How would a geologist on the way to Mars “triage” him or herself when there is a medical situation unfolding? We are looking for a smart A.I. that can be a “pocket doctor” to help non-medical personnel assess their health and assist in selecting and executing appropriate diagnostic tests and countermeasures. We are particularly interested in NASA’s identified medical conditions.

- **Point-of-care (POC) Diagnostics**
  Flexible platforms that can that facilitate diagnosis of clinical conditions on NASA’s Medical Conditions List. We are interested in platforms and approaches that are suitable for long-duration spaceflights; for example, miniaturizing a table-top device into a hand-held device, reducing the need for and extending the shelf-life of consumables, and improving ease-of-use.

**FUNDING**
Progressively increasing awards from $50K to $250K. 100 percent of matching funds (in kind or cash) is required to maximize the institute’s federal dollars

**KEY DATES**
- **March 8** - CIMIT Industry Solicitation Announcement
- **April 12** - Expression of Interest due by 11:59 p.m. ET
- **April 26** - Notifications Sent
- **June 5** - Full Proposals due by 11:59 p.m. ET
- **July 6** - Selection Announcements
Focused Investigation Program (FIP) Grants – Proposals may be submitted at any time

FIP Grants are best suited for pilot or proof-of-principle projects with a small amount of funding and a short duration. FIP proposals are subject to programmatic relevance and scientific peer review.

Grant Amount is typically $100,000
Grant Duration averages approximately 12 months

To submit a proposal, provide a brief summary of your research plan, which will be assessed based on TRISH’s current target areas.

Questions or to apply, email emmanueo@bcm.edu.
Synergy Grants – Proposals may be submitted at any time

Synergy Grants allow for the sharing of resources and personnel across TRISH-funded projects allowing researchers to get the most value from each project. This mechanism supplies funding to explore new collaborative ideas.

Best of all, proposals for Synergy Grants - along with Focused Investigation Program (FIP) Grants - may be submitted at any time and are reviewed quarterly.

Grant Amount is typically $25,000
Grant Duration averages approximately 6-12 months

To submit a proposal, provide a brief summary of your research plan, which will be assessed based on TRISH’s current target areas.

Questions or to apply, email emmanueo@bcm.edu.
SCIENTIST PROGRAM

Through its Scientist Program, TRISH offers multiple types of opportunities for researchers at experienced career levels to work with NASA. TRISH will post open positions on its website and communication channels as NASA requests.

• VISITING SCIENTIST / FACULTY EXCHANGE PROGRAM
  3-24 month positions provide the opportunity for external scientists to work with NASA. Bi-directional. Scientists or faculty may work with NASA scientists to design programs, experiments and include the opportunity to conduct experiments. NASA scientists may also spend time at universities or companies to learn a new skill or field.

• SENIOR SCIENCE MANAGERS
  TRISH finds candidates to fill limited-term senior management and scientist positions at NASA Centers.

To find out more info about TRISH funding mechanisms, visit [https://bit.ly/2uymHE9](https://bit.ly/2uymHE9)
POSTDOCTORAL FELLOWSHIP (PDF) PROGRAM GRANTS

Postdoctoral fellowship program grants enable early career scientists to design, develop and conduct their own space-related research projects under the guidance of experienced faculty mentors. These 2-year fellowships provide a stipend based on NIH guidelines and allowance for healthcare and travel.

A competitive third year of funding may be available.
SUPPORT PROGRAM

TRISH’s Support Program is the outreach arm of the institute that fosters public participation through workshops, conferences, and presentations - most available virtually. The institute harnesses the power of its virtual community via its website, videos, social media and online forum to allow prospective and new researchers as well as the general public to learn more about space health research. In addition to its Outreach Program, the institute also offers an aerospace medicine residency training program.

- **Outreach Program**
  TRISH is committed to educating prospective researchers and the public about risks to human spaceflight. Through our Support Program, we inform researchers on how their work can help maintain astronaut health during deep space exploration missions. Example: Red Risk School - [https://bit.ly/2F1dAN5](https://bit.ly/2F1dAN5)

- **Workshops + Conferences**
  Designed to spur innovation, TRISH places an emphasis on Workshops and Conferences. We hold two topic-specific workshops annually that enable participants to evaluate the maturity of a research area or new methodology for use in space.

- **Aerospace Medicine Residency Program Research Opportunities**
  The Clinical Research Opportunities in Space Medicine program funds research opportunities to residents in the University of Texas Medical Branch Aerospace Medicine. Residents perform projects with seasoned mentors to further hone their research skills.

POCs

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Please stay tuned.
TRISH Webinar will begin shortly.