TRISH Diversity-Focused Survey Results
In 2019, TRISH performed an internal review of its applicant demographics and solicitation outreach strategies. Based on the internal review, the Institute saw a gap in underrepresented researchers and minority-serving institutions. Thus, TRISH decided to more intentionally target researchers from these communities. The first step was understanding their barriers from engaging and applying to TRISH.
Following receipt of six competitive proposals, TRISH selected an external consultant, the Commercializer, to perform an online survey instrument targeting people of color and the existing space health research community.

The purpose was to identify strategies to attract and retain underrepresented science, technology, engineering, and math (STEM) researchers.

Some preliminary results from the survey follow.
The primary objective was to describe standards to identify, recruit, and retain emerging researchers from underserved communities.

Objective 1
Identify how TRISH can help diverse groups feel that they can be successful in obtaining TRISH funding

Objective 2
Identify barriers to success for minority applicants
Over 500 individuals engaged with the survey.

Responses from 123 individuals had a complete survey and met the requirement of identifying as a “STEM researcher.”

Based on the branching logic employed and individuals that did not answer all questions in the survey, some responses may have n<123.

A short selection of data are provided in the next slides. A more detailed dive into the data and results will be provided in a forthcoming manuscript.
Are you familiar with the Translational Research Institute for Space Health (TRISH)?

- **YES**: 88 votes (71.5%)
- **NO**: 35 votes (28.5%)

N=123
Do you identify as a person of color?

Yes 52.8%

No 47.2%

N=123
N=123

Ethnic/Racial Affiliation

- White: 48% (59 people)
- Black or African American: 20.3% (25 people)
- Asian: 17.9% (22 people)
- American Indian/Alaska Native: 4.1% (5 people)
- Other: 9.8% (12 people)
Are you of Hispanic, Latino, or Spanish origin?

- No, not of Hispanic, Latino, or Spanish origin: 102 (82.9%)
- Yes, Mexican, Mexican American, Chicano: 7 (5.7%)
- Yes, Puerto Rican: 2 (1.6%)
- Yes, another Hispanic, Latino, or Spanish origin: 12 (9.8%)

N=123
Ethnic/Racial Affiliation of Survey Instrument Respondents Compared to the 2020 U.S. Census*

This chart examines the racial/ethnic diversity of the survey respondents in comparison to the U.S. Census. The survey respondents either exceed their proportion in the census or are comparable.

N=123

* https://www.census.gov/quickfacts/fact/table/US/PST045221
Self-Identified Gender Affiliation

- Male: 51 (41.5%)
- Female: 63 (51.2%)
- Non binary: 6 (4.9%)
- Decline to answer: 2 (1.6%)
- Other/ Transgender: 1 (0.8%)

N=123
Purported Grant Writing Experience

Person of Color
- Extremely knowledgeable: 4 (8%)
- Moderately knowledgeable: 24% (12)
- Not knowledgeable at all: 68% (34)

N=50

Non-Person of Color
- Extremely knowledgeable: 10 (15%)
- Moderately knowledgeable: 30% (21)
- Not knowledgeable at all: 55% (38)

N=69
Purported Knowledge Regarding Locating Resources for Grants

Person of Color

- 24% Extremely knowledgeable
- 62% Moderately knowledgeable
- 14% Not knowledgeable at all

N=50

Non-Person of Color

- 32% Extremely knowledgeable
- 52% Moderately knowledgeable
- 16% Not knowledgeable at all

N=69
Purported Knowledge Regarding Obtaining Grants for Space Research

Person of Color

- Extremely knowledgeable: 6% (3 of 50)
- Moderately knowledgeable: 42% (21 of 50)
- Not knowledgeable at all: 52% (26 of 50)

Non-Person of Color

- Extremely knowledgeable: 14% (10 of 69)
- Moderately knowledgeable: 38% (26 of 69)
- Not knowledgeable at all: 48% (33 of 69)

N = 69
Belief about TRISH Recruit and Review Processes

- **Purported belief that TRISH's applicant recruiting efforts encourage a culture of diversity**
  - N=119
  - No (31) 26.1%
  - Yes (88) 73.9%

- **Purported belief that TRISH review panels include perspectives of people from underserved communities**
  - N=100
  - No (42) 42%
  - Yes (58) 58%

- **Purported belief that the TRISH review process is culturally competent**
  - N=41
  - No (11) 26.8%
  - Yes (30) 73.2%

* Regardless of whether respondents have knowledge of or experience with the TRISH review process.
25 individuals were interviewed in addition to completing the online survey.

**Gender Affiliation**
- 13 WOMEN
- 11 MEN
- 1 TRANSGENDER

**Racial/Ethnic Affiliation**
- 17 PEOPLE OF COLOR
  - 6 BLACK
  - 5 ASIAN
  - 6 LATINO/HISPANIC
- 8 WHITE

17 PEOPLE OF COLOR = 6 BLACK
5 ASIAN
6 LATINO/HISPANIC

**Interview Demographics**

25 interviewees
Until you have people who are jumping at the chance to mentor and develop students from diverse backgrounds that's when you will see the increase of diverse people from diverse backgrounds. They need to have a positive experience.

– HBCU Faculty
Quotes from Interviewees: Community

"You aren’t going to win unless you talk to someone who knows how to win or who already has."

– Survey Participant
You learn how to write so much better when you have been on the other side of the fence. You can review funding and someone can point out to you and they will say wow I never knew that.

– Survey Participant
The recommendations from the Commercializer based on the survey and interview results were as follows:

**Recommendation 1**
Offer **educational materials and resources** about the Institute and translating research to space health applications

**Recommendation 2**
Produce support to researchers before they receive TRISH funding

**Recommendation 3**
Build a network with minority-serving institutions and underrepresented researchers

**Recommendation 4**
Create trainings to educate researchers on grant writing, proposal review, or conducting TRISH research

**Recommendation 5**
Fund underrepresented researchers in a cohort model
Gaps in Support of Underrepresented Researchers

Survey respondents ask for help in all the areas described below:

- **Research Fundamentals**
- **Preliminary Data**
- **Grant Writing**
- **Understanding of NASA Risks + TRISH**
- **Access to Resources, NASA Personnel, or Knowledgeable Collaborators**
- **Scientific Research & Its Deliverables**

Where TRISH usually operates:
• TRISH in partnership with its Diversity Advisory Board (DAB) concluded that the Institute should release a solicitation seeking **external partners** to support its diversity, inclusion, equity, and accessibility goals.

• TRISH will scout for **external partners with already existing networks in underrepresented communities** where the Institute’s reach is currently limited.

• The Institute will focus on Recommendations 1, 2, 3, and 4 (see Slide 20) in its first solicitation with the plan to release a solicitation focusing on Recommendation 5 in FY 23.
Aims for 2022 TRISH Diversity Partnership Solicitation

• TRISH programs typically support investigators with some existing awareness of NASA’s research needs, and access to resources and collaborators typical of a successful research proposal.

• TRISH is seeking partners that will facilitate underrepresented researchers engaging with the Institute at multiple points in their professional careers.

• The ideal partner will consider methods to enhance research fundamentals, access to preliminary data and grant writing skills for diverse researchers. However, the Institute will accept new or adapted ideas and approaches to these areas in which TRISH has already existing programs and resources.

• The Institute will only support ideas that ultimately lead to more underrepresented researchers applying for TRISH’s annual solicitations.