The 2023 PI Launchpad Workshop

Pre-Application Information Session

February 24, 2023

On behalf of the PI Launchpad Team:

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PI Launchpad Motivation

The process of developing space mission concepts for submission to a NASA announcement of opportunity is incredibly complex.

A potential principal investigator needs to develop a strong, well-motivated, internally coherent science case, while also coordinating a large team from multiple institutions.

The complexity of the process can be a barrier to entry for new PIs who have a good science idea but limited mission experience.

The PI Launchpad is designed to reduce that barrier to entry!

2019 Launchpad

- 40 attendees, 2.5 days, Tucson, AZ

- Funded by Heising-Simons Foundation and NASA

- Application (5 questions) was necessary to fund all attendees to make the workshop accessible.

- All content is available online

2021 Launchpad

- June 14th to 25th, via WebEx

- 10 days of content, only 3 hours per day, mix of live and asynchronous sessions

- Again 40 participants- limited by number of mentors for a good small group experience.

2023 Launchpad

When: July 24-27, 2023

Where: Ann Arbor, Michigan at University of Michigan (in person)

Application Process: Similar to previous Launchpads (5 questions submitted as an NSPIRES NOI)

Theme: *Building a mission team and developing a concept*

Topics: *Proposal Basics, Timelines, Mission Sizes, Storytelling, Graphics, the STM, partnering with industry and NASA centers, roles on the science team, lessons learned from other Pis, building a diverse science tea Individual and group networking opportunities with Industry Partners and NASA Centers*

A typical day....

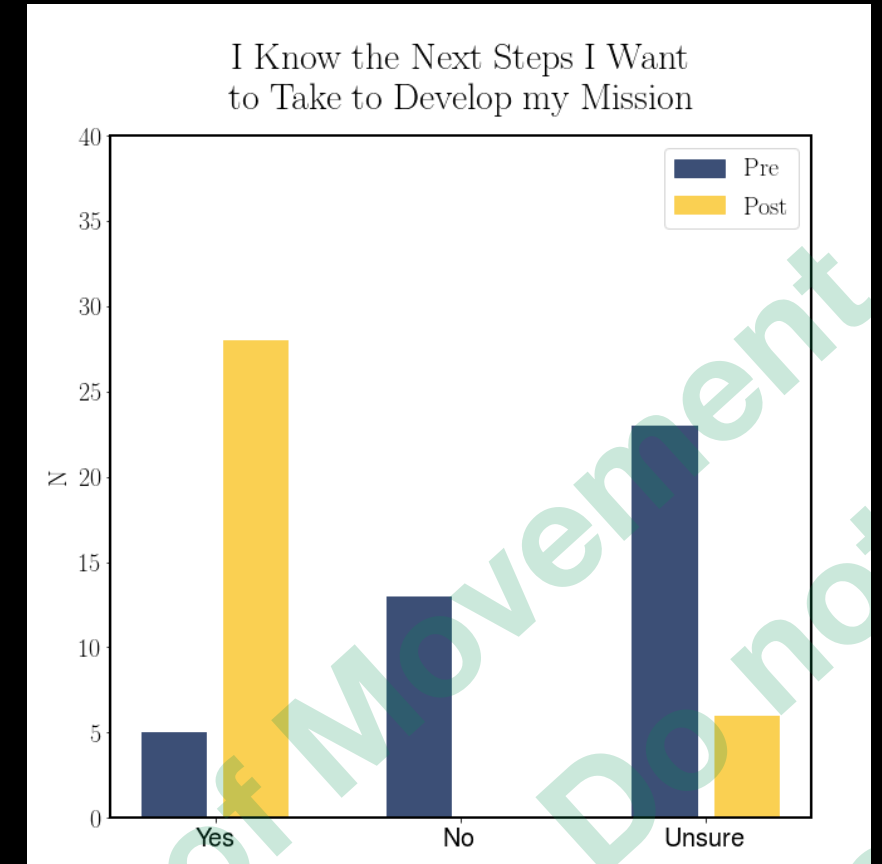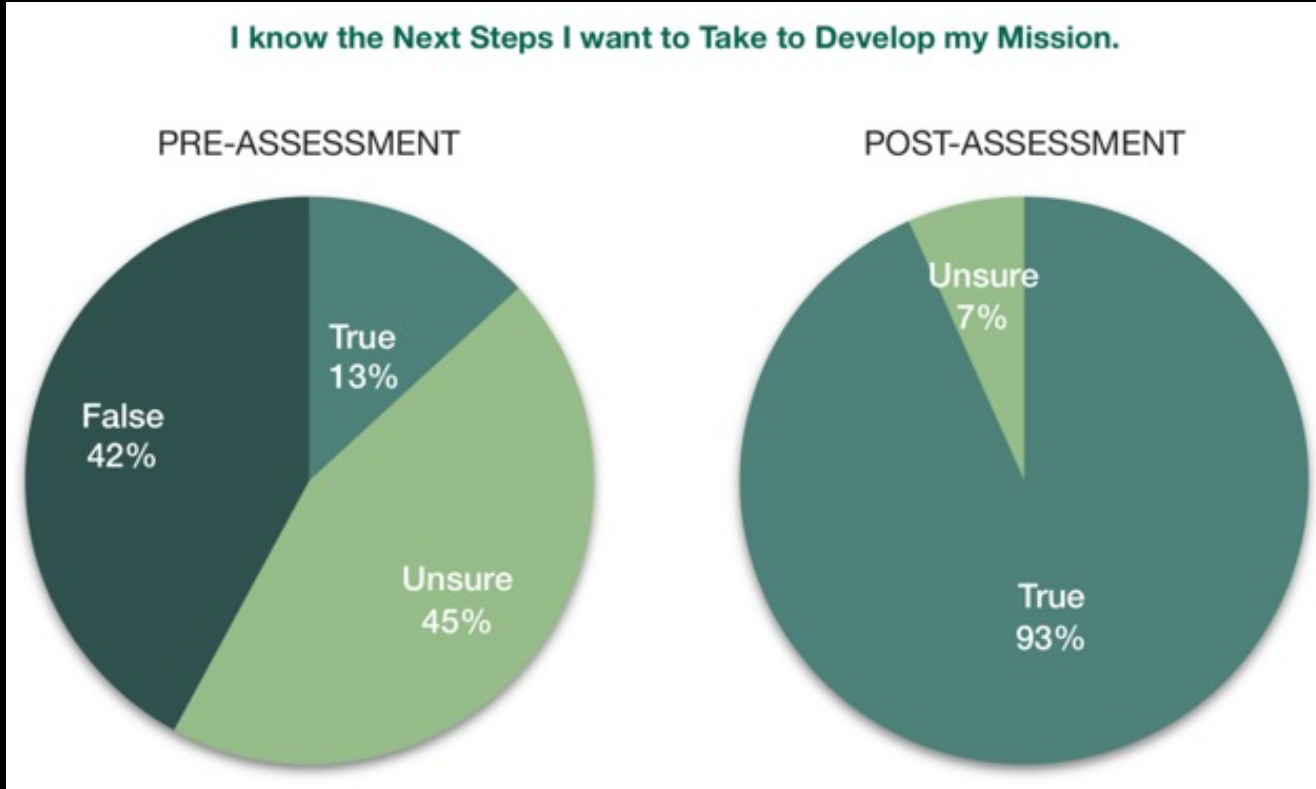| Time	Activity
8:15	*Welcome Back! Gather*
8:30	*Team Roles--there is more to life than being a PI--CoI, Instrument Sci etc.*
9:15	*Getting on a NASA Center's Radar*
10:00	*Break*
10:15	*Making a Winning Fact Sheet*
10:45	*Build your Fact Sheet with a small group*
11:15	*Communicating Visually*
11:45	*Communicating Visually Activity*
12:05	*Lunch*
13:05	*Inclusion Plan Development*
13:50	*Inclusion Plan Dev.Activity*
14:20	*Break*
14:40	*Umich Players*
16:10	*Office Hours/Happy Hour*
18:00	*Group Dinner*

2023 Launchpad Logistics

- All ~40 participants will have flights, transportation, and lodging paid for through a combination of funding from NASA TWSC and the Heising-Simons Foundation.

- All meals will be provided.

- There is no registration fee and the workshop should not cost the participants anything.

- NASA Civil Servants will have their travel and lodging paid for by their Agency.

Key Dates

- Applications Due to NSPIRES as an NOI: April 14th, 2023 at 11:59 Eastern Time

- Applicants notified of status: May 30th, 2023 (target)

- Workshop dates July 24-27, 2023

Impact of previous workshops-

Final Report from Movement Consulting, 2019 (left) and 2021 (Right)

Science Topics   News   For Researchers   Learners   Get Involved   Citizen Science   About Us   Español ⧉

For Researchers

Overview   FAQ   Solicitations   SMD Bridge Program   ROSES Blog   NAC Science Committee   NASA Postdoc Program   More ▾

PI Launchpad Workshop

Information about the 2023 PI Launchpad Workshop

Are you interested in developing your first flight mission proposal but have no idea where to start? NASA Science Mission Directorate (SMD), the Heising-Simons Foundation, and a team of mission experts have teamed up to make the mission development process more transparent and accessible.

will be hosting the 3rd PI Launchpad workshop at the University of Michigan, Ann
r, during the week of July 24th, 2023. This workshop will be in-person, with all costs
ered for participants. The workshop, like previous ones, will cover a range of topics
vant to mission development and including networking events.

previous years, an application will be posted to NSPIRES. The application will be
ar to previous workshops, with 5 questions, and will be posted in January 2023, and
in early April 2023. We will host a pre-proposal conference to answer questions

2021 Virtual Launchpad Workshop

> Watch the Presentations and Panels

> PI Launchpad Workshop Content

> 2021 Virtual Launchpad Information

> FAQs

> Accessibility Statement

2019 PI Launchpad Workshop

> 2019 Workshop Sessions
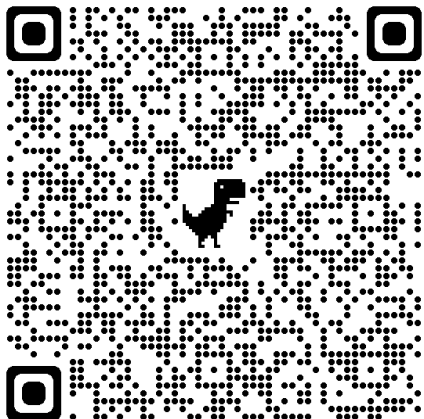
2023 PI Launchpad Organizing Team

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2023 Application:

- 5 questions focused on science, leadership, teams, decision making, and diversity, equity, inclusion, and accessibility (DEIA) work.

- Submit to NSPIRES in a pdf as an NOI, Due April 14th

- Statistics on previous workshop applications:
  - 2019: Nearly 200 applicants, 130 of which were compliant, 40 applicants selected.
  - 2021: 100 Applicants, 40 selected

- Reviewer pool consists of previous attendees of the workshop, as well as a diverse pool of early career researchers. All applications will be evaluated by at least two reviewers (goal is three reads per application)

Application Questions

1. **What is your science question that you would like to develop into a mission concept?**

As a prerequisite for participation, we want you to have a relevant science question that can be addressed via a mission concept that you will formulate throughout the workshop.

Please address the following questions in your answer in up to 500 words.
   a. **Why does answering your question require a spaceflight investigation?**
   b. **Why is now the appropriate time to develop your science question into a mission concept?**
   c. **How is your science question relevant to NASA's Science Mission Directorate science goals as laid out by decadal surveys and roadmaps (see below)?**
   d. **How would a mission derived from your science question be innovative or transformative?**

Application Questions

2. **Describe your views on leadership and the obligations of leaders, using specific examples from your lived experience and how you may embody them.**

We are not going to teach leadership skills in the workshop and thus a prerequisite for attendance is demonstrating previous thought and awareness of leadership skills.

Please address the following questions in your answer in up to 500 words.
   a. **Do you have a personal leadership style? If so, what is it?**
   b. **How do you motivate and support team members in their tasks?**
   c. **How do you ensure junior team members are prepared for future leadership roles?**
   d. **What process would you use to communicate critical decisions to members of your team?**

Application Questions

3. **Describe what you believe is the role of diversity, equity, inclusion, and accessibility (DEIA) in leadership and teams.**

DEIA is a core value of NASA, and we recognize that awareness of these issues is a key component of making innovative teams.

Please address the following questions in your answer in up to 500 words.
   a. **How does your lived experience inform your capabilities as the leader of a team?**
   b. **How have you supported and involved the people you hope to reach with your DEIA work?**
   c. **You may also include examples of DEIA work you have been involved in or initiated - including but not limited to in-person and virtual programs, focused interactions, and/or broad-reaching digital activities.**

Application Questions

4. Describe how group, power, and team dynamics inform how you would run an effective team.

Group, power, and team dynamics all play a role in whether a team will accomplish its goals.

Please address the following questions in your answer in up to 500 words.
   a. What are your thought processes and values for how you would build a team, considering power dynamics within a team?
   b. How have your past experiences being on teams (both positive and negative) influenced your team leadership style?
   c. How would you consider team members' strengths and weaknesses, existing and potential conflicts, and differences in life experience when organizing a team for success?

Application Questions

5. **Describe your thought process for organizing and making critical decisions about multiple priorities.**

Being a PI involves balancing diverse needs across science, engineering, budget, schedule, and policy, requiring strategic decision making.

Please address the following questions in your answer in up to 500 words.
   a. **What are your thought processes in decision making?**
   b. **How would you manage a complex project?**
   c. **How would you make decisions around delegation?**
   d. **Describe your potential management choices and constraints in the context of organizing a complex task, delegation, and making decisions that balance science desires with other requirements.**

Evaluation Rubric

Science Question

(binary-all three must be Yes for applicant to proceed)

1. Idea is timely, innovative/transformative (Yes/No)
2. Relevance to NASA SMD objectives (Yes/No)
3. Need for a spaceflight investigation (Yes/No)

Remaining criteria are scored low, medium, or high

Leadership

1. Demonstrated the ability to motivate and support team members
2. Demonstrated Stewardship/Mentorship
3. Demonstrated a thoughtful Communication process.

Team Dynamics

1. Demonstrated awareness of group dynamics & conflict resolution
2. Demonstrated team building process and power dynamics within teams

Decision Making

1. Demonstrated thought process and examples involved in decision making
2. Demonstrated ability to organize complex projects
3. Demonstrated ability to delegate tasks

Diversity, Equity, Inclusion, and Accessibility (DEIA)

1. Demonstrated the ability to be responsive to the needs of marginalized people in DEIA work
2. Demonstration of participation, leadership, and action in DEIA initiatives

Questions?