

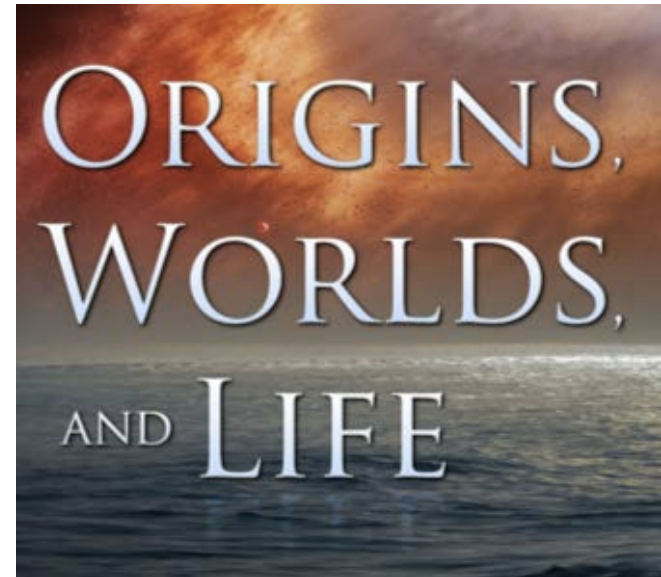
DEIA in Planetary Spacecraft Mission Science Teams

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Planetary Science and Astrobiology Decadal Survey - purpose

1. Assess the status of an entire scientific discipline
2. Identify key scientific questions to be addressed in the next decade
3. Prioritize the most important initiatives to address these questions
4. Provide Technical Risk and Cost Evaluation (TRACE) for recommended projects/missions
5. Conducted independently by the National Academies for sponsoring agencies



State of the Profession

- 2022 survey **first** to include consideration of the state of the profession and actions for enhancing diversity, equity, inclusion, and accessibility (DEIA)
- But, how do you consider the state of the profession?

DEIA Defined:

● Diversity

● Equity

● Inclusion

● Accessibility

2020 Workforce Survey

- Run by AIP's Statistical Research Center and funded by the DPS
- Questions on demographics
- How many times have you been a PI on a mission proposal? (never, once, 2x, 3x, 4+)
- How many times have you been a Co-I on a mission proposal?
- Can find more at <https://dps.aas.org/reports>

(34) What is your gender identity?

- Woman
 Man
 Another identity - (please specify if you wish)

 Prefer not to answer

(35) Do you identify as transgender?

- Yes
 No
 Prefer not to answer

(36) Do you identify as:

- Heterosexual
 Gay or Lesbian
 Bisexual
 Other (please specify if you wish)

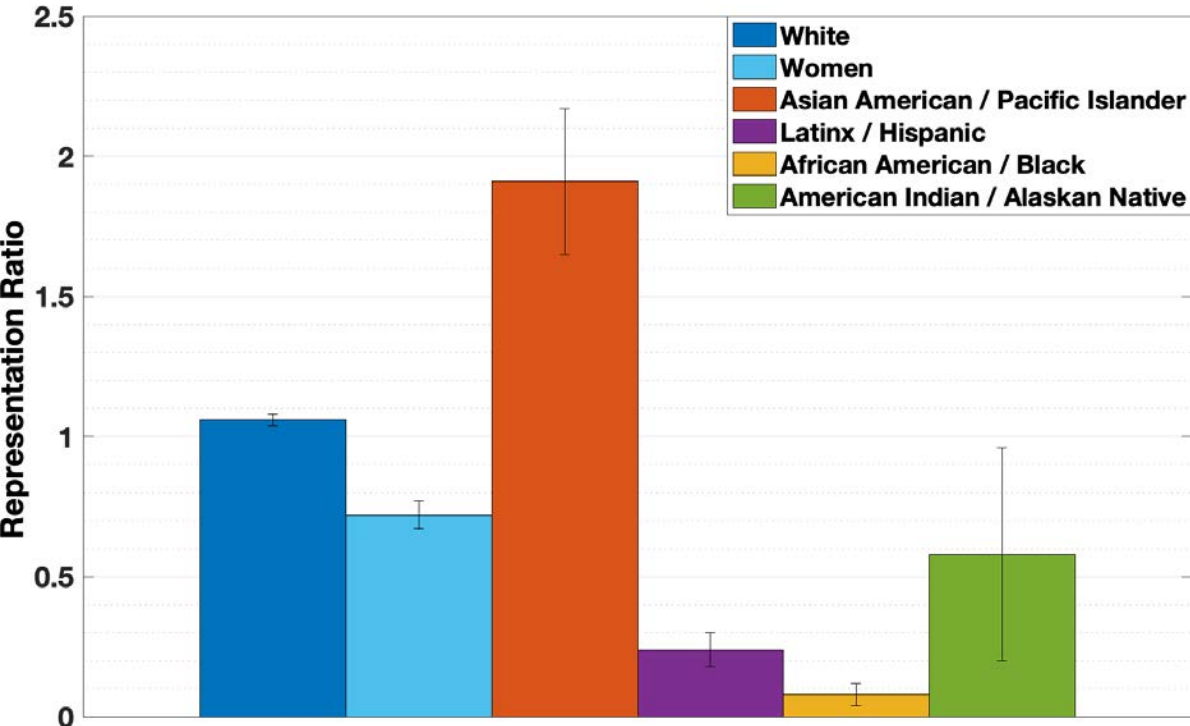
 Prefer not to answer

(37) Which of the following racial/ethnic designations best describes you?
Please select all that apply.

[Click here for more information](#)

- Hispanic/Latinx
 American Indian or Alaska Native
 Asian or Asian American
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Planetary Science Demographics

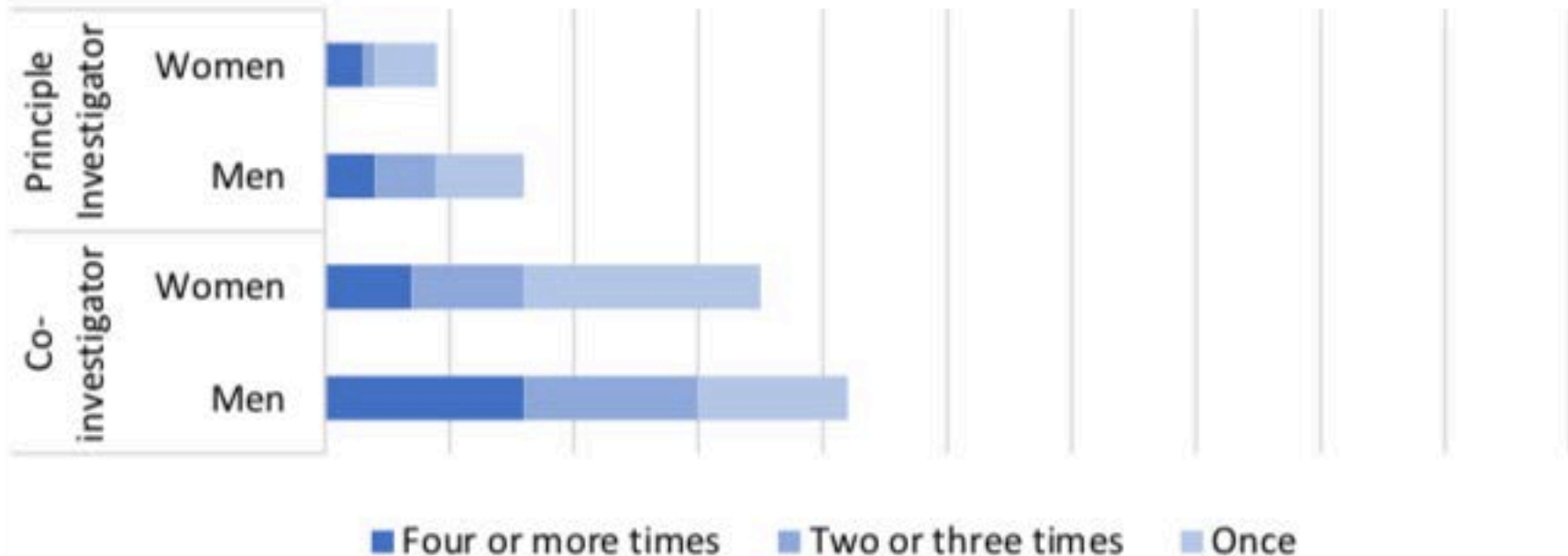


% of respondents

- Women 37%
- Disability 15%
- LGBTQ+ 10%
- Black, Latinx, Indigenous 7%
- Non-binary 1%
- See decadal white paper by Rivera-Valentín et al.

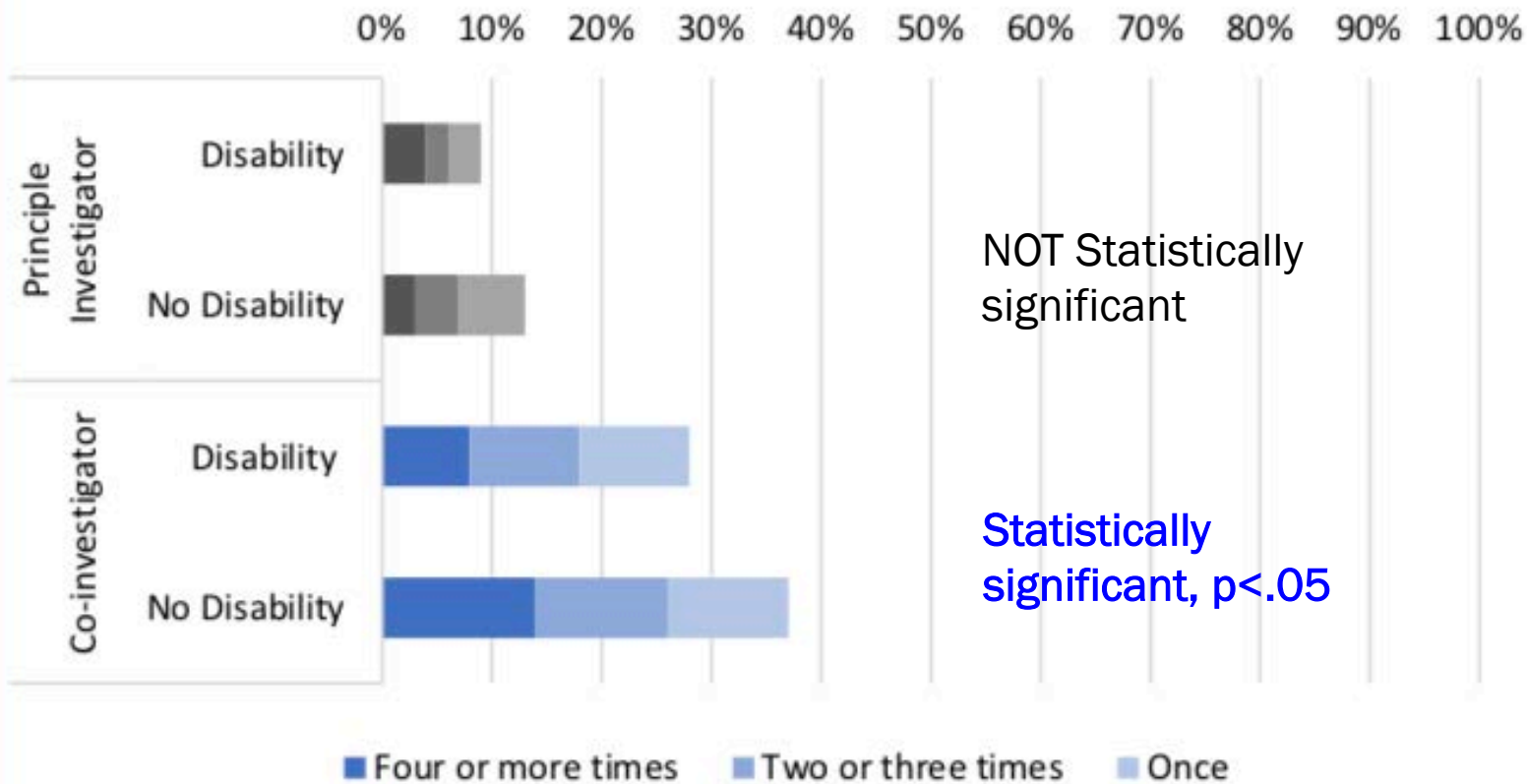
Number of Times on Mission Proposals for Men and Women

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



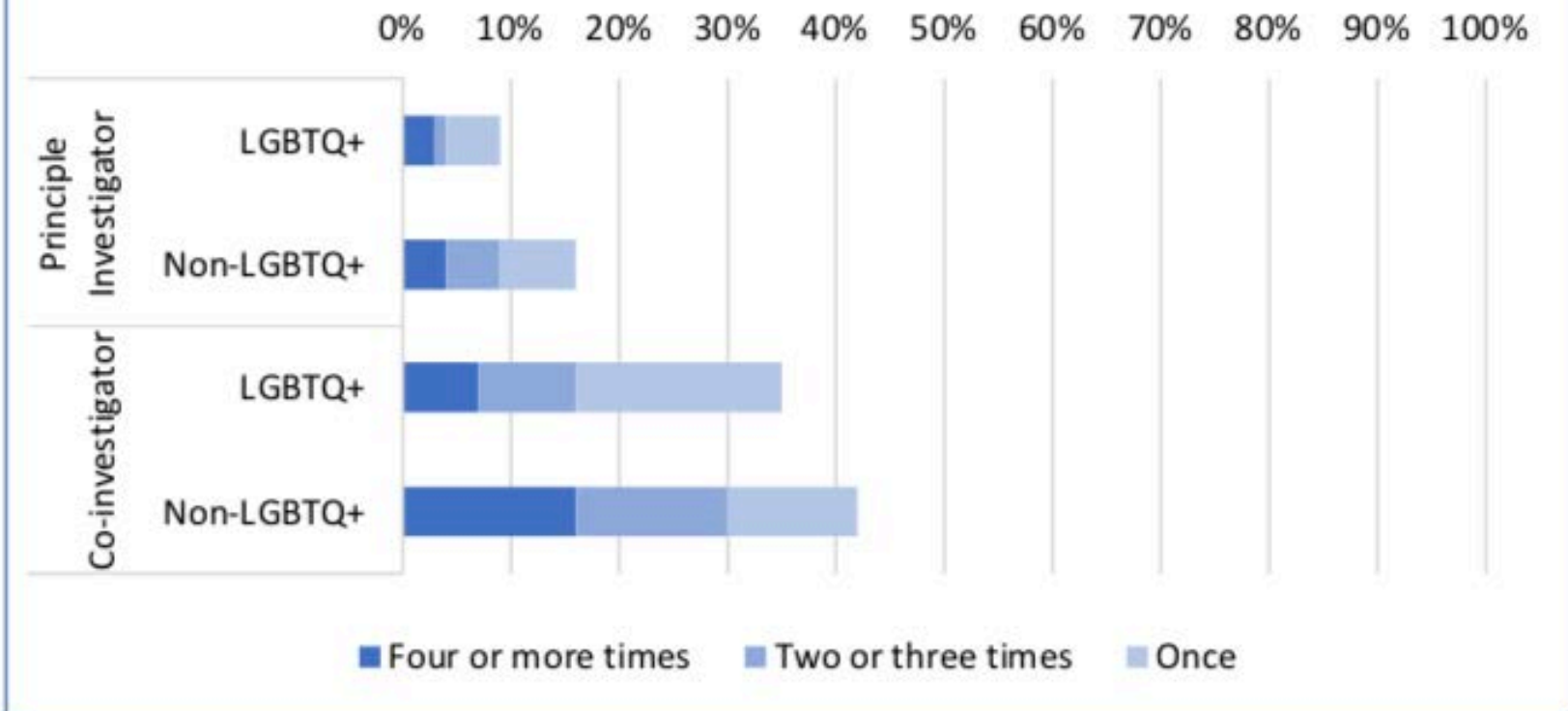
Findings shown in color were statistically significant, $p < .05$.

Times on mission proposals by disability status



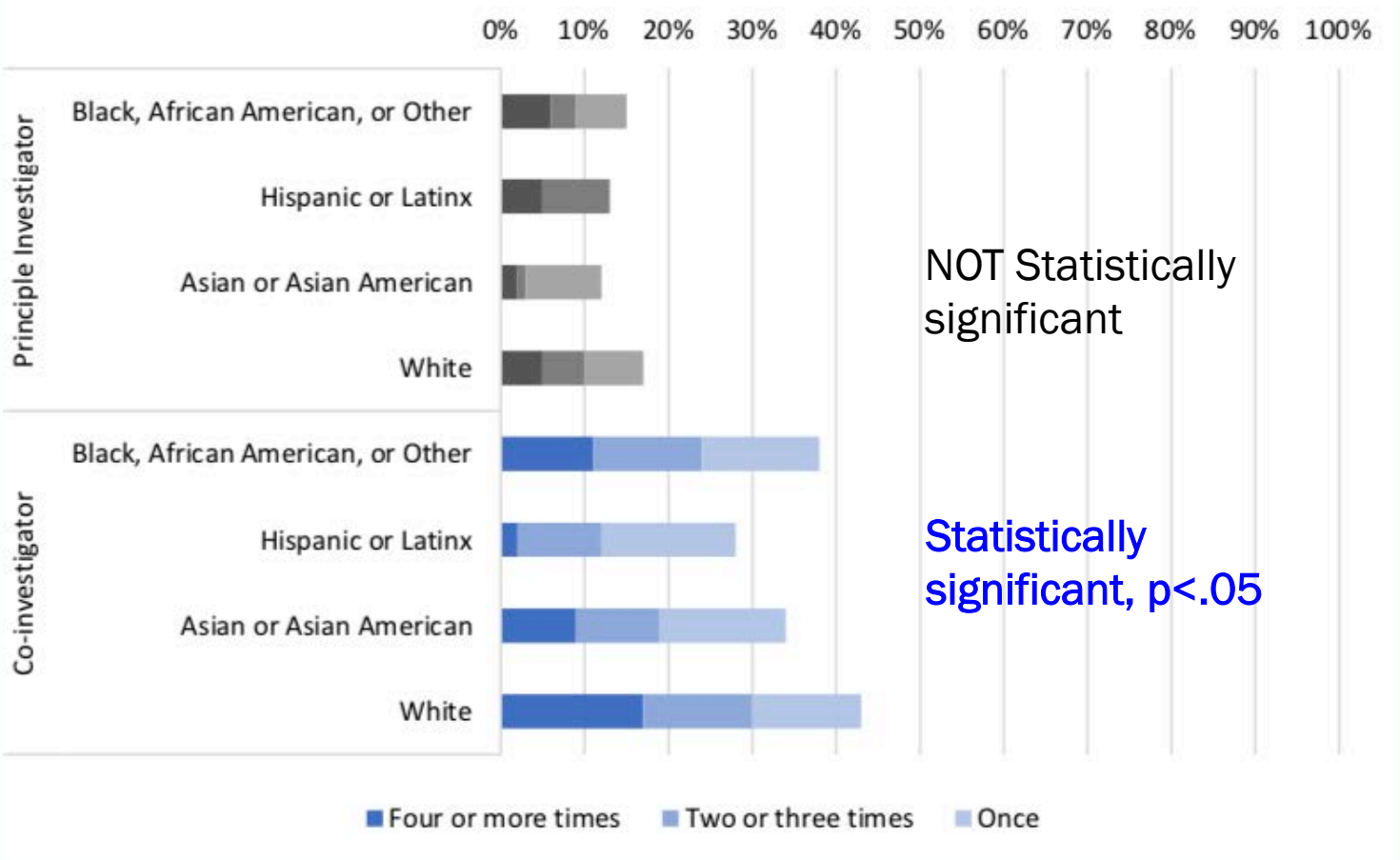
Disability status does not include respondents over 60 years old, who also indicated they were deaf, hard of hearing, or had serious difficulty standing, walking, and climbing stairs.

Number of Times on Mission Proposals by LGBTQ+ Identity



Findings shown in color were statistically significant, $p < .05$. LGBTQ+ included respondents who identify as gay, lesbian, bisexual, transgender, another sexual orientation, or another gender identity.

Times on mission proposals by race/ethnicity



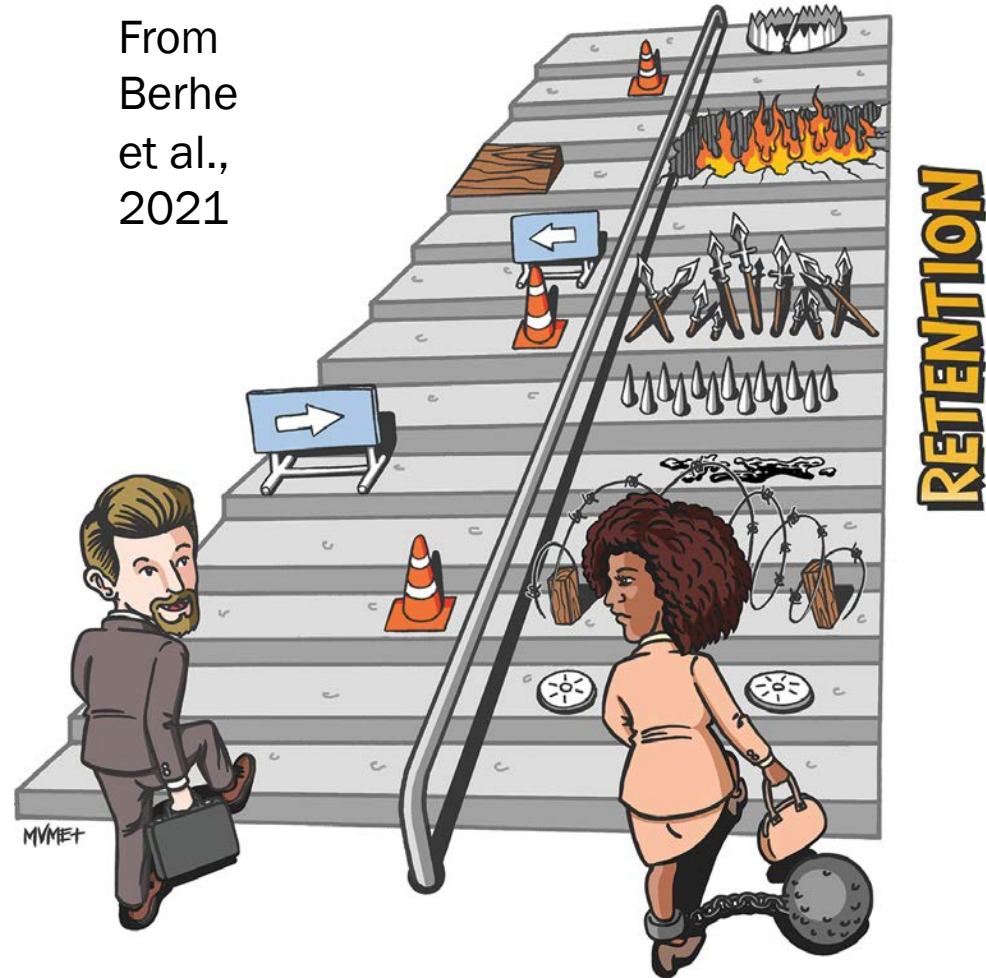
Other race/ethnicity includes respondents who chose Native American/Alaska Native, Native Hawaiian/Other Pacific Islander, or wrote in another Race/Ethnicity. These groups were too small to report separately and were combined for analysis.

Conclusions

- We already know that there are barriers to entry in planetary science for members of historically excluded groups
- These data show that, even for those who overcome those barriers, they face other barriers **within the field**, to full participation in the field

CAREER ACHIEVEMENTS

From
Berhe
et al.,
2021



Recommendations

- See the report from IDEA Con:
<https://zenodo.org/record/6656887>

1. Funding Agencies
2. Universities
3. Research Groups
4. Professional Organizations
5. Employers
6. Safety
7. Public Engagement



What you can do:

- Read report, advocate for changes
- Listen to members of underrepresented groups – do your own research
- Amplify voices of scientists least likely to be heard
- Be aware of your social capital and use it to help members of URM groups
- Fill out **surveys** after meetings, include **positive** & negative comments
- Bring considerations of diversity, equity, and inclusion into all aspects of doing science.
- Pay attention to whom you work with. Who is missing from your collaborations? What can you do to fill those gaps and engage with different people?
- **Think along multiple axes:** gender, race, LGBTQ+ status, ability status...
- Ask people at periphery of your network for new networking opportunities
- **Figure out how to apologize. Mistakes WILL happen.**

how you can help

