EARLY LESSONS LEARNED FROM DESIGNING WORKSHOPS FOR PLANETARY SCIENTISTS AND INFORMAL EDUCATORS IN ENGAGING DIVERSE AUDIENCES. A. J. Shaner[1], L Rubino-Hare[2], E. G. Rivera-Valentín[1], S. Shebby[3], [1]Lunar and Planetary Institute/USRA, shaner@lpi.usra.edu, [2]Northern Arizona University, [3]McREL International.

Introduction: The Planetary Resources and Content Heroes (ReaCH) project is taking deliberate steps to enhance the planetary science community's ability to engage with Black and Latinx children (Fig. 1) and their families. ReaCH is one of 29 projects funded through the SMD's Science Activation program.

Fig. 1. *The ReaCH logo reflects the team's desire to help planetary scientists more effectively engage diverse audiences, particularly Black and Latinx communities, in planetary science and exploration.*

Throughout the lifetime of the project, ReaCH will develop and continuously refine a model of effective practices for training planetary scientists to better engage Black and Latinx families based on principles of inclusion, diversity, equity, and accessibility (IDEA). The development of this model will be informed by 1) needs assessments, 2) research literature, 3) input from Black and Latinx communities and 4) input from IDEA experts. In addition, the ReaCH team is designing professional development workshops for planetary scientists and informal educators. These workshops will model best practices for effectively engaging Black and Latinx youth and provide data to continually refine the ReaCH model.

Planetary Engagement Workshops: Workshops will build on the Lunar and Planetary Institute's (LPI) and Applied Physics Laboratory's past, highly successful workshops (Fig. 2) and LPI's ongoing Sharing Planetary Science seminars. Workshop participants will explore strategies for reducing barriers and increase relevance to engage Black and Latinx audiences and will allow participants to form authentic partnerships for future collaborations. Each workshop will be followed by a public engagement event at a local institution to give workshop participants an opportunity to utilize the best practices discussed in the workshop.

Early Workshop Design and Feedback: In February 2022, the ReaCH team held a co-design meeting to test an early workshop design. Members of ReaCH target audiences were invited to attend and provide feedback. Three informal educators and four planetary scientists participated. In general, feedback generated during the review showed the ReaCH workshop design, so far, to be on the right track. More detailed results of this design review will be discussed.

Fig. 2. *Participants in an APL Solar System Exploration Public Engagement Institute observe a "Strange New Planet."*

More data will be collected to inform the ReaCH model with pilot *Planetary Engagement Workshops* across the United States for planetary scientists and informal educators. The first pilot will take place in early April 2022. Results of evaluation data from this pilot will be presented.

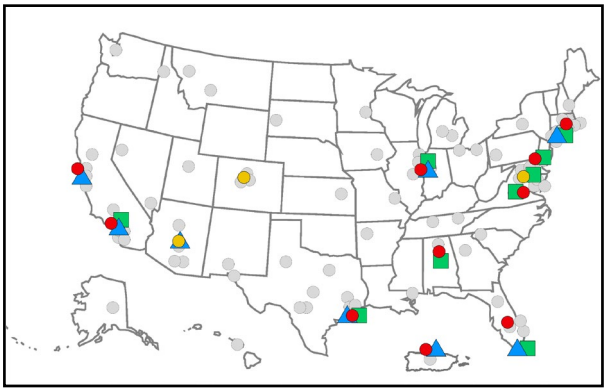

Fig 3. *Possible locations for Planetary Engagement Workshops (red dots). Locations are near concentrations of planetary research facilities (gray dots) and/or Latinx/Black communities (blue triangles/green squares). Black/Latinx community locales shown here have the highest populations based on 2010 census data. Yellow dots mark the locations of 2022 pilot workshops.*

Further refinements to the Planetary ReaCH model will be informed by evaluation data from the April pilot as well as evaluation data from two other pilots scheduled for 2022 (Fig. 3). Between 2023 and 2025, fifteen workshops will be held in locations determined by proximity to planetary research and mission facilities, and locations with high percentages of Black and/or Latinx communities. Stipends will be available for participants who are eligible to receive one.

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Additional Information: If you have any questions or would like additional information regarding the Planetary ReaCH project, please visit www.lpi.usra.edu/planetary-reach or contact Andy Shaner at shaner@lpi.usra.edu.