

SUPPORTING INCLUSION OF CHICANO/HISPANIC AND NATIVE AMERICAN REPRESENTATION IN PLANETARY SCIENCES. M.A. Matiella Novak,¹ C. Shupla², E. Rivera-Valentin. ¹Johns Hopkins University Applied Physics Laboratory, Laurel, MD (email: alexandra.matiella.novak@jhuapl.edu), ²Lunar and Planetary Institute, Houston, TX.

Introduction: The Society for the Advancement of Chicanos/Hispanics and Native Americans in the Sciences (SACNAS) annual conference is a prime opportunity to engage diverse audiences. This includes, mainly Latinx and Indigenous audiences, but many other underrepresented groups are present as well owing to the engaging and inclusive environment of the SACNAS conference. Many SACNAS participants are undergraduate, graduate, post-doc, as well as early-career level scientists looking to expand their experiences. The authors have participated in this conference by offering a variety of sessions to inspire, engage and employ future Scientists of Color. These sessions are focused on highlighting the research of planetary Scientists of Color as well as training on successfully applying to planetary and other STEM internship opportunities.

Planetary Science Sessions: Planetary science and exploration encompasses a diverse field of disciplines and technologies. Planetary Science sessions at SACNAS have focused on the many fields of research being conducted by planetary scientists and explorers, including human and robotic exploration, planetary geology and planetary defense, with a focus on research using data from NASA planetary exploration missions. The goal of this session is to show research opportunities available in planetary science and exploration. The presentations in this session cover multi-disciplinary approaches to the exploration of our geospace and planetary surfaces to show the diversity and inclusion of our backgrounds and how we apply them towards a common scientific objective.

We are committed to showing and strengthening the diversity and representation of all people in the planetary sciences and exploration fields. Therefore, all presenters are Scientists of Color, and diverse in their genders. In choosing which field of study category we represent, we chose “other” as neither the “Geosciences” nor the “Physics and Astronomy” categories alone describe our work well, so we recognize an opportunity to share “Planetary Science and Exploration” as another area of STEM research that offers many promising career paths in academia, research and industry. The presenters come from institutions that cover Texas and Maryland, as well as academic and non-profit organizations. Our presenters come from a variety of a careers

stages including mid-career to senior-level staff; Principal Investigators and Program Managers; and internship mentors.

Highlighting the work of Planetary Scientists of Color at SACNAS is not just beneficial for sharing the science with underrepresented groups, but it also provides an opportunity for Scientists of Color to present their science to a large STEM audience. Scientists of Color, and women in particular, are still the least likely group to be invited or assigned a talk at the biggest science conferences [1]. By inviting Women of Color SME’s to speak at our Planetary Science session, we are providing a counterweight to the persistent practice of excluding these scientists from opportunities to speak at conferences.

Internship Application Sessions: The goals of these sessions are to highlight strategies that undergraduate and graduate students can use to prepare a competitive internship application, to encourage students who might otherwise opt-out and to enable students to highlight those valuable life experiences and soft-skills that make them exceptional candidates. Exciting undergraduate and graduate internship positions can be extremely competitive, yet successful applications don’t always need perfect GPA’s to be considered.

Participants on these sessions have learned the steps involved in preparing and submitting a competitive internship application, including advanced planning, researching the institution and internship program, giving advisors the information needed to prepare excellent reference letters, preparing a professional CV, and drafting and editing a cover letter. Presenters share tips on highlighting those experiences and soft-skills that can make an application exemplary to increase the likelihood of a successful internship application. NASA internship opportunities are also shared with participants, so they can immediately put their training to use in applying for these internships. For example, at the 2021 SACNAS meeting internship and hiring opportunities were shared and a SACNAS participant at the PhD level was able to find a position at APL, where they have recently been hired into the Technical Professional Staff to work on projects in both Civil Space and National Security Space missions.

References: [1] Ford, H.F. et al (2019) *Nature* 576, 32-35.