

NASA ACTIVITIES: GET INVOLVED TO EFFECT CHANGE. Nicolle E. B. Zellner¹, LaJuan K. Moore¹, and Stephen A. Rinehart¹, ¹NASA Planetary Science Division, NASA HQ, Mary W. Jackson Building, Washington, D. C. 20546-0001. (Corresponding e-mail address: lajuan.moore@nasa.gov).

Introduction: In recent years, NASA’s Science Mission Directorate (SMD), which includes the Heliophysics, Astrophysics, Planetary Science, Earth Science, and Biological and Physical Sciences divisions, has been integrating best practices with science community input to seek out and establish internal mechanisms by which to improve measures of Inclusion, one of NASA’s core values. The Planetary Science Division (PSD), in particular, has the goal of increasing the diversity of people and institutions funded by PSD and expanding the community that supports NASA’s forward-looking science and exploration goals. One way to help make this happen is to get the community involved in NASA activities, and each division provides multiple opportunities for people in the science community to participate in activities that are both compensated and voluntary. Although various funding lines exist for supporting research and similar pursuits, there are also professional development opportunities that span all career stages, from undergraduate to senior-career researcher/professor.

NASA Internships: NASA’s Office of STEM Engagement (OSTEM) manages internship positions for high school, undergraduate, and graduate students throughout the academic year and over the summer. The OSTEM partners with the Universities Space Research Association (USRA) to coordinate and post ads from NASA personnel for internships, process applications from prospective interns, and place successful candidates into intern positions. Students from all over the country, with any kind of major and at any type of institution, are welcome to apply.

Currently NASA’s PSD has 14 internship positions available for Summer 2022, with a specific goal of recruiting students from minority-serving institutions (MSIs). The Planetary Science Division is able to work directly with staff in the Minority University Research Education Program (MUREP) to create programs that are specific to MSIs only, at the direction of Executive Order (EO) #14035 [1], a published directive from the President of the United States. This EO gives NASA the ability to work with members of underrepresented communities in order to advance inclusion, diversity, equity, and accessibility (IDEA) in the federal workforce.

The OSTEM also manages The Pathways Program that offers current students and recent graduates paid internships (co-ops) that are direct pipelines to full-time employment at NASA upon graduation. Additionally,

international university students from participating countries are eligible to intern through NASA’s International Internship Project. Learn more about all of these internship programs and opportunities at <https://intern.nasa.gov/>.

NASA IPA Positions: Temporary assignments via the Intergovernmental Personnel Act (IPA) allow professionals from academic (and other) institutions to take a leave-in-service from their home institutions in order to work at NASA so that they can learn about the way NASA “works” from the inside. Duties include assisting in and leading review panels as Program Officers, organizing workshops, and undertaking other activities as desired. Positions can last up to six years and include a government-level salary, travel funding (including conferences), and cost-of-living allowances when a housing relocation is involved. Full details are included when IPA ads are posted (at usajobs.gov), and a brief description of this program can be found at <https://nasapeople.nasa.gov/hclwp/intergovernmental.htm>.

Proposal Review Panels: Thousands of proposals are reviewed annually across SMD and require subject matter expertise from scientists in most fields, regardless of the type of institution. Proposal topics include scientific research and data analysis (e.g., sample analyses, computational studies, experiments); instrument design; technology development; participating scientist or co-investigator on a NASA mission or spacecraft; virtual institutes; and mission planning and implementation, among other topics as listed in the annual Release of Research Opportunities in Space and Earth Science (ROSES; [2]) and also in the NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES; [3]). Panels usually require 6-8 panelists, including the Group Chief, who manages the discussion schedule and provides guidance on the evaluations prior to review by the NASA Program Officers, and the Executive Secretary, an early-career postdoctoral researcher or an advanced graduate student who is responsible for keeping the discussion on task and the panel running smoothly. Participating on review panels is compensated with a daily honorarium, and when travel is involved, all expenses are covered. Learn about volunteering for these positions at <https://science.nasa.gov/researchers/volunteer-review-panels>.

The OSTEM and MUREP also regularly solicit proposals that are aimed at improving education and

professional development opportunities at historically underrepresented colleges and universities around the country. These proposals also require subject matter experts, including education and assessment professionals, to review these proposals. Learn more about MUREP funding opportunities and resources at <https://www.nasa.gov/stem/murep/projects/index.html>. Other announcements related to Engagement Opportunities in NASA STEM (EONS) can be found on the NSPIRES page.

Community-wide Exploration and Analysis Groups: Each division in SMD has its own set of analysis groups that are comprised of volunteers who act as liaisons between the science community and the division. PSD has eight analysis groups (AGs) that support the NASA and research community. Learn more about these groups and how to get involved at <https://science.nasa.gov/science-committee/subcommittees/nac-planetary-science-subcommittee/analysis-groups>.

There also exists a community-wide cross-AG IDEA Working Group that meets regularly to discuss and disseminate findings and other recommendations associated with IDEA matters [4, this conference]. The group reports to the NASA Planetary Science Advisory Committee (PAC) and actively participates in the AG meetings.

Additional Activities: In any given year, NASA or the National Academies solicit Requests for Information (RFIs) and nominations for advisory committees (e.g., PAC; Committee on Astrobiology and Planetary Science, CAPS). Every decade, the National Academies solicits input from the science community on the direction of science and space exploration as well as on the status of the workforce for the coming decade. These types of opportunities allow for the submission of both individual and group White Papers that serve as comments to be evaluated and incorporated into the next Decadal Survey [e.g., 5].

Summary: As described herein, there are ample opportunities for members of the science community, no matter the career stage or institutional type, to contribute to NASA's mission. Volunteer, comment, and spread the word! Contributions from and participation by members of the science community are essential for supporting and achieving IDEA goals at NASA.

References: [1] Biden J. R. (2021) Executive Order on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce, <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/06/25/executive-order-on-diversity-equity-inclusion-and-accessibility-in-the-federal-workforce/>. [2] NASA (2022) Research Opportunities in Space and Earth Sciences,

<https://nspires.nasaprs.com/external/solicitations/summary!init.do?solId={341BDCCE-1F95-D00C-38B3-D9CB183FFEEB}&path=open>. [3] NASA Solicitation and Proposal Integrated Review and Evaluation System, <https://nspires.nasaprs.com/external/>. [4] Mcadam M. et al. (2022) Adv. IDEA in Plan. Sci. Conf., 2024.pdf. [5] Bull. Amer. Astro. Soc. (2021) Whitepapers for the Planetary Science and Astrobiology Decadal Survey 2023-2032, 53(4), <https://baas.aas.org/vol-53-issue-4>.