



Arecibo Science Advocacy Partnership

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To the National Science Foundation:

On behalf of the Arecibo Science Advocacy Partnership, we are writing to request that the NSF state its intentions with respect to the next Arecibo Observatory Cooperative Agreement, its plans for the facility re-competition, and potential timelines for solicitation and award of the facility management in the next five years. As the contract term date is quickly approaching, and many staff members are entirely unsure of whether they will have a job at Arecibo next year, it seems a matter of utmost urgency to make this position clear. In addition, we would like to ask the NSF to comment on the recent results of the [Planetary Decadal Survey](#), which emphatically calls for the nation's planetary radar capabilities to promptly be improved in the interest of both science and planetary defense. We understand that some reports on the December 1, 2020, collapse and the subsequent damage are still being finalized. However, we feel strongly that such reports have no impact on the clear necessity for a near-term plan for this site.

There is no dispute about Arecibo's unparalleled contributions to astronomy, planetary science, and atmospheric science, as has been made clear through numerous reports, articles, and decadal surveys, as well as by the recent [unanimous passing](#) of a [Senate Resolution](#) that encourages the NSF "to study means of replacing the scientific capabilities that were lost at the Arecibo Observatory, utilizing new state-of-the-art technologies at the site". The recently released National Academies of Science, Engineering, and Medicine [Planetary Science and Astrobiology Decadal Survey](#) report, titled "Origins, Worlds, and Life: A Decadal Strategy for Planetary Science and Astrobiology" finds that "the loss of the Arecibo Observatory planetary radar program has resulted in a significant gap in solar system observations, particularly in support of planetary defense." The report recommends that "NASA and NSF should review the current radar infrastructure to determine how best to meet the community's needs, including expanded capabilities to replace those lost with Arecibo" and that "as the steward of ground-based observatories with NEO observing capabilities, NSF should support and prioritize critical planetary defense observations of NEOs at its ground-based facilities". Restoring radar capabilities at the Arecibo Observatory is absolutely essential for ensuring the ability of the U.S. to maintain a strong planetary defense infrastructure.

Additionally, the disciplinary science panel of the recent National Academies Decadal Survey on Astronomy and Astrophysics (Astro2020) found Arecibo “irreplaceable”, offering “unique capabilities for addressing a number of key high-priority science questions, and found that Arecibo played a crucial supporting role in addressing many others. Another key Astro2020 goal is to enhance community engagement with astronomy. Arecibo’s Ángel Ramos Foundation Visitor Center “has been a model for this” with its outreach to hundreds of thousands of Puerto Ricans and visitors, its “promotion of demographic diversity in STEM” and “its impact on post-secondary education.” Arecibo’s profound impact as inspiration to people around the world is clear. A small collection of personal tributes that convey this deep impact can be found [here](#).

It is clear that the loss of Arecibo’s capabilities will significantly impact the ability of the U.S. planetary and astronomy communities to address high-priority science questions, and is a major blow to the earliest-career scientists who have depended on this facility to launch their careers. This has made the need for NSF to state its position on its commitment to the future of Arecibo, most pressingly the commitment to a renewed management contract ten months from now, even more urgent.

Thank you. Please don’t hesitate to contact us with any concerns or questions. Feel free to visit our website for our statements on assessing the loss of the telescope, our press release on the planetary decadal survey, and information on our mission to support and advocate for the future of the Arecibo Observatory.

Sincerely,

The Board of the
Arecibo Science Advocacy Partnership
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