

# United States Senate

WASHINGTON, DC 20510

December 14, 2022

The Honorable Sethuraman Panchanathan  
Director  
National Science Foundation  
2415 Eisenhower Avenue  
Alexandria, Virginia 22314

Dear Dr. Panchanathan,

Thank you for your leadership on science, technology, engineering, and mathematics (STEM) research and education. The National Science Foundation (NSF) and its programs and facilities, such as the world-class Arecibo Observatory, are critical in furthering this mission. The collapse of the 305-meter radio telescope at the Arecibo Observatory was a devastating loss for the international astronomy community, the people of Puerto Rico, and countless others. We share your commitment to STEM education and research and want to ensure that the path forward for the Arecibo Observatory encapsulates the rich scientific, education, and economic benefits of its 305-meter telescope.

In its nearly six decades in operation, the Arecibo Observatory Education and Public Outreach Program played a role in inspiring thousands of students in Puerto Rico, the nation, and the world to pursue careers in STEM. We appreciate NSF's recent announcement to establish a STEM education center at the Arecibo Observatory. This center would build on and grow the observatory's existing education and outreach programs. We are encouraged that NSF's announcement indicates there will be continuity for ongoing programs and NSF-funded activities. However, despite the announcement's solicitation requesting proposals for a new cooperative agreement to manage the facility, it "does not include rebuilding the 305-meter telescope or operational support for current scientific infrastructure."<sup>1</sup> Without active, on-site scientific research, including that done by the instruments currently in operation, we worry the impact of the center may not be as successful as programs at the Arecibo Observatory historically have been.

We are also concerned that NSF's proposal does not fully account for the vital scientific advancements of the Arecibo Observatory. Since the Arecibo Telescope was completed in 1963, the telescope made unparalleled contributions to radio astronomy, time domain astronomy, planetary science, and more. It also played a significant role in planetary defense, including providing data used in the National Aeronautics and Space Administration's (NASA) successful DART mission earlier this year.<sup>2</sup> We understand NSF is working with NASA to study the

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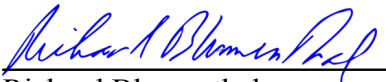
<sup>1</sup> National Science Foundation, "NSF to create a new education center at Arecibo Observatory," October 13, 2022, <https://beta.nsf.gov/news/nsf-create-new-education-center-arecibo>.

<sup>2</sup> Zenaida Gonzalez Kotala, "NASA's Double Asteroid Redirection Test Mission Launching Today Aided by Arecibo Observatory," *UCF Today* (Orlando, FL), November 23, 2021, <https://www.ucf.edu/news/nasas-double->


existing capabilities of ground-based planetary defense. As this study occurs, we encourage it to take into account the achievements of the Arecibo Observatory and its 305-meter radio telescope. We further urge continued consideration of Puerto Rico and the Arecibo Observatory site as a contender for future investments utilizing state-of-the-art technologies to replace lost scientific capabilities.

Thank you for your consideration of our letter. We look forward to working with you to continue to cement the legacy of the Arecibo Observatory and Telescope for generations to come.

Sincerely,

  
Richard Blumenthal  
United States Senator

  
Robert Menendez  
United States Senator

  
Elizabeth Warren  
United States Senator

CC: National Aeronautics and Space Administration