Dear Senator X / Representative X,

With the collapse of the world’s largest radio/radar telescope for more than 50 years, the Arecibo Observatory in Puerto Rico, the U.S. lost irreplaceable capabilities to collect data such as that which revealed a secret nuclear test in the Vela incident, to make a detailed picture of the orbits and shapes of Near Earth Asteroids, and much more.

**The National Science Foundation proposes to replace this world-class observatory with only a STEM education center, which is why we need your help.**

Bipartisan support is a rarity these days, but Arecibo has attracted it. In fact, the Senate passed a resolution unanimously to “encourage the National Science Foundation . . . 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 CHIPS Act “encouraged” NSF to strengthen and expand the Observatory’s role, not cut it past the bone, and gut its scientific mission. Congress intended “education, outreach and diversity programs” but also emphasized “future research capabilities and technology at the site.”

So it was a rude shock when NSF announced in October that they would shut down the Observatory’s scientific mission and retain only its STEM Education programs from September 2023 onward. As a group of more than 350 scientists, we ask your help to avoid that calamity for U.S. science leadership.

At present, NSF's decision is that by August 14th 2023, all working instruments at Arecibo Observatory will be mothballed, and most of the current staff will be terminated. **This will severely limit any future possibility of scientific use of the site, which is still a productive scientific establishment, with operating instrumentation and computing systems.**

Hence, we are sending these urgent congressional oversight requests:

**• We ask Congress to urge NSF to halt their closure and mothballing procedures.**

**• We ask Congress to urge NSF to continue ongoing science operations at Arecibo, in parallel to expanding the educational mission as proposed through the NSF Arecibo Center for STEM Education and Research (ACSER) program.**

**• We ask Congress to support a new or renewed cooperative agreement for the management of Arecibo Observatory as a scientific institution.**

For the background of what has been done so far, in May 2022, ASAP wrote an ASAP open letter to NSF (<https://areciboscience.org/OpenLetter_to_NSF.pdf>) which was emailed to the NSF Director, the Head of the NSF Directorate for Mathematical and Physical Sciences, and the NSF Program officer for Arecibo Observatory (among others). ASAP did not receive any communication in response.

On October 13th, 2022, NSF published a call for proposals to establish a new STEM Education Center at the Arecibo site (<https://beta.nsf.gov/news/nsf-create-new-education-center-arecibo>), and the ending of the Scientific mission of the Observatory.

Here are two documents expressing the ASAP's reaction to that announcement:

<https://areciboscience.org/Boardstatement.pdf> (Board statement)

<https://areciboscience.org/ASAPMediaRelease_short.pdf> (press release)

On Nov. 18th, 2022, there was a bipartisan and bicameral letter from Puerto Rico's Residence Commissioner, Hon. Jennifer Gonzalez 's office sent to the NSF supporting the science mission of the Observatory: <https://gonzalez-colon.house.gov/media/press-releases/members-congress-request-updated-cooperative-agreement-arecibo-observatory>

On Dec 14th, 2022, Senator Blumenthal's office also sent a letter to the NSF with a similar request: <https://www.blumenthal.senate.gov/imo/media/doc/121422nsfnasaareciboobservatory.pdf>

The NSF replied to these around Jan 19th, 2023: <https://areciboscience.org/NSFResponse_20230119.pdf>

The ASAP’s comments to the NSF’s reply can be read here:

- <https://areciboscience.org/ASAP-NSF-Blumenthal-20230207.pdf> (Comments to NSF’s reply to Senator Blumenthal’s letter)

- <https://areciboscience.org/ASAP-NSF-GonzalezColon-20230206.pdf> (Comments to NSF’s reply to Representative González-Colón’s letter)

In addition, this short 2-page document on restoring the US leadership in radio astronomy and radar science at the Arecibo Observatory might be of general interest to you: <https://areciboscience.org/ASAP-RestoreUSLeadership.pdf>

Should you have any further questions, please do not hesitate to contact me.

Many thanks and with all best wishes,