United States Senate

WASHINGTON, DC 20510

May 22, 2025

The Honorable Jerry Moran
Chair
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Senate Committee on Appropriations
U.S. Senate
Washington, D.C. 20510

The Honorable Chris Van Hollen
Ranking Member
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Senate Committee on Appropriations
U.S. Senate
Washington, D.C. 20510

Dear Chair Moran and Vice Chairman Van Hollen:

As you work on the Fiscal Year (FY) 2026 appropriations for the National Science Foundation, we respectfully request that you include funding above the budget request to implement the recommendations of the most recent National Academy of Sciences Decadal Survey for Astronomy (ASTRO 2020).

Specifically, we request an additional $150,000,000 in the National Science Foundation's Research and Related Activities (R&RA) Account for design and development work on projects identified as the highest ground-based priorities in the decadal; and an additional $50,000,000 in the Major Research Equipment and Facilities Construction (MREFC) Account for construction work, including the purchase of long lead items, next fiscal year for use on the US-Extremely Large Telescope Program (US-ELTP), which will be considered for approval by the National Science Board later this year.

Additional funds are greatly needed in FY 2026 because American leadership in astronomy, for the first time in nearly seven decades, is at high risk with implications for US scientific leadership and our national security. The European Southern Observatory (ESO) is today constructing the European Extremely Large Telescope (EELT), an observatory in Chile that will be finished later this decade whose observing power is approximately four to five times that of existing US ground-based observatories in optical astronomy and on which ESO plans to reserve its use only for scientists from its Member countries and Chile. Of greater concern, is the emergence of China as a serious threat by way of its planned investment of more than $350 million in Chile in various astronomy focused university-based partnerships with the goal of building a meaningfully sized survey telescope in Chile's Andes Mountains not far from current US southern hemisphere observing locations.

Without sustained US investment in the field in these future facilities, our non-European allies in Asia will likely have no choice but to partner with China if they wish to remain viable in astronomy. These aggressive investments by our allies and adversaries alike recognize the power of astronomy: to stimulate interest in STEM professions and learning; its heritage in producing

remarkable technologies in optical sciences, engineering and data science used by many industries; and the power of new knowledge in helping to understand our universe more profoundly while projecting national soft power that builds diplomatic goodwill. Without further federal investment that scales in FY 2026, the US faces a daunting future where its ground-based astronomy will be considered second class by scientists globally because its current observing platforms will no longer be state of the art.

The US-ELTP leverages the largest ever non-federal investment in scientific research infrastructure from the founders of the two US-led observatories, including U.S. universities and foundations and international partners such as Canada, Japan, India, Israel, Australia, Brazil, South Korea, Taiwan, and Chile. In addition, the combined scientific observational power of an ELT in each hemisphere will ensure US leadership continues in the field for the next half century. A two hemisphere, two telescope system will enable more discoveries, will guarantee robust community access, and will strengthen important international alliances rather than inflaming and weakening them.

Both projects have already been through Conceptual Design review (CDR) and Preliminary Design Review (PDR) at the NSF. The National Science Board was however not provided with updated financial statements before their recent vote in favor of a single telescope, which would have shown the strong level of existing financial commitments from the partners, and which would address their concern about funding risk. Their statement indicates that they feel constrained by both historical funding averages for NSF construction projects and competing needs for science infrastructure in other disciplines. The Congress in this case must provide leadership to both provide direction that two telescopes must be supported by the NSF, and that the funding will be provided without requiring the NSF to reduce funding elsewhere.

American astronomy is at an inflection point and inaction on the US-ELTP will lead to a full-scale crisis in the field in the coming years. We must act boldly in the coming appropriations cycle to keep these projects on track so that they can be completed in a timely fashion in the early 2030's. In over 40 years of Academy surveys, Congress has never failed to fund the first ranked priority on the ground or in space – indeed, it has led to Congress supporting major achievements in astronomy, such as the Hubble Space Telescope and the James Webb Space Telescope.

To avert a future crisis in astronomy, we respectfully urge you to support funding for implementation at no less than $150,000,000 to the NSF's R&RA Account and $50,000,000 to NSF's MREFC, and the inclusion of report language in the FY26 Commerce, Justice, Science Appropriations Act to ensure that such a failure does not happen under our watch.

Thank you for the consideration of our request.

Sincerely,

Mark Kelly
United States Senator

Ben Ray Lujan
United States Senator

Richard J. Durbin
United States Senator

Alex Padilla
United States Senator

Cory A. Booker
United States Senator

Adam B. Schiff
United States Senator

Commerce, Justice and Science Group Letter Table
CJS_Kelly_Group_250522-021755[LetterID 22044]

ID	Sub	Request Agency or Account	Request Project Name	Request ($000)
192620	CJS Group	[Title III]/[Science]/[National Science Foundation (NSF)]/[Research and related activities] **[Member Staff]** - Sydney Hess sydney_hess@kelly.senate.gov 202-224-4571	ASTRO 2020 Astronomy Decadal Funding for Giant Magellan Telescope and Thirty Meter Telescope - R&RA **[Member's Request (text)]** - Additional $150,000,000 for design and development work on projects identified as the highest ground-based priorities in the decadal	$0
192621	CJS Group	[Title III]/[Science]/[National Science Foundation (NSF)]/[Major research equipment and facilities construction (MREFC)] **[Member Staff]** - Sydney Hess sydney_hess@kelly.senate.gov 202-224-4571	ASTRO 2020 Astronomy Decadal Funding for Giant Magellan Telescope and Thirty Meter Telescope - MREFC **[Member's Request (text)]** - Additional $50,000,000 in the Major Research Equipment and Facilities Construction (MREFC) Account	$0