



NATIONAL SCIENCE FOUNDATION
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ALEXANDRIA, VIRGINIA 22314

NSF 18-028

Dear Colleague Letter: Provision of Capabilities for Storing, Curating, and Managing Scientific Ice Cores for the NSF Research Community

November 14, 2017

Dear Colleagues:

The Office of Polar Programs (OPP) of the National Science Foundation (NSF) is seeking expressions of interest from organizations interested in providing storage, curation, and scientific management capabilities for ice cores collected in support of scientific research. The goal of this effort is to ensure secure, long-term, cost-effective archival of and access to ice cores for use by the scientific community.

OPP currently supports the National Ice Core Laboratory (NICL) (<https://icecores.org/>) housed at the Denver Federal Center in Lakewood, Colorado. NICL is supported with NSF funding through an Interagency Agreement with the U.S. Geological Survey. Scientific management of the collection is provided through a subaward from the USGS to the University of New Hampshire.

The current NICL main archive freezer is near the end of its useful life and utilizes refrigerants that were phased out under the Montreal Protocol. NSF seeks a modern and compliant facility to ensure preservation and scientific access to ice core archives and to manage future operating costs. NSF anticipates investing in refurbishment and/or construction of an upgraded NICL facility along with an annual operations and maintenance budget to ensure the core are available for scientific analysis. Modernization options include but are not limited to a modernized facility within the Denver Federal Center, a new facility at another location, or renovation of an existing facility.

The NICL facility consists of a main archive freezer (55,000 cubic ft., -36oC), core processing laboratory (12,000 square ft., -24oC), small filtered-air laboratory, loading dock for receiving shipments, and office space for staff and visiting scientists. Current holdings comprise roughly 19,000 meters of ice core collected from various locations.

NSF is open to considering ideas for new management models and/or partnerships for a modernized facility within the Denver Federal Center, a new facility at another location, or renovation of an existing facility. NSF welcomes innovative management, operational, or technological concepts, including public-private partnerships. All respondents should include a management model, a proposed location and a strategy for scientific oversight that is responsive to

the needs of the research community.

Please submit written responses by **February 15, 2018**. Interested respondents should be clear on their approach and include:

- Which model is being discussed (modernization and management at the Denver Federal Center, relocation and management at a new facility, or renovation and management of a new facility);
- How your approach improves efficiency of service and operations while minimizing capital and ongoing costs;
- Your approach to science management (core allocation); and
- Your approach to long-term core curation (core storage and access to the scientific community for sampling and analysis).

Responses to this request do not bind NSF to any further or specific actions related to this topic. This DCL is not a formal solicitation for proposals and conveys neither a financial commitment nor a reflection of a final decision of the disposition of NICL. To the extent that the sender plans to provide any information that it considers proprietary, such status must be unambiguously communicated and clearly marked. Comments received are intended for NSF internal use only. Responses received will not be posted publicly, and the names of the respondents will be protected from public disclosure to the extent permitted by law.

Responses, along with questions and comments, should be submitted in electronic form via e-mail to:

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