

NSF 23-070

Dear Colleague Letter: Advancing Research in the Geosciences Using Legacy Scientific Ocean Drilling Cores

March 15, 2023

Dear Colleagues:

The National Science Foundation's (NSF) Directorate for Geosciences (GEO) Division of Ocean Sciences (OCE) encourages the submission of proposals utilizing existing International Ocean Discovery Program (IODP2) and Integrated Ocean Drilling Program (IODP1), Ocean Drilling Program (ODP), and Deep Sea Drilling Project (DSDP) cores for fundamental research, including in large collaborative groups that can be multidisciplinary in scope, and for scientific training.

Scientific ocean drilling began in 1968 with DSDP and has continuously operated through the present IODP. In total, over 465 km of sediment, igneous and metamorphic basement, and other core types (e.g., coral reefs) have been collected from all ocean basins, marginal seas, and continental and island margins. These cores are significant scientific resources collected through the commitment of thousands of scientists with financial support from NSF and its international partners. Many transformational scientific discoveries have been made using these cores; with continued advances in technology, these legacy cores are invaluable for future discoveries. Many of the 2015-2025 Priority Research Questions in the National Academies of Science, Engineering, and Medicine Sea Change Report have been, and continue to be, addressed by research on these cores.

Cores are housed in three repositories: the Gulf Coast Repository at Texas A&M University, the Kochi Core Center at Kochi University in Japan, and the IODP Bremen Core Repository at MARUM, University of Bremen, Germany. Proposals to study cores curated in any of these repositories are encouraged.

OCE welcomes proposals to the Marine Geology and Geophysics Program (MGG) promoting research that supports collaborations of diverse scientists and disciplines and provides training opportunities for the next generation of ocean scientists. Proposals in response to this DCL must advance core OCE program science goals and use DSDP/ODP/IODP cores

toward addressing scientific problems.

HOW TO SUBMIT

This is not a special competition or new program. Relevant proposals should be submitted to MGG, according to Program proposal submission guidelines. Before submission, PIs should contact cognizant program directors to discuss the potential submission.

Proposals will be evaluated by MGG, alongside other proposals submitted to the Program. Therefore, proposals should first and foremost focus on important scientific questions in the discipline of interest.

When making investments, NSF seeks broad representation of principal investigators (PIs) and institutions in its award portfolio, including a geographically diverse set of institutions (including those in EPSCoR jurisdictions) and PIs who are women, early-career researchers, members of underrepresented minorities, veterans, and persons with disabilities. Submissions that benefit and involve the full breadth of the geoscience research community, including undergraduates, graduate students, and faculty at two-year and four-year institutions of higher education, including minority serving institutions and non-R1 institutions, are encouraged.

General questions about this Dear Colleague Letter may be submitted to odp@nsf.gov.

Sincerely,

Alexandra Isern Assistant Director, Geosciences Directorate