Research community responds to NSF divestment of marine seismic research vessel

May 7, 2018

On April 10, 2018, the National Science Foundation (NSF) released a Dear Colleague Letter, titled “Towards a New Approach for the Provision of Marine Seismic Capabilities to the U.S. Research Community,” announcing its decision to divest of the marine seismic research vessel Marcus G. Langseth by 2020. The letter stated that NSF would honor existing commitments regarding awards that require the specialized capabilities currently provided by the Langseth, but will no longer accept new proposals that require its use. The Dear Colleague letter suggested that researchers should instead seek access to these capabilities through industry providers or international/institutional partners moving forward.

Early career geophysicists and groups such as the Incorporated Research Institutions for Seismology (IRIS) have replied to NSF with letters expressing concern about divestment of the vessel and limited options to continue cutting edge seismic research in deep-ocean crustal imaging. IRIS explained that the loss of these capabilities and the abrupt termination of proposal submissions will be especially damaging for early career scientists in the community. IRIS further expressed concerns that having to coordinate access to seismic capabilities “through industry providers or international/institutional partners” could heavily steer funding opportunities toward the few – likely senior – individuals with the necessary connections for establishing such partnerships, and toward studies of most interest to those providers. Their concerns were described by the Washington Post in an article published on May 7, “Scientists warn against losing a crucial research ship: The National Science Foundation ‘has betrayed us’.”

Addressing the rising costs of infrastructure and flat funding of NSF’s Division of Ocean Sciences (OCE) during fiscal years (FY) 2011 through 2014, the 2015 National Academy of Sciences (NAS) Sea Change: 2015-2025 Decadal Survey of Ocean Sciences provided recommendations to rebalance OCE’s research funding and reduce infrastructure costs for the Academic Research Fleet. For example, the report suggested several options to achieve sustained cuts that would amount to savings of at least $3 million, one of which was immediate lay-up of the Langseth. Since the release of this report, NSF responded to the recommendations by hosting a workshop in 2016, surveying the community about seismic research needs, and soliciting input and proposals for different ownership and/or financial operational models for the Langseth or for use of other vessels or alternative technologies (NSF 16-120 and NSF 17-563). According to NSF, the agency received one or more proposal(s) in response to Solicitation NSF 17-563 and evaluated the proposal(s) using the NSF merit review process. However, based on the results of that review, NSF determined it was unable to fund any of the submitted proposal(s).

In the FY 2018 omnibus appropriations bill that was passed in March 2018, the accompanying committee report for the Commerce, Justice, and Science division encouraged NSF and its academic partners to ensure that the academic marine geology and geophysics community can continue to have access to NSF-funded marine seismic research vessel capabilities. More recent statements from NSF have further emphasized their commitment to divest of the Langseth, but the agency is continuing to have open dialogue with the research community as stakeholders consider alternative resources.

Sources: Columbia University; Incorporated Research Institutions for Seismology; National Academies of Science National Science Foundation; U.S. House of Representatives; Washington Post.