NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

NSF 17-126

Dear Colleague Letter: Software Infrastructure for Sustained Innovation (SI^2) Program in Fall 2017

August 22, 2017

Dear Colleagues:

The Software Infrastructure for Sustained Innovation (SI^2) program has been a bold and long-term investment led by the National Science Foundation's (NSF) Office of Advanced Cyberinfrastructure (OAC), in partnership with all NSF directorates and offices. Over the last six years, SI^2 has sought to realize the software vision and strategy that was developed as part of the NSF Cyberinfrastructure Framework for 21st Century Science and Engineering (CIF21; https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf10015). This vision for software infrastructure (https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf12113) has been pursued through a tiered approach encompassing Software Elements (SSE), Software Frameworks (SSI), and Software Institutes (S^{2}I^2).

As the NSF-wide CIF21 priority area sunsets as planned, NSF and OAC have begun transitioning CIF21 investments to new cross-Foundation priority areas, such as the National Strategic Computing Initiative (NSCI; https://www.nsf.gov/cise/nsci/) and the Harnessing the Data Revolution Big Idea (HDR; https://www.nsf.gov/about/congress/reports/nsf_big_ideas.pdf). Additionally, NSF and OAC have initiated several strategic activities such as the National Academies of Sciences, Engineering, and Mathematics study entitled "Future Directions for NSF Advanced Computing Infrastructure to Support U.S. Science and Engineering in 2017-2020" (http://www.nap.edu/catalog/21886/future-directions-for-nsf-advanced-computing-infrastructure-to-support-us-science-and-engineering-in-2017-2020). Community advice and input has also been gathered from the NSF Advisory Committee for Cyberinfrastructure (ACCI; https://www.nsf.gov/cise/oac/advisory.jsp), and yearly SI^2 principal investigators" workshops (see recent reports at https://figshare.com/articles/Report_of_the_2017_NSF_SI2_PI_Meeting/4987013 and https://sites.google.com/view/2017-si2-pi-meeting/previous-si2-pi-meetings).

In parallel, OAC is leading an NSF-wide evaluation of the progress that has been made in research cyberinfrastructure, with the goal of determining any changes to the goals and/or structures of related programs, including SI^2, to better address current and anticipated future community needs.

As part of this evaluation, NSF directorates and offices jointly requested input, including bold, forward-looking ideas, from the research community on science and engineering challenges and associated cyberinfrastructure needs over the next decade and beyond, through a Cyberinfrastructure (CI) 2030 Request for Information (RFI). Details on this RFI, as well as preliminary results, may be found here: https://www.nsf.gov/cise/oac/ci2030/.

In order to successfully complete this evaluation and incorporate findings into current and future OAC programs, new project proposals to the SI^2 program will not be accepted during the remainder of calendar year 2017. This decision impacts only proposals pursuant to the SSI new proposal deadline of September 19, 2017. Any proposals already submitted to this deadline should be withdrawn (or may be returned without review). Active awards are not impacted.

Principal investigators (PIs) are encouraged to monitor the SI^2 program web page (https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503489) for information about new software-related funding opportunities later this fall.

Current SI^2 awardees should continue to communicate with their cognizant program officers in OAC for any issues related to their SI^2 awards. PIs seeking new funding during the fall should contact their disciplinary program directors for guidance.

Sincerely,

James Kurose
Assistant Director
Directorate for Computer and Information Science and Engineering