

Our ability to remain a leader in science and innovation moving forward will rely on the nation's increasingly diverse talent. NSF's programs aid this effort but must be dramatically expanded to address these major national needs.

A central aspect of NSF's mission is "to achieve excellence in STEM education at all levels and in all settings (both formal and informal) to support the development of a diverse and well-prepared workforce." NSF education research and workforce programs have a key role to play in ensuring that our nation's workers have the skills they need to thrive in the economy of the future. The Administration should also seek to build stronger partnerships between NSF and the Department of Education to ensure scaling and implementation of new education innovations.

CNSF encourages the new Administration to prioritize this critical piece of NSF's mission through support for programs that foster improvement in STEM learning and teaching, help prepare the next generation of STEM professionals, and increase the participation of women and traditionally underrepresented populations in STEM fields and the scientific and technical workforce.

Climate Change

As the nation confronts the long-term challenge of climate change, foundational research will be critical to fully understand our changing Earth and its fragile ecosystems, advance social and behavioral science central to all mitigation and adaptation efforts, catalyze new solutions through engineering and the physical sciences to increase resilience and enable clean technology, advance modeling and AI approaches to improve our forecasting abilities, and much more. NSF has many programs and initiatives of relevance to climate change, environmental sustainability, and natural disasters across all areas of science and engineering. In addition to the research, we must build a future workforce for climate and clean energy innovation, and NSF investments in

new Director Panchanathan’s vision to advance NSF’s work at greater scale, strength, and speed, as well as his demonstrated commitment to deepening robust partnerships with all types of stakeholders. ***CNSF encourages the new Administration to support critical priority research areas at NSF while also ensuring broad funding for NSF’s core activities that fuel scientific innovation and economic growth. We also encourage the Administration to support processes at NSF that continue to provide community input into the development of new priorities for the agency.***

Key Personnel Recommendations

Early Appointment of the Science Advisor and Assistant to the President for S&T

Given the COVID-19 pandemic, it is more important than ever for the new Administration to quickly appoint a Presidential Science Advisor. Furthermore, that individual should be visible and engaged throughout the pandemic response and recovery process and highlight the important and continued role of NSF in advancing science that addresses current challenges and promotes future innovations. The advisor should have an established relationship with the stakeholder community, including Congress, industry, academia, and scientific organizations.

Since its establishment in 1976, OSTP has been tasked with providing the President and senior executive branch staff with “accurate, relevant, and timely scientific advice on all matters.” It has also “ensured that executive branch policies are based on sound science” and that the “scientific and technical work of the executive branch is coordinated to provide the greatest benefit to society.” ***CNSF encourages President-elect Biden to appoint a science advisor by early January 2021 and nominate that person to serve as Director of OSTP.***

Expeditious Nomination of a Deputy Director for the National Science Foundation

NSF has been without a Senate-confirmed Deputy Director since 2013. As a new Director of NSF, Dr. Panchanathan would benefit from the support of a deputy who can help advance his vision for the agency with a focus on operations and implementation—in line with most other federal agencies, including the National Institutes of Health. ***CNSF recommends that the Administration expeditiously nominate an individual for the Deputy Director position.***

