



NSF Response to Coronavirus Disease

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NSF Directorate for Engineering Advisory Committee Meeting
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Important Notice No. 146

NSF Letter to Community Regarding COVID-19

Important Notice to the Science and Engineering Community

March 23, 2020

NSF was established in the aftermath of a defining chapter of the 20th century. World War II tested the nation, and the research community rose to that challenge with tremendous leaps forward in science, engineering, and technology. After the war, Congress and the President made a pivotal decision to retain support for research and development as a national priority. The spirit that drove accomplishments in wartime laboratories and military facilities would be harnessed not only for the advancement of knowledge, but also for the progress of society and the benefit of the nation.

Today, we are facing a time of new uncertainty and upheaval as the spread of Coronavirus Disease 2019 (COVID-19) tests our communities and workplaces. Our thoughts are with the healthcare workers and volunteers around the world who are working tirelessly to care for the sick and protect public health. Our thoughts are with teachers struggling to teach in new environments in new ways, and with students who want to continue learning. Our thoughts are with parents trying to explain to their children why everything will be different for a while and why home is the safest place they can be. We are encouraged by the many stories of people finding new ways to care for their families, continue their work, and support their communities. The research community is facing unique challenges during this crisis, from the unprecedented disruptions to education and academic and research programs, to how to best support public health efforts through our knowledge and expertise.

NSF understands the effects this challenge will have on NSF-funded research and facilities, and we are committed to providing the greatest available flexibilities to support your health and safety as well as your work. NSF is continually updating guidance and our online resources to keep you informed. Today, we are also issuing new guidance for NSF awardees to implement flexibilities authorized by the Office of Management and Budget. We hope that this guidance will answer many of the questions you are facing as you cope with this trying time. NSF is also accepting proposals for non-medical, non-clinical-care RAPID research on coronavirus — our ability to better understand the virus and how to effectively respond will be crucial to public health efforts. The latest information is available on our website at: <https://www.nsf.gov/coronavirus>.

The post-war decision to make basic research a national priority matters to us in this moment. There is NSF-supported research — spanning the seven decades of NSF's history — behind nearly every aspect of the work being done right now to combat this pandemic. Our understanding of fundamental physics and chemistry is at the heart of many diagnostic techniques, including MRI and other imaging methods. Precision nanoscale engineering enables cutting edge medical devices. Biology, data, computation, and mathematics help epidemiologists model and accurately track the spread of infections. Computing and communication innovations are helping us telework and remain connected with our families and friends while practicing social distancing. Social and economic sciences help us better design and deploy healthcare solutions. There are many, many more examples from every field of research. And, of course, there are educators who have fostered not just new generations of researchers and innovators, but also the medical professionals on the front lines of this effort. I know you take pride in the research community's legacy, and I hope you'll take comfort knowing that your work is important in this difficult moment.

Your work is also crucial to our future success. When this pandemic passes, basic research will still be an engine of our economy. It will still

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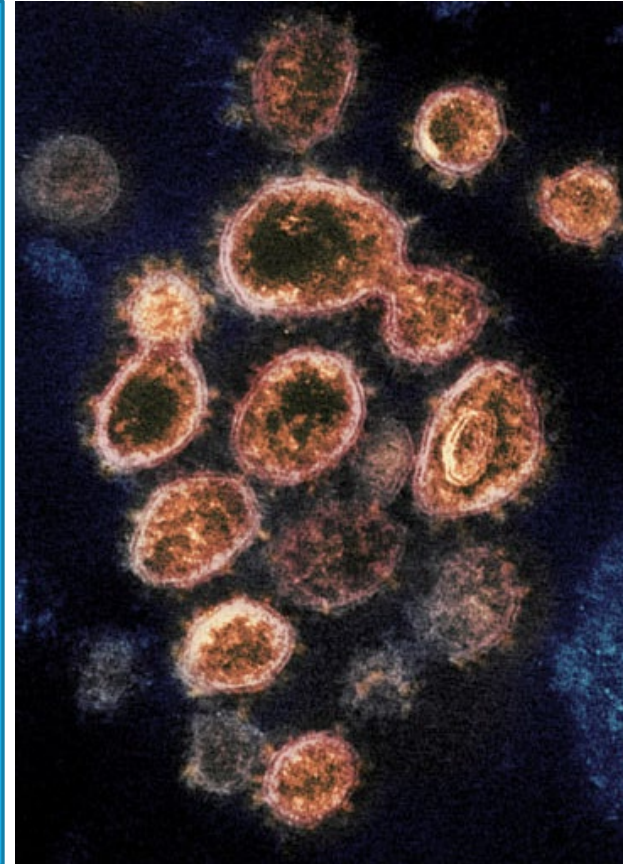
NSF-funded Research Response

RAPID: Coronavirus persistence, transmission, and circulation in the environment

Alexandria Boehm of Stanford University and Krista R. Wigginton of University of Michigan

EAGER: Modeling, Hospital Planning and Operations for COVID-19 Pandemic

Yongpei Guan of University of Florida



RAPID: Foam Formulations for Decontamination of Surfaces with Minimum Wastewater

Ponisseril Somasundaran of Columbia University and NSF IUCRC for Particulate and Surfactant Systems



Internal NSF Response

Staff are now teleworking to the greatest extent possible

Non-essential staff travel is cancelled or postponed

Task force will consider long-term impacts for the STEM research and education community



NSF Community Response

FAQs About the Coronavirus Disease 2019 (COVID-19) for NSF Panelists

FAQs About the Coronavirus Disease 2019 (COVID-19) for Proposers and Awardees

Impact on Existing NSF Deadlines

Implementation of OMB Memo M-20-17, Administrative Relief for Recipients and Applicants of Federal Financial Assistance Directly Impacted by the Novel Coronavirus (COVID-19) due to Loss of Operations

www.nsf.gov/coronavirus



Proposals and Merit Review Panels

Proposal deadline changes

Virtual merit review panels

Virtual or postponed site visits



Award Management

Project report deadline extensions

No-cost extensions for awards

Guidance on salary, cancellation costs, award activities and travel

Virtual or postponed workshops and conferences



Challenges We're All Facing

Staff working remotely, apart from easy access to colleagues, files, labs.

IT systems can be strained, and not everyone may be working with the same level of IT access.

Policies are not necessarily in place at organizations and at the Federal level to deal with every situation.

Flexibility within a policy framework is key!

Current and Future Needs of the ENG Research Community

Needs during the pandemic

Needs at the end of the pandemic

- Restart research, education, facilities, etc.

Special considerations

- Different institutions
- Various investigators and students
- Equipment, tools and facilities
- Research areas and fields

Research directions

- Emerging areas
- International collaborations

Other questions for NSF to answer