



National Science Foundation
WHERE DISCOVERIES BEGIN


[RESEARCH AREAS](#)
[FUNDING](#)
[AWARDS](#)
[DOCUMENT LIBRARY](#)
[NEWS](#)
[ABOUT NSF](#)


Award Abstract #2041952

Virtual Organization for Computing Research in Pandemic Preparedness and Resilience

NSF Org: [CNS](#)
[Division Of Computer and Network Systems](#)

Initial Amendment Date: August 4, 2020

Latest Amendment Date: August 4, 2020

Award Number: 2041952

Award Instrument: Standard Grant

Program Manager: James Joshi
CNS Division Of Computer and Network Systems
CSE Direct For Computer & Info Scie & Enginr

Start Date: October 1, 2020

End Date: September 30, 2023 (Estimated)

Awarded Amount to Date: \$1,444,394.00

Investigator(s): Madhav Marathe mvm7hz@virginia.edu (Principal Investigator)

Sponsor: University of Virginia Main Campus
P.O. BOX 400195
CHARLOTTESVILLE, VA 22904-4195 (434)924-4270

NSF Program(s): Information Technology Researc,
Special Projects - CNS,
Secure & Trustworthy Cyberspace

Program Reference Code(s): 025Z, 096Z

Program Element Code(s): 1640, 1714, 8060

ABSTRACT

This Virtual Organization (VO) will facilitate communication and collaboration among CISE scientists currently involved in pandemic research through the NSF RAPID program. With the guidance of a Steering Committee composed of members from industry, academia, and government agencies, the VO will encourage the sharing of research results in a way not available without a concerted effort. The depth and breadth of multi-disciplinary collaboration enabled by this VO will be extended to include researchers, educators, and students interested in general topics related to pandemic planning and resilience. Utilizing a variety of dissemination platforms, the VO will harness the synergies of the CISE RAPID research programs to facilitate scientific advances and advance public health in the US and around the world.

The VO will: (i) facilitate the collection of a comprehensive collection of data sets, software tools, and documentation that can be shared by the research community; (ii) identification of new research efforts resulting from the cross fertilization of ideas from various subdisciplines of CISE research; (iii) a research roadmap that proposes research directions in CISE

sciences that can lead to effective methods to prepare for and recover from future pandemics; and (iv) training and other pedagogic materials needed for educating future generations of scientists in topics related to pandemic preparedness, recovery, and resilience. The increased levels of collaboration fostered by this VO have the potential to result in innovative computational methods and technologies for dealing with future pandemics. The research roadmap will include identification of key research topics, risks, and gaps in the current R&D landscape that will significantly benefit the research community and serve as the blueprint for researchers, funding agencies, and policy makers on the role of information and communication technologies (ICT) in developing break-through solutions for pandemic resilience. While it is not possible to prevent pandemics completely, developing resilience techniques will enable society to prepare for and cope with the aftermath in a more effective manner.

This award reflects NSF's statutory mission and has been deemed worthy of support through evaluation using the Foundation's intellectual merit and broader impacts review criteria.

Please report errors in award information by writing to: awardsearch@nsf.gov.

[RESEARCH AREAS](#)[FUNDING](#)[AWARDS](#)[DOCUMENT LIBRARY](#)[NEWS](#)[ABOUT NSF](#)

National Science Foundation, 2415 Eisenhower Avenue, Alexandria, Virginia 22314, USA
Tel: (703) 292-5111, FIRS: (800) 877-8339 | TDD: (800) 281-8749

 [Text Only Version](#)