

# COVID-19 RESPONSE FUNDING UPDATE

APRIL 10-16, 2020

## FACTS

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\$14,443,702  
FUNDS MOBILIZED

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106  
GRANTS FUNDED

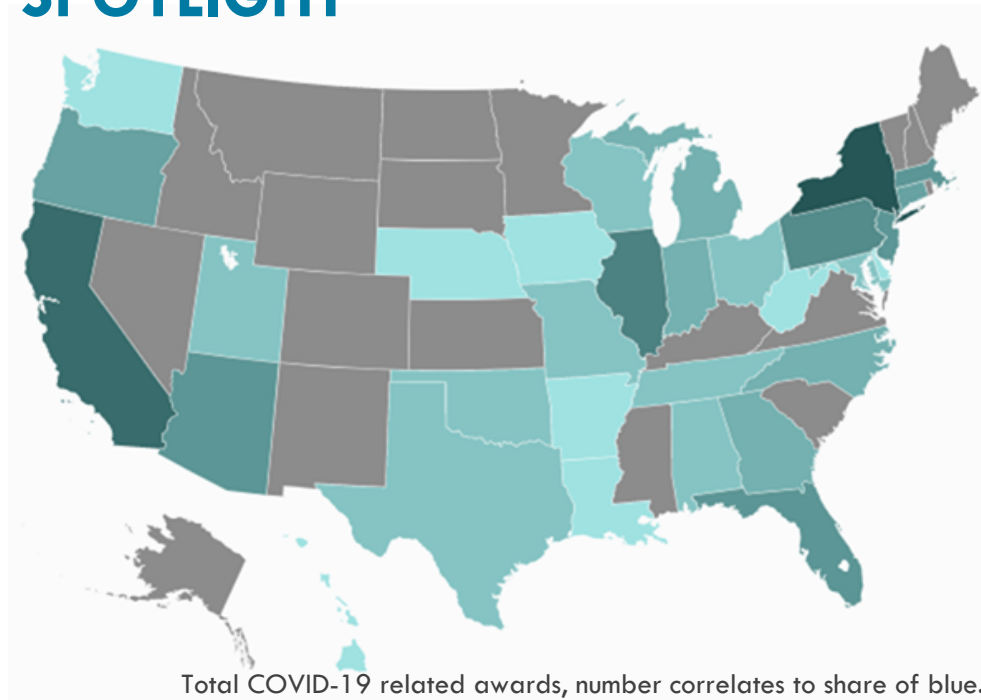
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# OVERVIEW

In response to the COVID-19 virus, the National Science Foundation (NSF) is mobilizing funding from the FY2020 budget and supplemental appropriations through the Coronavirus Aid, Relief, and Economic Security (CARES) Act. CARES Act funding supports a wide range of research areas to help the country fight and recover from the COVID-19 crisis through several research funding mechanisms including Rapid Response Research (RAPID), a fast-tracked grant process to accelerate critical discovery.

## AWARDS SPOTLIGHT



	CARES ACT	All COVID-19
<b>Number of Awards</b>	20	106
<b>Funding Deployed</b>	\$3,003,123	\$14,443,702

This update spotlights several recent awards, just a snapshot of the essential work NSF is funding through the CARES Act and FY2020 appropriations. You can explore all of the COVID-19 related research grants awarded through the [National Science Foundation here](#).

## CHEMICAL, BIOENGINEERING, ENVIRONMENTAL AND TRANSPORT SYSTEMS

### CARES Act \$200,000

<b>Title</b>	RAPID: Flow Asymmetry in Human Breathing and the Asymptomatic Spreader
<b>Institution/Loc</b>	Princeton University, Princeton, New Jersey
<b>What</b>	This research will explore how viruses move through the air as asymptomatic individuals speak and breathe during social interaction.
<b>Why</b>	Understanding how a virus moves through the air will help target mitigation strategies like wearing face masks and maintaining physical distance.

## CHEMICAL, BIOENGINEERING, ENVIRONMENTAL AND TRANSPORT SYSTEMS

### CARES Act \$199,958

<b>Title</b>	RAPID: Computational Modeling of Contact Density and Outbreak Estimation for COVID-19 Using Large-scale Geolocation Data from Mobile Devices
<b>Institution/Loc</b>	New York University, New York, New York
<b>What</b>	Using a large-scale geolocation dataset from smart phones, researchers will develop a model to estimate contact density, measure the efficacy of social distancing and predict disease spread. The NYU Institutional Review Board approved processing these data.
<b>Why</b>	This computation model could better empower public health officials in containment efforts, outbreak prediction, and identify at-risk communities based on socioeconomic vulnerabilities.

## COMPUTING AND COMMUNICATION FOUNDATIONS

### CARES Act \$100,551

<b>Title</b>	RAPID: Accelerated Testing for COVID-19 using Group Testing
<b>Institution/Loc</b>	Texas A&M Engineering Experiment Station, College Station, Texas
<b>What</b>	Researchers are designing new approaches that allow multiple COVID-19 tests to be processed at once.
<b>Why</b>	Increasing the efficiency of processing COVID-19 tests will help diagnose patients faster, use fewer testing resources, and provide additional information for tracking infection rates.

## MOLECULAR AND CELLULAR BIOSCIENCES

### CARES Act \$188,253

<b>Title</b>	RAPID: Factors Contributing To Sequence Conservation in the SARS-CoV-2 Genome
<b>Institution/Loc</b>	Rutgers University Camden, Camden, New Jersey
<b>What</b>	Using data from viral sequencing, this research will help meet the urgent need for understanding how the SARS-CoV-2 virus evolves.
<b>Why</b>	Understanding the viral genome and its evolution is critical for effective testing and anti-viral drug development. Findings from this research will be made available on a public database prototype.

## BEHAVIORAL AND COGNITIVE SCIENCES

### CARES Act \$199,448

<b>Title</b>	RAPID: Assessing and preventing detrimental impacts on literacy acquisition during COVID-19-related school closures
<b>Institution/Loc</b>	Haskins Laboratories, Inc. New Haven, Connecticut
<b>What</b>	School closures, such as those imposed by COVID-19, could have a negative impact on the development of basic reading skills in early grade school children. This is especially true for children with learning disorders in special education, for whom online learning is much more challenging.
<b>Why</b>	Teachers and their K-2 students across the country will help researchers test whether a digital game based on cutting-edge reading research can maintain and strengthen basic reading skills. Successful remote learning applications and techniques may help overcome the decline in basic reading skills during school closures now and in the future. The findings could also be useful for teaching students in areas in the U.S. where trained reading specialists are not readily available.