## COVID INFORMATION COMMONS

About the COVID Information Commons User Tutorial Video Project Team



#### Launch Webinar - July 15, 2020 Brought to you by the Big Data Innovation Hubs



Convergence Accelerator

The COVID Information Commons is supported by the National Science Foundation through award <u>#2028999</u>. Disclaimer: The opinions, findings, and conclusions or recommendations expressed here are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

# Agenda

- Welcome by the Big Data Innovation Hubs
- COVID Information Commons overview and demo
- Lightning Talks by PIs
- Next steps

## COVID Info Commons – Brought to you by the Big Data Hubs

#### BROUGHT TO YOU BY THE BIG DATA INNOVATION HUBS



C

# **COVID Information Commons Overview**

- Increases accessibility of valuable information regarding NSF COVID RAPID research awards
- Facilitates knowledge sharing and collaboration across COVID research efforts
- Serves as a resource for researchers, students, and decision-makers from academia, government, not-for-profit and industry sectors to leverage research efforts and findings, and accelerate the most promising research to mitigate the broad societal impacts of the COVID-19 pandemic
- Organizes relevant information in multiple ways, e.g., by research topic, institution, geography
- Will allow research project teams to provide links to their data, and present project information in ways relevant and user friendly for users in academia, industry, government and non-profit sectors
- Will incorporate coronavirus-related information from NSF Open Knowledge Network projects, as well as from other NSF research projects in general, over time

# **COVID Information Commons Phased Approach**

- Phase I July 2020 MVP Launch
  - Provide MVP website to search for US NSF COVID RAPID awards
  - Includes two search mechanisms and tools:
    - Customized NSF Simple Search for COVID RAPID awards by NSF Directorate
    - Advanced "COVID Research Explorer" with Machine Learning Generated Maps
  - Powerful query and visualization search keywords, topic, award type, institution, size, state, etc.
  - Drill down by award title, abstract, institution, PI name/email, state, start/end dates, etc.
- Phase II by October 2020
  - Addition of COVID PI provided links to award related information and collaboration opportunities
  - Link to NSF Open Knowledge Network projects and other pertinent data sets
  - Additional collaboration capabilities
- Phase III Post-award TBD
  - Search for other pertinent award information
  - Further potential innovations based on user and collaborator feedback

#### COVID Information Commons – Homepage - COVID Research Explorer Tool

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

Q

## COVID INFORMATION COMMONS

About the COVID Information Commons

User Tutorial Video Project Team



Note: https://covidinfocommons.net redirects to https://covidinfocommons.datascience.columbia.edu/

#### COVID Information Commons – Homepage - NSF COVID RAPID Award Search



#### CLICK THESE ICONS TO FIND NSF COVID RAPID GRANTS BY NSF DIRECTORATE



## COVID Info Commons – Funded by NSF Convergence Accelerator



# Convergence Accelerator

Disclaimer: The opinions, findings, and conclusions or recommendations expressed here are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

The COVID Information Commons is supported by the National Science Foundation through award #2028999 2.



About the COVID Information Commons User Tutorial Video Project Team Join the Slack Channel

## About the COVID Information Commons Tab - Text and video/audio

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

## COVID INFORMATION COMMONS

About the COVID Information Commons

User Tutorial Video Project Team

Home

About the COVID Information Commons

#### **About the COVID Information Commons**

The COVID Information Commons (CIC) is an open website to facilitate knowledge sharing and collaboration across various COVID research efforts, initiated by the NSF Convergence Accelerator. The initial focus of the CIC website is on NSF-funded COVID Rapid Response Research (RAPID) projects. The CIC serves as a resource for researchers, students and decision-makers from academia, government, not-for-profits and industry to identify collaboration opportunities, to leverage each other's research findings, and to accelerate the most promising research to mitigate the broad societal impacts of the COVID-19 pandemic.



Watch this video to learn more about the COVID Information Commons.

## About the COVID Information Commons Tab – Phased Approach

#### **Phased Approach**

Phase I of the COVID Information Commons is scheduled to launch on July 10th, 2020. Phase I includes two forms of award searches into the public NSF Awards database. One is an NSF directoratelevel breakdown of NSF funded COVID RAPID awards, connected to customized views of the NSF Simple Search website, which can be found by clicking the icons where it says "CLICK THESE ICONS TO FIND NSF COVID RAPID GRANTS BY NSF DIRECTORATE".

The second and innovative advanced award search is provided through the blue button on the website entitled Click for COVID Research Explorer ML Maps C. The COVID Research Explorer is a machine learning powered tool which clusters awards by multiple parameters and keywords. The COVID Research Explorer tool clusters awards in topographical maps by topical areas, and in polygonal tree maps with keyword labels. Each award represented has a drill-down capability to identify the award number, institution, Principal Investigator (PI) name and email, state, award amount, the abstract from the NSF award, as well as other publicly available NSF award information.

Contextual and keyword searches provide researchers and students the opportunity to identify research relevant to their work and potential collaborators to further COVID-related research for the good of society. Phase II of the COVID Information Commons is scheduled to be available by October 2020. Phase II is projected to add multiple potential attributes including:

- Additional award information provided by the Principal Investigators, such as websites with their project information, links to materials and papers, and current collaborations
- New collaboration opportunities with the researchers
- Additional connections to NSF awards and other scientific collaborators

Contact Us info@covidinfocommons.net

## User Tutorial Video Tab – Step-by-step tutorial and demo

About the COVID Information Commons User Tutorial Video Project Team

Home

Video Library

User Tutorial Video

#### **User Tutorial Video**

COVID Information Commons User Tutorial



About the COVID Information Commons



https://covidinfocommons.net

### **COVID Information Commons Project Team**

COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

#### COVID INFORMATION COMMONS

About the COVID Information Commons User Tutorial Video Project Team

Home Project Team

#### **Project Team**



Jeannette Wing Principal Investigator, Columbia University



Florence Hudson Executive Director, Northeast Big Data Innovation Hub



Meredith Lee Executive Director, West Big Data Innovation Hub

COLUMBIA UNIVERSITY

Information Technology



W. John MacMullen Executive Director, Midwest Big Data Innovation Hub



Renata Rawlings-Goss Executive Director, South Big Data Innovation Hub



Katie Naum Manager of Operations, Northeast Big Data Innovation Hub



Helen Yang Assistant, Northeast Big Data Innovation Hub

Columbia University Information Technology COLUMBIA UNIVERSITY LIBRARIES library.columbia.edu

Columbia University Libraries

## COVID Information Commons – NSF COVID RAPID Award Search



#### CLICK THESE ICONS TO FIND NSF COVID RAPID GRANTS BY NSF DIRECTORATE



https://covidinfocommons.net



### NSF COVID RAPID Awards in the Office of the Director

RESEARCH AREAS FUNDING A	WARDS DOCUMENT LIBRARY NEWS ABOUT NSF	
Simple Search Advanced Search I	Popular Searches Download Awards Send Comments Award Search Help	
Advanced Search Results		
	Export up to 3,000 CSV   EXCEl   A Text Awards:	📩 Email this Link   🗐 Export All Results
You Searched For:	Sort By: Relevance V Results size: 30 per page V Table List	f 1 Displaying 1 - 14 of 14
NSF Organization Office Of The Director Keyword COVID AND RAPID	RAPID: A Platform for Mitigating the Impacts of COVID-19 on the Healthcare System Award Number:2029557; Principal Investigator:Shahin Vassigh; Co-Principal Investigator:Shu-Ching Chen, Miguel Alonso Jr, Biayna Bogosian; Organiz Organization:OIA Start Date:06/01/2020; Award Amount:\$159:300.00; Belevance:47.67;	ation:Florida International University;NSF
Active Awards true Refined by	RAPID: COVID Information Commons (CIC) Award Number:2028999; Principal Investigator:Jeannette Wing; Co-Principal Investigator:; Organization:Columbia University;NSF Organization:OIA St Amount:\$200,000.00; Relevance:47.67;	tart Date:05/15/2020; Award
Refine Search	RAPID: Improving Transportation Equity to Enhance Food Security for Families Vulnerable to COVID-19 Award Number:2029518; Principal Investigator:Robert Hampshire; Co-Principal Investigator:Aditi Misra, Olutayo Fabusuyi, H. Jagadish; Organization:Regents of the University of Michigan - Ann Arbor;NSF Organization:OIA Start Date:06/01/2020; Award Amount:\$159,955.00; Relevance:47.04;	
California (2) District of Columbia (1) Florida (1) Massachusetts (2)	RAPID: Collecting Reliable COVID-19 Datasets in Crisis Conditions Award Number:2029457; Principal Investigator:Rastislav Bodik; Co-Principal Investigator:; Organization:University of Washington;NSF Organization:O Amount:\$69,998.00; Relevance:47.04;	IA Start Date:05/01/2020; Award
Award Amount	RAPID: COVID-19-Net: Integrating Health, Pathogen and Environmental Data into a Knowledge Graph for Case Tracking, Analysis, and I Award Number: 2028411; Principal Investigator: Peter Rose; Co-Principal Investigator: Ilya Zaslavsky; Organization: University of California-San Diego; N Award Amount: \$200,000.00; Relevance: 46.53;	Forecasting ISF Organization:OIA Start Date:05/15/2020;
Between \$50,001 - \$100,000(4) Between \$100,001 - \$500,000(10)	RAPID: Enhancing US manufacturing of small molecule active pharmaceutical ingredients (APIs) using Authoritative Systems Knowledg Award Number:2029919; Principal Investigator:James Ferri; Co-Principal Investigator:; Organization:Virginia Commonwealth University;NSF Organizat Amount:\$155,000.00; Relevance:46.12;	je (ASK) - (ASK4APIs) tion:OIA Start Date:05/01/2020; Award
	RAPID: Supply Chain Portal to Serve Entrepreneurs Producing Critical Items in Response to COVID-19 Award Number:2032040; Principal Investigator:Louiqa Raschid; Co-Principal Investigator:Shivakumar Raman, Binil Starly, Jay Pujara; Organization:Un Organization:OIA Start Date:06/01/2020; Award Amount:\$86,177.00; Relevance:46.11;	viversity of Maryland College Park;NSF
	RAPID: Developing a Benefits Distribution System to Facilitate Economic Recovery from the Impact of COVID-19 Award Number:2029746; Principal Investigator:Justine Hastings; Co-Principal Investigator:; Organization:National Bureau of Economic Research Inc;N Award Amount:\$148,589.00; Relevance:45.15;	ISF Organization:OIA Start Date:06/01/2020;
	RAPID: Increasing Healthcare Credential Open Data in Response to COVID-19 Award Number:2029584; Principal Investigator:Jeffrey Grann; Co-Principal Investigator:; Organization:CREDENTIAL ENGINE, INC.;NSF Organization:C Amount:\$54,250.00; Relevance:45.15;	DIA Start Date:06/01/2020; Award 14



#### National Science Foundation WHERE DISCOVERIES BEGIN

RESEARCH AREAS AWARDS NEWS ABOUT NSF FUNDING DOCUMENT LIBRARY Awards Award Abstract #2028999 **RAPID: COVID Information Commons (CIC)** NSF Org: OIA **Office of Integrative Activities** Search Awards **Initial Amendment Date:** May 5, 2020 **Recent Awards** Presidential and Honorary Latest Amendment Date: May 5, 2020 Awards About Awards Award Number: 2028999 How to Manage Your Award Standard Grant Award Instrument: **Grant Policy Manual** Program Manager: Chaitanya Baru Grant General Conditions **OIA Office of Integrative Activities** O/D Office Of The Director **Cooperative Agreement** Conditions Start Date: May 15, 2020 Special Conditions Federal Demonstration End Date: October 31, 2020 (Estimated) Partnership **Policy Office Website** Awarded Amount to Date: \$200,000.00 Investigator(s): Jeannette Wing WING@COLUMBIA.EDU (Principal Investigator) Columbia University Sponsor: 2960 Broadway NEW YORK, NY 10027-6902 (212)854-6851 CA-HDR: Convergence Accelerato, NSF Program(s): COVID-19 Research

Program Reference Code(s): 096Z, 7914, 9102

Program Reference Code(s): 096Z, 7914, 9102

Program Element Code(s): 095Y, 158Y

#### ABSTRACT

0

SEARCH

This project will create a COVID Information Commons (CIC) website to facilitate knowledge sharing and collaboration across various COVID research efforts, especially focusing on all the NSF-funded COVID Rapid Response Research (RAPID) projects. The CIC will serve as a resource for researchers as well as decision-makers from government, academia, not-for-profit and industry to leverage each other's findings, and invest in and accelerate the most promising research to mitigate the broad societal impacts of the COVID-19 pandemic. It will also serve as a model for integrated knowledge sharing and collaboration on other public health challenges, in benefit to society. Projects will be able to enter and publish information about their efforts in ways that are most relevant and user-friendly for a variety of potential stakeholders from academia, industry, government, and non-profit sectors. Information will be organized in multiple ways, for example, by research topics areas and by geography. In addition to information from NSF COVID-19 RAPID projects, the COVID Information Commons will incorporate coronavirus-related information NSF Open Knowledge Network projects, as well as from other NSF research projects in general.

The COVID Information Commons will utilize information science methods to bring together information about the collection of COVID-19 RAPID projects funded by the National Science Foundation. A wide array of research efforts are underway to study the impacts of the pandemic in fields as far ranging as biophysics, social justice/inequity, behavioral science, public health, supply chains, and risk management. The CIC will semantically link information across projects to provide a more holistic view across distinct efforts, including efforts such as the COVID projects in the NSF Open Knowledge Network. The resulting, concise, curated, integrated resource will provide insight into NSF-funded COVID RAPID projects and facilitate collaborations among such efforts. These objectives will be achieved using information science approaches to 1) compile a comprehensive list of NSF COVID RAPID awards, along with relevant details for each project, 2) link to any publicly available data sets and data feeds, 3) organize the information and data feeds, for example, by categories of research areas and/or geography, using a meta-data schema developed for the resource and existing taxonomy and semantic frameworks; 4) design and develop a web portal to allow project teams to publish their data, or links to the data, and present project information in ways that are most relevant and user friendly for researchers in academia, industry, and government; 5) integrate the schema.org COVID-19 annotated data to enable more effective identification, retrieval, and integration of relevant data. A Minimum Viable Product for the website will be developed first, working with stakeholders in the community to prioritize features and add new functionality. In addition to the Information Commons, the project will also assess the effort and feasibility of implementing a data and model commons?to share datasets as well as data-driven models, such as machine learning models related to COVID-19.

This RAPID award is made by the Convergence Accelerator program in the Office of Integrative Activities with funds from the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

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.

## COVID Information Commons – COVID Research Explorer



#### CLICK THESE ICONS TO FIND NSF COVID RAPID GRANTS BY NSF DIRECTORATE



https://covidinfocommons.net

## COVID Research Explorer – NSF Awards Topographical Map



17

## COVID Research Explorer – NSF Awards Tree Map



#### COVID Research Explorer – Customize the view by State and Institution



https://covidinfocommons.net

## COVID Research Explorer – Awards by Institution in New York



https://covidinfocommons.net

20

## COVID Research Explorer – Awards by Institution in California



#### COVID Research Explorer – Awards by Institution in North Carolina



https://covidinfocommons.net

## COVID Research Explorer – Awards by Institution in Ohio



https://covidinfocommons.net

### COVID Research Explorer – Awards by Institution in Pennsylvania



## COVID Research Explorer – Awards by Institution in California



### COVID Research Explorer – Awards by Institution in Maryland



### COVID Research Explorer – Awards by Institution in Illinois

![](_page_26_Figure_1.jpeg)

## COVID Research Explorer – Customize the view by PI

![](_page_27_Figure_1.jpeg)

## COVID Research Explorer – Zoom in on the view by PI in CA

![](_page_28_Figure_1.jpeg)

#### https://covidinfocommons.net

#### COVID Research Explorer – Query By Topic showing PI/Co-PI by State

![](_page_29_Figure_1.jpeg)

### COVID Research Explorer – Query By Topic showing Institution by State

![](_page_30_Figure_1.jpeg)

#### COVID Research Explorer – Query By New Topic showing Institution by State

![](_page_31_Figure_1.jpeg)

32

#### Click on my Institution – who else is doing research on this topic in my State

![](_page_32_Figure_1.jpeg)

https://covidinfocommons.net

## COVID Research Explorer – Customize the view with "Fields"

![](_page_33_Figure_1.jpeg)

<sup>34</sup> 

# Lightning Talks by COVID PIs

Principal Investigator	Institution	COVID Award Type: Title
Felicia Jefferson	Fort Valley State University	RAPID: Effects of the Move to Online Teaching on the Rural HBCU Community due to the Coronavirus (COVID-19) Pandemic
Peter Rose	University of California – San Diego	RAPID: COVID-19-Net: Integrating Health, Pathogen and Environmental Data into a Knowledge Graph for Case Tracking, Analysis, and Forecasting

**COVID Information Commons** 

RAPID: Effects of the Move to Online Teaching on the Rural HBCU Community due to the Coronavirus (COVID-19) Pandemic

![](_page_35_Picture_2.jpeg)

![](_page_35_Picture_3.jpeg)

![](_page_35_Picture_4.jpeg)

#### Felicia Jefferson, Ph.D.,

Associate Professor

#### Jasmine Paul, Ph.D.,

Associate Professor,

Biology Department, College of Arts & Sciences, Fort Valley State University NSF Award #2028573 July 15, 2020

# Introduction

#### About Fort Valley State University

- 1890 Morrill Act Land-Grant Institution
- Public, apart of the University System of GA
- Rural, located in Central and Middle Georgia
- A Historically Black Colleges and Universities (HBCU)
- Primarily Undergraduate Teaching Institution
  - **Graduate Programs**
  - **Research Capacity**

#### Researchers

#### Neuroscience, Biology, Engineering, and Sleep (NeuBEs) Laboratory (www.neubefvsu.com)

Faculty

- Dr. Felicia Jefferson, Director Graduate Students (6)
- to one Ph.D. and six (6) Master's Students at partnered labs
- Undergraduate Students (g)
- Majors/Minors: Biology, Biotechnology, Chemistry, Nuclear Engineering Zakiyah Brannen-Buston
  - Amber Devents
  - Cassandra Gary-Smith
  - Tracie Nicole Holme
  - Myron Prestor
  - Jenish Smert
  - Kebriana Rost Gabrielle van Genderer

#### Partnered LABS

.Emory and Atlanta VA Center, University of Texas Arlington University of Texas Health Science Center

![](_page_36_Picture_24.jpeg)

Current Lab Projects: Smart Home tracking for home based elderly patients with Alzheimer's, Effects of Artificial Light at Night (ALAN) on Sleep-Wake Patterns in Rural and Suburban Wildlife, Electromagnetic radiation and bird migratory paths, Neurotoxicological effects of sleep deprivation and cognitive decline, RFID RatiPig Model for smart Pills, etc.

![](_page_36_Picture_26.jpeg)

![](_page_36_Picture_27.jpeg)

ORIGINAL RESEARCH published: 12 November 201 doi: 10.3389/fcomp.2019.00007

#### A Comparative Analysis of Student Performance in an Online vs. Face-to-Face Environmental Science Course From 2009 to 2016

Jasmine Paul\* and Felicia Jefferson

Department of Biology, Fort Valley State University, Fort Valley, GA, United States

A growing number of students are now opting for online classes. They find the traditional classroom modality restrictive, inflexible, and impractical. In this age of technological

Citation: Paul J and Jefferson F (2019) A Comparative Analysis of Student Performance in an Online vs. Face-to-Face Environmental Science Course From 2009 to 2016. Front. Comput. Sci. 1:7. doi: 10.3389/fcomp.2019.00007

#### Dr. Jasmine Paul, Associate Professor, Fort Valley State University, Fort Valley, GA 31030

Dr. Paul has significant experience in teaching online lab courses at Fort Valley State University. Dr. Paul also served as research mentor to several undergraduate students in research. Students are challenged to present oral and poster presentations at the Annual Biomedical Research Conferences (ABRCMS) and Annual National Institute of Science/ Beta Kappa Chi Scientific Honor Society each year. Dr. Paul's focus on the research is toward HIV/AIDs and Related Risk Behaviors among African American College Students. Her recent publication is on "A comparative Analysis of Student Performance in an Online vs Face to Face Environmental Science Course from 2009 to 2016" was on Frontiers Computer Science. In the year 2019. (doi.org/10.3389/f.comp).

Dr. Paul also collaborated with Dr. Jefferson to support the research on "The ability of a sleep intervention to increase non-STEM major's interest in STEM fields and their engagement in a STEM course based on sleep quality and /or duration. (ongoing research support). Currently Dr. Paul is working with Dr. Jefferson on the research "Effects of Coronavirus (COVID-19) on the Rural HBCU community with the move to 100% online teaching. NSF.20-052,2020

#### Dr. Felicia Jefferson

- Education: Biotechnology (B.S.) and German Language (B.A.) (RIT), Molecular Genetics and Biochemistry (M.S.) – (GSU), Neuroscience and Biomedical Science (Ph.D.) – (MSM), Behavioral Neuroscience Research Fellow (Postdoctoral) - (Emory)
- Appointments: Industry Employment: Bausch & Lomb, Procter & Gamble, Schering-Plough (now Merck), American Management Association, Positions: Staff Scientist III, Staff Scientist V, Review Manager, Contributing Editor; Academic: Fort Valley State University, (Tenured

# Let us know if you're interested in participating Contact: jeffersonf@fvsu.edu and paulj@fvsu.edu

- Universities we are working with:
  - Bluefield State College
  - Chaflin University
  - Elizabeth City State University
  - Grambling State University
  - Kentucky State University
  - Louisiana State University
  - Mississippi Valley State University
  - Morehouse School of Medicine
  - Prairie View A&M University
  - Rust College
  - Selma University
  - South Carolina State University
  - Southwestern Christian College
  - Talladega College
  - Tuskegee University
  - University of Maryland Eastern Shore
  - University of Texas Arlington
  - University of Virgin Islands
  - Voorhees College
  - Wiley College

![](_page_37_Picture_22.jpeg)

![](_page_37_Picture_23.jpeg)

# COVID-19-Net

Peter W. Rose, Structural Bioinformatics Lab Ilya Zaslavsky, Spatial Information Systems Lab San Diego Supercomputer Center UC San Diego pwrose@ucsd.edu, zaslavsk@sdsc.edu Integrate heterogeneous biomedical and environmental datasets to help researchers analyze the interplay between host, pathogen, and environment

Patients <ul> <li>Demographie</li> <li>Symptoms</li> </ul>	<ul> <li>Host-Pathogen Inter</li> <li>Protein-protein</li> <li>CS</li> <li>Immune response</li> </ul>	actions se Animal and Human Strains • Genomes • Genes • Proteins
	Host Pathogen	
<ul> <li>Demographics</li> </ul>	COVID-19	<ul> <li>Previous Outbreaks</li> <li>SARS</li> </ul>
		<ul> <li>MERS</li> </ul>
Transmission &	Environ- ment	Animal to Human Transmission
Migration		<ul> <li>Animal reservoirs</li> </ul>
<ul> <li>Travel</li> </ul>		<ul> <li>Animal diversity/hot spots</li> </ul>
<ul> <li>Transportati</li> </ul>	on	Food chain
<ul> <li>Venues</li> </ul>	Weather	
<ul> <li>Education</li> </ul>	<ul> <li>Seas</li> </ul>	onal effects
<ul> <li>Work</li> </ul>	<ul> <li>Temp</li> </ul>	perature
<ul> <li>Sports</li> </ul>	<ul> <li>Preci</li> </ul>	pitation

# Coordinated COVID-19 Efforts

![](_page_40_Figure_1.jpeg)

![](_page_41_Figure_0.jpeg)

# Automated, Transparent, Reproducible Workflow

![](_page_42_Figure_1.jpeg)

#### **Query and Browsing**

#### Dashboards

![](_page_43_Figure_2.jpeg)

# Acknowledgements

**Project COVID-19-Net** funded by NSF OIA-2028411 David Valentine UCSD DSC 198 Course: Data Science Students

![](_page_44_Picture_2.jpeg)

#### Project KONQUER funded by NSF OIA-1937136

![](_page_44_Picture_4.jpeg)

Lucila Ohno-Machado

![](_page_44_Picture_6.jpeg)

Hua Xu

![](_page_44_Picture_8.jpeg)

Joe Hamman

**Graphs4Good** 

![](_page_44_Picture_11.jpeg)

PI	Institution	COVID Award Type: Title
Abhishek Dubey	Vanderbilt University	Collaborative Research: <u>RAPID</u> : Addressing Transit Accessibility and Public Health Challenges due to COVID-19
Ali Rahnavard	George Washington University	<b><u>RAPID</u></b> : A novel platform for data integration and deep learning on COVID-19
Ashok Srinivasan	University of West Florida	Collaborative: <u>RAPID</u> : Leveraging new data sources to analyze the risk of covid-19 in crowded locations
Branden Johnson	Decision Science Research Institute	RAPID: Media Exposure, Objective Knowledge, Risk Perceptions, and Risk Management Preferences of Americans Regarding the Novel Coronavirus Outbreak
Chris Cherry	University of Tennessee Knoxville	Collaborative Research: <u>RAPID</u> : Maintain Mobility and Reduce Infection Through a Resilient Transit and Micromobility System
Deb Niemeier	University of Maryland - College Park	RAPID: Combining Big Data in Transportation with Hospital Health Data to Build Realistic "Flattening the Curves" Models during the COVID-19 Outbreak
Debbie Kim	University of Chicago	<b><u>RAPID</u></b> : Pandemic Learning Loss in U.S. High Schools: A National Examination of Student Experiences
Debra F. Laefer	New York University	RAPID: DETER: Developing Epidemiology mechanisms in Three-dimensions to Enhance Response
Dominique Duncan	University of Southern California	RAPID: COVID-ARC (COVID-19 Data Archive)
		https://covidinfocommons.net

PI	Institution	COVID Award Type: Title
	University of Texas -	EAGER: AI-Enabled Optimization of the COVID-19 Therapeutics Supply Chain
Erick C. Jones	Austin	to Support Community Public Health
	University of Maryland –	RAPID: "Responding to COVID-19 using High-speed Mesh Wireless
Foad Hamidl	Baltimore County	Community Network Internet"
		RAPID: Prototype of a medical mask using a novel antimicrobial / antiviral
Gloria S. Oporto	West Virginia University	biofilter material
Howard Stone	Princeton University	<b>RAPID</b> : Flow Asymmetry in Human Breathing and the Asymptomatic Spreader
Jeff Grann, Ph.D.	Credential Engine	RAPID: Increasing Healthcare Credential Open Data in Response to COVID-19
		Collaborative Research: <u>RAPID</u> : Maintain Mobility and Reduce Infection
John MacArthur	Portland State University	Through a Resilient Transit and Micromobility System
	University of Wisconsin -	
John Yin	Madison	RAPID: Ecological Dynamics of Human Coronavirus
		RAPID: SaTC: COVID19: Science of using wirelessly powered sensors to
Kevin Fu	University of Michigan	quickly scale up verifiable decontamination of individual N95 respirator masks
Lalitha Sankar	Arizona State University	RAPID: SaTC: FACT: Federated Analytics based Contact Tracing for COVID-19
Leila Hedavatifar	NECSI	RAPID: Modeling COVID-19 in the context of optimizing guarantine policy
		<b>EACED</b> : Dertable device for regid and label free identification of COV/ID 40
Mourioio Torresso	Donn State	EAGER: Portable device for rapid and label-free identification of COVID-19
iviauricio terrones	renn State	using an ultra-miniature nanonelo Raman spectrometer
		https://covidinfocommons.net

PI	Institution	COVID Award Type: Title
Michael Pazzani	University of California – San Diego	RAPID: Explainable Machine Learning for Analysis of COVID-19 Chest CT
Murat Kantarcioglu	University of Texas at Dallas	RAPID: Collaborative: A Privacy Risk Assessment Framework for Person-Level Data Sharing During Pandemics
Nian Sun	Northeastern University	RAPID: New Handheld Gas Sensors for Airborne SARS-CoV-2 Virus: Instant COVID-19 Diagnosis from Exhaled Breath
Niema Moshiri	University of California – San Diego	RAPID: Real-time phylogenetic inference and transmission cluster analysis of COVID-19
Nora Garza	Laredo College	RAPID: Using real life COVID-19 Data to teach quantitative reasoning skills to undergraduate Hispanic STEM students.
Payam Sheikhattari	Morgan State University	RAPID/Collaborative Research: Developing Pandemics and Healing Models for Coronavirus COVID-19 to Assist in Policy Making
Pedro Alvarez	Rice University	RAPID: Molecular Imprinting of Coronavirus Attachment Factors to Enhance Disinfection by a Selective Photocatalytic "Trap-and-Zap" Approach
Praveen Rao	University of Missouri - Columbia	RAPID: Democratizing Genome Sequence Analysis for COVID-19 Using CloudLab

https://covidinfocommons.net

PI	Institution	COVID Award Type: Title
Rachel Wu	University of California - Riverside	RAPID: Older adults' learning and adaptation as resilience processes to counter social isolation during the COVID-19 pandemic
Samantha Penta	University at Albany	RAPID: A Multi-Wave Study of Risk Perception, Information Seeking, and Protective Action in COVID-19
Shelley McGuire	University of Idaho	RAPID: Collaborative Research: COVID-19, human milk and infant feeding
Tracy Van Holt	New York University	RAPID Collaborative: Networks and Spatial Dynamics of the US Food Supply Chain amid the COVID-19 Pandemic
Viktor K. Prasanna	University of Southern California	RAPID: ReCOVER: Accurate Predictions and Resource Allocation for COVID-19 Epidemic Response
Wesley Shrum	Louisiana State University	RAPID: A Comparative Study of How Context Shapes Responses to COVID-19
Xifeng Yan	University of California – Santa Barbara	IIII: <u>RAPID</u> : Interventional COVID-19 Response Forecasting in Local Communities Using Neural Domain Adaptation Models
Ying (Sarah) Zhong	University of South Florida	RAPID: COVID-19: Sterilization Mechanism of Corona Discharge for Masks and Environment
Yung-Hsiang Lu	Purdue University	Collaborative: <u>RAPID</u> : Leveraging New Data Sources to Analyze the Risk of COVID-19 in Crowded Locations

https://covidinfocommons.net

# FAIR Principles in the COVID Info Commons

- Findable Find all NSF RAPID awards related to COVID easily, in context
- Accessible Access all NSF COVID RAPID public award information award title, abstract, type, institution, state, PI & Co-PI names/emails, amount, start & end date, program reference codes, program element codes, etc.
- Interoperable In Phase II enabling more researcher collaboration, and links to PI provided datasets and award-related information
- Reusable Reuse the information from the COVID Information Commons, extract and share topical maps, awards and spreadsheets

# Next Steps

- Watch the COVID Information Commons tutorial video <a href="https://covidinfocommons.net">https://covidinfocommons.net</a>
- Use it, share it, provide feedback and input for future phases on the feedback form
- Join the covidcommons Slack channel <u>https://bit.ly/2Wk416B</u> it's on the CIC website
- Sign up for the COVID Information Commons Community and CIC events
- Offer to present a lightning talk at CIC webinars
- Join COVID Info Commons Community proposal for <u>International FAIR Convergence</u> <u>Symposium organised by CODATA and GO FAIR</u>, 22-23 October 2020 (Paris/virtual)
  - Track: CRISIS REDUCTION AND RESPONSE (learning from COVID-19 outbreak)
  - EMAIL US BY JULY 17<sup>th</sup> (proposal due July 20<sup>th</sup>) info@covidinfocommons.net
- Save the Date Oct 14-16, 2020 (online): <u>Academic Data Science Alliance Annual Meeting</u>, Rapid Response joint session with Data Science Leadership Summit | July 20 deadline
- For any of the above or questions, email us at info@covidinfocommons.net

![](_page_51_Picture_0.jpeg)

## Thank You

- Florence D. Hudson, Executive Director, Northeast Big Data Innovation Hub, <a href="mailto:fh2417@Columbia.edu">fh2417@Columbia.edu</a>
- Renata Rawlings-Goss, Executive Director, South Big Data Innovation Hub, <a href="mailto:rrawlings.goss@gatech.edu">rrawlings.goss@gatech.edu</a>
- Meredith M. Lee, Executive Director, West Big Data Innovation Hub, <u>mmlee@berkeley.edu</u>
- John MacMullen, Executive Director, Midwest Big Data Innovation Hub, wjohn@illinois.edu