



Clarkson

Clarkson University

EPIDEMIC AND VIRUS RELATED RESEARCH
CLARKSON UNIVERSITY RESEARCH INNOVATION FUND

In response to the current pandemic of COVID-19 specifically, and more broadly, to the need to address critical gaps in knowledge and response methods, tools, technologies, and strategies related to viral diseases and disease outbreaks, the Office of Sponsored Research Services is issuing a Special Solicitation – Epidemic & Virus Related Research Innovation Fund, jointly sponsored by the Clarkson University Office of Sponsored Research Services and the Shipley Center for Innovation.

We encourage our research community to respond to this challenge by leveraging broad and deep expertise across campus. Eligible proposals could include development of new work leveraging on-going research wherein an investment of funding would support a pivot towards addressing critical gaps in knowledge and response to viral diseases and disease outbreaks. Also of interest are proposals for new investments that would rapidly translate into much needed solutions to this and future disease related challenges.

Proposals should address research and technology needs across a breadth of disciplines. We seek proposals that can leverage on-going research activities, can advantage data science-based research, as well as those that advance our ability to ensure resilient rural community economies and health care systems.

Areas of research interest, eligible to be submitted to the AVP for Research, include all areas of Clarkson University research and scholarship that may provide a broader perspective on viral diseases, and the detection and response to their outbreaks. Eligible topics include technology design and development, as well as research and development broadly related to public health, legal, economic, societal, and fiscal implications, among others. Projects with potential for technology transfer and commercialization will be further supported by the Shipley Center, which will provide additional support for intellectual property development, partnerships for commercialization, and connections to external funding opportunities targeted to these efforts. Lastly, projects that leverage our partnership with the Trudeau Institute are of particular interest.

**REQUEST FOR PROPOSALS
EPIDEMIC AND VIRUS RELATED RESEARCH
CLARKSON UNIVERSITY RESEARCH INNOVATION FUND**



Clarkson

APPLICATION DEADLINE 5pm, Friday, April 24, 2020

PURPOSE

In a highly interconnected, interdependent, and interactive world, disease outbreaks, epidemics, and pandemics will continue to challenge our global community. The current COVID-19 pandemic is an acute example of the numerous societal challenges associated with an epidemic. This outbreak marks the third time, in recent years, that a coronavirus has caused severe disease and death ([NIH](#)) worldwide, but larger epidemic events occurred throughout human history.

In response to the current pandemic of COVID-19 specifically, and more broadly, to the need to address critical gaps in knowledge and response methods, tools, technologies, and strategies related to viral diseases and disease outbreaks, the Office of Sponsored Research Services is issuing a Special Solicitation – Epidemic & Virus Related Research Innovation Fund, jointly sponsored by the Office of Sponsored Research Services and the Shipley Center for Innovation.

This solicitation aims to support all areas of Clarkson University research and scholarship that may provide a broader perspective on viral diseases and the detection and response to their outbreaks. Eligible topics range from biomedical and clinical research and development, as well as research and development broadly related to public health, legal, economic, societal and fiscal implications, among others.

The awards provide up to \$60,000 total support per project. The funds should be spent within 12 months but special circumstances around COVID-19 will be taken into account in extending the grant period.

Given the just-in-time nature of this funding opportunity, and the availability of associated external funding, proposals need to include a concrete plan for applying for a specific external funding opportunity larger than the requested funds; ([COVID Resources](#) provides examples of relevant funding programs). Proposals must also clearly describe how the special research innovation fund will make the planned proposal more competitive for that target external award and/or pursuit of technology transfer and commercialization of intellectual property. For technology or intervention development proposals, the impact and scaling plan of the proposed technology/intervention to the target community or sector and beyond must be included.

ELIGIBILITY

Interdisciplinary, multi-PI research is strongly encouraged, but is not a requirement. The program will not fund the same work being supported under other Clarkson University programs or external sponsors; the only exception are technology development proposals focused on pivots of on-going work and translation of technology development work to commercialization. These awards are not renewable. Applicants must be permanent, full-time Clarkson University faculty with a research profile; tenure-track, research track, teaching track, or clinical. Adjunct and visiting faculty are not eligible.

COST SHARE

Participating schools, institutes, research centers, and core facilities are encouraged but not required to provide cost share support through appropriate relief of academic duties, research infrastructure or equipment, or financial contributions in support of the effort.

TYPES OF ASSISTANCE

- Research materials, small equipment and supplies necessary to carry out the proposed work, including computers, software, digital records, lab materials, recording devices, etc.;
- Research expenses related to data acquisition, including the use of core/shared resource facilities;
- Salary support for PhD students, post docs, and other student wages (graduate assistant tuition waivers will be provided);
- Collection and purchase of archival materials and subscriptions to databases.

GRANT CONDITIONS

- Equipment purchases and subcontracts are not permitted;
- Awardees have discretion in the budgeting and re-budgeting of funds to meet their research needs within the guidelines of the fund and the terms of the proposal. Funds may not be transferred to another project, researchers or institutions;
- No indirect costs can be charged, but fringe benefits are required as relevant;
- The work should be finished within a year but special circumstances around COVID-19 will be taken into account in extending the grant period.
- Awards do not fund faculty salary, conference travel, consultants, tuition or other student fees;
- All Clarkson University rules, with respect to conflict of interest, human subject research, animal research, etc., apply to projects funded under this program. Funding will not be provided until all pertinent reviews are complete.
- Awardees commit to submit a larger follow-up proposal to the identified external sponsor

RESEARCH PROPOSAL EVALUATION AND NOTIFICATION

Research proposals submitted to this Special Solicitation will be evaluated internally and promptly. Applicants will be notified of the amount and conditions of the award and funds will be transferred for use by May 15.

REPORTING AND ACKNOWLEDGEMENT OF SUPPORT

Research Innovation awardees are asked to submit an interim report January 1, 2021 and a final report by August 15, 2021 (including an accounting of expenditures and any external support received). Portions of the report may be reprinted to build support for this fund among the university community and to make decisions about how best to use the fund in the future.

Any publication or creative endeavor arising from work supported by the fund must acknowledge the Clarkson University Faculty Research and Innovation Fund. The Office of Sponsored Research Services should be informed of any grant submissions/awards for which this fund were used in order to support the continuation of the Research and Innovation fund.

FURTHER INFORMATION AND PROGRAM CONTACT INFORMATION

Questions about the award or the application submission process can be directed to Shannon Robinson at srobinso@clarkson.edu.

For submission instructions, see Proposal Guidelines.

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PROPOSAL GUIDELINES

Proposals must be submitted to the AVP of Office of Sponsored Research Services, Shannon Robinson (srobinso@clarkson.edu) by 5pm, Friday, April 24, 2020.

Format: Proposal documents should be written in Arial or Times New Roman font, 12 point, single-spaced, with one-inch margins all around, and submitted in PDF. Apart from use in formulas, preferably do not use “symbols” text format (use “alpha” instead of “ α ”).

PROPOSAL COMPONENTS

1. Cover page information (filled out on-line)
 - a) Principal Investigator (PI) contact information;
 - b) Proposal title;
 - c) Budget total requested;
 - d) Is regulatory approval required? (Please indicate all that apply);
 - e) Link to the specific solicitation or program targeted for future funding (if the RFP has not yet been released, provide the link to the most recent RFP available);
 - f) Expected date of proposal submission to external sponsor;
 - g) Amount requested to the external sponsor;
 - h) Co-PI contact information.
2. Abstract (not to exceed 30 lines): A succinct stand-alone description of the proposed work
3. Project Narrative (not to exceed 5 pages): A comprehensive description of the work. No other ancillary text, appendices, etc., will be accepted; page limits include figures and tables. Please include the following sections and headers only:
 - i. Research Description: Describe the research/development to be supported and its relevance to the theme of the special solicitation.
 - ii. Project Design: Describe project activities to accomplish the project goals, and methodologies involved. Identify the roles of all personnel. Include any preliminary/prior planning or research activities that support the goals and success of the proposed work.
 - iii. Sustainability: Identify a specific external funding source larger than the Innovation Research grant budget. Include the specific solicitation or program, the proposed submission date and amount requested, and the link

to the program and RFP. Present a clear plan for how the funding improves the competitiveness for that external funding opportunity.

- iv. **Expected Results and Impact:** Describe the expected outcomes and deliverables from the proposed work relative to the goals of the special program. For technology development proposals, include goals for technology transfer/commercialization.
 - v. **Timeline:** A clear timeline for the completion of the work identifying specific milestones associated with project goals.
 - vi. **Commitment Statement:** A statement of commitment to submit a follow-up proposal to the intended external funder/target program.
- 4. **Budget Justification (one page):** Clarify the role of individuals for whom salary support is requested. Justify any request for salary support in terms of the objectives of the project.
 - 5. **Letter(s) of Support:** Letter of support from the dean/director or relevant research centers and/or partners should describe financial and other support and importance of the proposal/partnership.
 - 6. **References Cited (one page)**
 - 7. **Curriculum vitae (5 pages):** PI's and co-PIs' CV in any standardized CV format, or agency ones (e.g., NIH, NSF, etc.).

PROPOSAL SUBMISSION

Proposals are to be submitted via the Office of Sponsored Research Services via email to srobinso@clarkson.edu.

APPLICATION DEADLINE 5pm, Friday, April 24, 2020

Signatures: By submitting the application, applicants indicate their agreement to comply with the terms and conditions of the program and all other applicable Clarkson University policies.

FURTHER INFORMATION AND PROGRAM CONTACT

For additional information or inquiries about the Clarkson University Special Solicitation - Epidemic and Virus Related Research Innovation Fund application submission process, please contact: Shannon Robinson, srobinso@clarkson.edu.

COVID-19 Resources (as of March 29, 2020)

COVID-19 High Performance Computing Consortium

The Trump administration has unveiled a new initiative to help researchers worldwide harness a range of America's most powerful high-performance supercomputing resources to deliberately accelerate new discoveries in the fight against COVID-19. Scientists can tap into 16 of America's top computing systems. Learn more at [COVID-19 HPC Consortium](#).

Johns Hopkins Coronavirus Map & Resource Center

The map was first shared publicly on Jan. 22. It was developed to provide researchers, public health authorities, and the general public with a user-friendly tool to track the outbreak as it unfolds. All data collected and displayed are made freely available through a GitHub repository, along with the feature layers of the dashboard, which are now included in the ESRI Living Atlas. Learn more at [coronavirus.jhu.edu](#).

COVID-19 Open Research Dataset (CORD-19)

In response to the COVID-19 pandemic, the Allen Institute for AI has partnered with leading research groups to prepare and distribute the COVID-19 Open Research Dataset (CORD-19), a free resource of over 29,000 scholarly articles, including over 13,000 with full text, about COVID-19 and the coronavirus family of viruses for use by the global research community. Learn more at [SemanticScholar.org](#).

Dimensions (COVID-19 Research)

Digital Science wants to support the global research effort to manage and minimize the impact of COVID-19. For researchers, early knowledge and access to research being carried out and published is critical. In order to facilitate this, they're able to free people from the constraints of specific applications and platforms by providing all relevant content on COVID-19 in [Dimensions](#) as a single export file, updated once every 24 hours, to make sharing and distributing this research information easier. The file contains the details of (and links to) all relevant publications, data sets and clinical trials.

COVID-19 Non-Federal Funding Opportunities

Clarkson University Office of Sponsored Research Services

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Clarkson University Shipley Center for Innovation

Funds are available to support technology development through the Shipley Center Ignition Program. For more information contact Jamey Hoose (jhoose@clarkson.edu).

FuzeHub

This year the Manufacturing Grants program includes special funding for projects focused on COVID-19. The Innovation Fund comprises three program tracks: Manufacturing Grants, an annual Commercialization Competition and Innovation Challenges. For more information visit <https://fuzehub.com/fuzehub-blog/mfg-grant-2020-update/>.

LifeArc

LifeArc has made available an initial £10M for the identification of therapeutics that can be rapidly deployed to treat COVID-19. The aim is to run trials in patients during the current epidemic. It is anticipated that applications will be for funding to repurpose one or more drugs that are generic, already licensed, or are in late stage development for another indication. Learn more at [LifeArc: Coronavirus \(COVID-19\) Therapeutics](#).

Massachusetts Institute of Technology (MIT)

MIT Solve is seeking tech innovations that can slow and track the spread of an emerging outbreak, for example by improving individual hygiene, developing low-cost rapid diagnostics, analyzing data that informs decision making, and providing tools that protect health workers. Solve is also seeking solutions that focus on preventative and mitigation measures that strengthen access to affordable primary healthcare systems, enhance disease surveillance systems, and improve healthcare supply chains. Learn more at [MIT Solve: Health Security & Pandemics Challenge](#).

COVID-19 Federal Funding Opportunities

Department of Energy (DOE)

The U.S. Department of Energy (DOE) encourages you to consider scientific questions that underpin COVID-19 response and that the research community may answer using DOE user facilities, computational resources, and enabling infrastructure. Learn more at [DOE Seeking Input and Collaboration on Science and Technology Response to COVID-19](#).

Health and Human Services (HHS)

As part of the government-wide effort to mitigate the spread of COVID-19 in U.S. communities, the U.S. Department of Health and Human Services (HHS) has updated a broad agency announcement (BAA) to focus specifically on products to diagnose, prevent or treat coronavirus infections. Learn more at [HHS Solicits Proposals for Development of Medical Products for Novel Coronavirus](#).

National Institutes of Health (NIH)

NIGMS is issuing this Notice of Special Interest (NOSI) to highlight the urgent need for research on SARS-CoV-2 and Coronavirus Disease 2019 (COVID-19). Learn more at [NOT-GM-20-025](#).

NIAID is issuing this Notice of Special Interest (NOSI) to highlight the need for research on Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease 2019 (COVID-19). NIAID is particularly interested in projects focusing on viral natural history, pathogenicity, transmission, as well as projects developing medical countermeasures and suitable animal models for pre-clinical testing of vaccines and therapeutics against SARS-CoV-2/COVID-19. Learn more at [NOT-AI-20-034](#).

National Center for Advancing Translational Sciences (NCATS) is issuing this Notice of Special Interest (NOSI) to highlight the urgent need for research on the 2019 novel Coronavirus (COVID-19). NCATS is particularly interested in projects focusing on the use of informatics solutions to diagnose cases and the use of CTSA-supported core resources (e.g., advanced scientific instruments, highly-specialized facilities, and regulatory expertise) to facilitate research on COVID-19 and advance the translation of research findings into diagnostics, therapeutics, and vaccines. Learn more at [NOT-TR-20-011](#).

NIH has issued a notice to highlight the urgent need for research on the 2019 Novel Coronavirus (2019-nCoV, also known as COVID-19). NIDA is especially interested in research collecting and examining data on the risks and outcomes for COVID-19 infection in individuals suffering from substance use disorders. Learn more at [NOT-DA-20-047](#).

NIH has issued a notice to highlight the urgent need for research on COVID-19 and on biological effects of its causative agent, SARS-CoV-2. Topics of specific interest to NHLBI include host response, associations with heart, lung, and blood (HLB) diseases, potential impacts on transfusion safety, and clinical outcomes of infected individuals. Learn more at [NOT-HL-20-757](#).

NIH has issued a notice to highlight the urgent need for research on COVID-19. NIAID is particularly interested in projects focusing on viral natural history, pathogenicity, transmission, as well as projects developing medical countermeasures and suitable animal models for pre-clinical testing of vaccines and therapeutics against COVID-19. NIGMS is specifically interested in incorporation of data from COVID-19 into ongoing research efforts to develop predictive models for the spread of Coronaviruses and related pathogens. Learn more at [NOT-AI-20-030](#). This will be [rescinded as of 04/08/2020](#).

National Science Foundation (NSF)

The Office of Advanced Cyberinfrastructure (OAC) within the Directorate for Computer and Information Science and Engineering is inviting RAPID proposals and supplemental funding requests to existing awards that address COVID-19 challenges through data and/or software infrastructure development activities. Learn more at [NSF 20-055](#).

NSF is accepting proposals to conduct non-medical, non-clinical-care research that can be used immediately to explore how to model and understand the spread of COVID-19, to inform and educate about the science of virus transmission and prevention, and to encourage the development of processes and actions to address this global challenge. Learn more at [NSF 20-052](#). They've also posted an [FAQ for NSF 20-052](#).

Office of Science and Technology Policy

In response to the COVID-19 pandemic, the Allen Institute for AI has partnered with leading research groups to prepare and distribute the COVID-19 Open Research Dataset (CORD-19), a free resource of over 29,000 scholarly articles, including over 13,000 with full text, about COVID-19 and the coronavirus family of viruses for use by the global research community. The White House has issued a call to action to the Nation's artificial intelligence experts to develop new text and data mining techniques that can help the science community answer high-priority scientific questions related to COVID-19. Learn more at [Call to Action to the Tech Community on New Machine Readable COVID-19 Dataset](#).