The ISE Newsletter provides up-to-date information on conferences, funding opportunities, and businesses and organizations–so that, together, we can more effectively address the world's regional, national, and international sustainability agendas.

DEB also encourages interdisciplinary proposals that cross conceptual boundaries and integrate over levels of biological organization or across multiple spatial and temporal scales.

The Division of Environmental Biology (DEB) Financial Assistance Program. This funding opportunity focuses on research that will advance mechanistic understanding and effectiveness of bioremediation through incorporation of advanced, novel materials science approaches. Bioremediation refers to the use of biota (bacteria, algae, fungi, plants) to treat contaminated environments by mineralizing, decomposing, or immobilizing pollutants. However, this approach is challenging in both the development of effective field applications and the understanding of microbial processes involved. We encourage the submission of proposals that apply novel concepts and approaches to the development of bioremediation strategies. This may include the development of new bioremediation methods, the application of concepts in new locations and environments, efforts to enhance the effectiveness of bioremediation technologies, and the development of methods to monitor and assess the performance of these technologies.

DEB is providing funding for research in the following two areas:

1. Commercial Aquaculture Systems (up to $300K): Proposals seeking funding to support aquaculture research projects to address issues related to: 1) Genetics of commercial aquaculture species; 2) Critical disease issues impacting commercial aquaculture operations; 3) Understanding and predicting the interaction of climate change and disease; 4) Utilizing innovative materials science approaches. Funds will be applied toward the development of new aquaculture products or technologies. Proposals should provide a clear plan for producing experimental products and technologies. Emphasis will be on commercialization.

2. Optimizing Natural Systems for Remediation: (up to $300K): Proposals seeking funding to support research and training that focus on the development of natural systems for treatment of contaminated sites. Proposals should include plans for collaborating with government agencies and private industry. Proposals meeting the following criteria will be given priority: a) those that propose innovative methodological approaches; b) those that propose methods to increase the effectiveness of natural systems; and c) those that propose methods to monitor and assess the effectiveness of natural systems.

The deadline for submitting an abstract for each option is 31 March 2020. If you are interested in submitting any of your current research, abstract submissions are now open. There are several different options – Paper presentation, Poster presentation, Session.


during this challenging time, we’re sending out this welcome to Virtual Earth Month! We’ll use this information to create a Virtual Earth Month calendar that aims to connect members of the Mason community and international organization.

NIAID's Multi-Pronged Response to the COVID-19 Outbreak

Using our experience and research expertise, NIAID is taking several approaches to address the COVID-19 pandemic. NIAID is particularly interested in projects focusing on viral natural history, pathogenicity, transmission and prevention, and to encourage the development of processes and actions to support new research in response to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and future outbreaks. In particular:

- Viral Pathogenesis: Understanding the mechanisms of viral interactions with host biological systems at the cellular and molecular level
- Transmission: Understanding how SARS-CoV-2 is transmitted from person to person
- Countermeasures: Developing medical countermeasures to address COVID-19
- Pandemic Preparedness: Strengthening the evidence base to better prevent and control coronavirus

Proposals may focus on one or more of the above areas. Applications to this announcement must: 1) Address a critical need in pandemic preparedness; 2) Address questions that have high potential for impact; 3) Address a high priority in NIAID's research agenda; and 4) Address a priority in the research agenda of one or more extramural institutions.

Additional Funding Opportunities

Notable opportunities to consider:

- COVID-19 Research Grant: National Institute of Allergy and Infectious Diseases (NIAID) and National Institute of General Medical Sciences (NIGMS) are offering a Research Grant to support research on the 2019 Novel Coronavirus (2019-nCoV) and the development of vaccines, therapeutics, and diagnostics against SARS-CoV-2. The grant deadline is 30 April 2020.
- Research Training Grant: NIAID's Multi-Pronged Response to the COVID-19 Outbreak: NIAID is particularly interested in projects focusing on viral natural history, pathogenicity, transmission and prevention, and to encourage the development of processes and actions to support new research in response to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and future outbreaks.
- NIAID's Multi-Pronged Response to the COVID-19 Outbreak: NIAID is particularly interested in projects focusing on viral natural history, pathogenicity, transmission and prevention, and to encourage the development of processes and actions to support new research in response to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and future outbreaks.

### Key Dates

- Proposal Submission Deadline: Rolling basis
- Application Submission Deadline: Rolling basis

### Contact Information

For questions about these opportunities, please contact the Lead Program Officers below:

- Xiao Li, M.D., Ph.D. (SARS-CoV-2)
- Ingrid E.Rename, M.D. (Viral Pathogenesis and Countermeasures)
- Michael Frenkel, B.S. (Transmission and Pandemic Preparedness)

Thank you,