

## **Coronavirus Medical Device Challenge Program Guidelines and Instructions FY2020**

### **SUMMARY**

UM Ventures – invites applications for the **Coronavirus Medical Device Challenge Program** from tenured/tenure-track faculty whose full-time, home positions are at the University of Maryland, College Park (UMD) or University of Maryland, Baltimore (UMB). Joint proposals between the two institutions are highly encouraged.

The World Health Organization (WHO) has declared the current coronavirus (COVID-19) outbreak a pandemic. An effective response to this outbreak and other future pathogens requires accelerated development and commercialization of medical devices directed to better detection, prevention, and control of COVID-19 and other pathogens related to the current epidemic and to increase impact and response capacity across a wide range of domains.

### **TIMELINE**

Applications will be accepted on a **rolling basis through May 2020 (or until funds are exhausted); funding decisions will be made bi-weekly until all funds are spent.** Proposals received will be awarded (or not) within two weeks.

### **ELIGIBILITY**

Tenured/tenure-track faculty whose full-time, home position is at UMD or UMB are eligible to apply. Single PI proposals are accepted; multi-disciplinary proposals/approaches are encouraged especially across institutions. As a pre- or co-requisite, an invention disclosure for the subject technology must be on file with UM Ventures.

### **FUNDING AVAILABLE**

Up to \$50,000 in total funding is available for each project from UM Ventures to support this program.

### **RESEARCH FOCUS**

We seek proposals that utilize UMB/UMD strengths in medical devices (e.g., Robert E. Fischell Institute) and related innovation (e.g., computer technology) to rapidly contribute to human health and related outcomes with respect to COVID-19 or the causal virus (SARS-CoV-2), including prevention, control, and response efforts. To that end, proposed research should accomplish the following:

- Contribute to commercialization of evidence-based medical devices related to the COVID-19 pandemic across a wide range of outcomes, including but not limited to testing, personal protection, treatment and prevention.

*Grant funds should be spent within six months of the award; any longer duration will need to be approved.*

### **EVALUATION CRITERIA**

- **Impact:** Does the proposal have the potential for significant impact on human health and related outcomes? Can the proposal speed up commercialization and bring the solutions to the market quickly? Proposals that impact Maryland, specifically, are encouraged.
- **Alignment with UMB/UMD Strengths:** Does the proposal harness UMB/UMD's unique strengths to be competitive and successful?
- **Urgency:** Is the project urgent and can it only be accomplished through this funding?

- **Risks:** Does the proposal outline and include plans for mitigating any risks to the research team and/or participants?
- **Readiness:** Does the proposal support the case to go to the market? Recommended TRL 3 to 5, i.e., proof of concept (TRL 3), initial laboratory testing (TRL 4), and simulated field testing (TRL 5).
- **Regulation:** Technology is regarded as a medical device by the FDA, or has a strong relevance to medical devices. Software and apps are considered on a case-by-case basis. The Fischell Institute can provide assistance in understanding FDA regulatory landscape.
- **Leverage:** Can this proposal be leveraged to garner extramural support from specific funding agencies or industry partners?

## APPLICATION INSTRUCTIONS

The application is on rolling basis. Please submit an electronic pdf copy with lead inventor signature to Alex Wang-at [ywang186@umd.edu](mailto:ywang186@umd.edu) (where PI lead is UMCP-based) and/or Gail Knott [gknot001@umaryland.edu](mailto:gknot001@umaryland.edu) (where PI lead is UMB-based). Teams whose project is approved will receive a confirmation via email along with terms, which must be accepted before funds are transferred to the PI's department budget.

The inventor(s) must include **within 3 pages:**

- Inventor(s) name, school/department affiliation and an email address for correspondence
- Title and disclosure number of technology disclosed to UM-Ventures
- Abstract (summary and endpoints; 3 sentences maximum)
- Technology Description (no more than 3 paragraphs) and Technology Readiness Level (TRL)
- Market Need and Opportunity (no more than 2 paragraphs, include time to complete project)
- Budget and justification
- Milestones

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*The university does not want any member of the faculty, staff or student population to put themselves at any undue risk to perform this research. We always urge all members of the UMD community to practice prevention behaviors and hold each other accountable in following safe and healthy practices. Please review guidelines for research safety and ensure that your [Responsible Conduct of Research](#) training is up-to-date.*

Suggested sites:

<https://www.cdc.gov/coronavirus/2019-nCoV/lab/lab-biosafety-guidelines.html>

<https://essr.umd.edu/research-safety>

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Details, information and links on external funding opportunities related to COVID-19 can be found [here](#).