TO: BU MED Campus Faculty
FROM: Andrew W. Taylor, PhD, Associate Dean of Research, BUSM
DATE: Sept. 3, 2019
SUBJECT: CDC Network of Modeling Centers to Improve Evidence Base for Seasonal and Pandemic Influenza Prevention and Control

OBJECTIVES: The purpose of the CDC Network of Modeling Centers to Improve Evidence Base for Seasonal and Pandemic Influenza Prevention and Control program is to support applied research that will develop, advance, and apply mathematical models to investigate the utility and impact of prevention and control strategies for seasonal and pandemic influenza, including vaccination and treatment. This Notice of Funding Opportunity (NOFO) will establish a network of Influenza Modeling Centers that conducts research to facilitate the rapid development, harmonization, validation, synthesis, and communication of multiple mathematical models and their results for seasonal and pandemic influenza prevention and control. This NOFO is expected to generate advancements in the rapid sharing of validated modeling results from multiple models that will improve the evidence base for public health action and inform policy development.

The proposed approach will establish Modeling Centers that each involve multiple modeling experts led by a Principal Investigator. Awardee institutions will work together to plan, initiate, complete, evaluate, analyze, and report out accomplishments and/or findings of the project. The Modeling Centers will work to identify key questions, similarities and differences in results from distinct modeling approaches, advancements in the rapid sharing of modeling assumptions, and the results from multiple models.

For the purposes of this NOFO, mathematical modeling is defined as methods that include the mechanism of transmission of infection from an infected to an uninfected host. These are distinct from most methods in epidemiology because they explicitly model the transmission process and, therefore, the cause of infection; a major risk factor for infection is the population infection prevalence itself. Examples include, but are not limited to, compartmental models, agent-based models, and network models. In order for modeling results to be appropriately used, decision-makers must understand the limitations of the data and methods used, the assumptions and inputs employed by the model, and how these choices affect the results. Uncertainty and sensitivity analyses, model validation, and clear communication are crucial for the successful use of model results to inform public health decisions.

Applicants should submit evidence of their knowledge and experience in mathematical modeling, including their use of innovative methodologies and any previous participation working collaboratively in multi-institution modeling networks or consortiums.

FUNDING INFORMATION: The estimated total funding available, including direct and indirect costs, for the entire five (5)-year project period is $9,375,000. The number of awards will be up to five (5). Awards issued under this NOFO are contingent upon availability of funds and a sufficient number of meritorious applications. Because the nature and scope of the proposed research will vary from application to application, it is also anticipated that the size and duration of each award may also
vary. The total amount awarded and the number of awards will depend upon the number, quality, duration and cost of the applications received.

The estimated total funding (direct and indirect) for the first year (12-month budget period) will be $1,875,000 with individual awards ranging from $300,000 to $375,000 for the first year. The estimated total funding (direct and indirect) for the entire project period will be $9,375,000. The project period is anticipated to run from 08/01/2020 to 07/31/2025.

ELIGIBILITY: Any individual(s) with the skills, knowledge, and resources necessary to carry out the proposed research as the Project Director/Principal Investigator (PD/PI) is invited to work with his/her organization to develop an application for support. Individuals from underrepresented racial and ethnic groups as well as individuals with disabilities are always encouraged to apply for HHS/CDC support.

INTERNAL SELECTION PROCESS: Interested BU MED campus faculty please submit the documents listed below via InfoReady Review by 9/23/19. If you are a faculty member in BMC space and wish to apply for this opportunity, please contact Jennifer Fleming, Director of Foundation Relations and Government Grants at jennifer.fleming@bmc.org.

- Questions outlined in InfoReady Review application;
- A brief statement (up to 2 pages) by the candidate describing the proposed project including both proposed partner institutions/organization and internal partners;
- A brief budget outline for the proposed project;
- Up-to-date CV for all team members.

A faculty committee drawn from both campuses will review internal proposals and select nominees.


In requesting to be considered for this limited submission funding opportunity, you are making a commitment, if selected, to submit your proposal to the sponsor in a timely manner and to Sponsored Programs in accordance with the Proposal Submission Policy.