

**Date:** November 19, 2019

**Re:** Pilot Project Funding Opportunity for Maine-INBRE Research Training Faculty

**To:** Bates, Bowdoin, and Colby Colleges; College of the Atlantic; Universities of Maine at Farmington, Machias, Presque Isle; University of Maine Honors College; and Southern Maine Community College

**From:** James Coffman, Ph.D., Program Director, Maine INBRE, MDI Biological Laboratory

**CC:** Maine INBRE External Advisory Committee

The Maine-INBRE invites applications for Research Training Faculty Pilot Projects. The purpose of this program is to provide outstanding faculty members at Maine INBRE partner institutions funding for cutting-edge research in comparative functional genomics that engages and trains undergraduate students. Proposals for interdisciplinary and/or collaborative research involving bioinformatics and or computational approaches will be prioritized, and submissions from individuals currently underrepresented in the biomedical, clinical, and behavioral sciences are encouraged. The maximum project period for this Funding Opportunity is three years, with an opportunity for competitive renewal for an additional two years.

Maine INBRE Research Training Faculty will be required to:

1. Formally apply for funding by submitting a research proposal, described below.
2. Devote **15-25% annual effort** directing the proposed research project. The % effort **must be confirmed** by the appropriate institutional official.
3. Submit quarterly progress reports to the INBRE Program Director (PD).
4. Submit annual progress reports that will be reviewed by the PD, Program Coordinator (PC), External Advisory Committee (EAC), Steering Committee, and the NIH.
5. Present their research at the National IDeA Symposium for Biomedical Research Excellence (NISBRE) in Washington, DC.
6. Submit research for peer-reviewed publication
7. Identify and work with one or more named scientific advisors who are experts in research fields relevant to the project.
8. Mentor students in their research.
9. Participate in an annual EAC meeting, INBRE-sponsored workshops, and other periodic meetings.

To apply, please submit the following to Kris Reaman (kreaman@mdibl.org) by **January 16, 2020**:

1. A research plan in the format of an [NIH R21 proposal](#), using Arial 11 point typescript and 0.5-inch margins, which includes the following sections (a-f):
  - a. Abstract/Summary (30 lines max).
  - b. Specific Aims (1 page)
  - c. Research Strategy (6 pages max), with the following subsections:
    - Significance (including background and any preliminary data)
    - Innovation
    - Approach (including plan for ensuring rigor and reproducibility)
  - d. Description of the relationship of the project to Comparative Functional Genomics\* and the relevance of the project to advancing human health or research in biomedical science ( $\leq 1$  page).
  - e. Statement as to how INBRE support will contribute both to advancing the career of the awardee and to student research training, including a plan for mentoring students ( $\leq 1$  page).
  - f. A plan for maintaining compliance with applicable federal policies, rules, and guidelines for research involving human subjects and/or biohazards ( $\leq 1$  page).

- g. A plan for authentication of key biological and/or chemical resources ( $\leq$  1 page).
  - h. Bibliography / References Cited.
2. An NIH-style biosketch with other support. For instructions and Biosketch form template page please see <https://grants.nih.gov/grants/forms/biosketch.htm>.
  3. IACUC approval for research involving vertebrate animals, and a narrative that addresses the five points of use of vertebrate animal as required by NIH. See attached template form and <https://nexus.od.nih.gov/all/2012/02/28/writing-the-vertebrate-animal-section/>
  4. A letter from an appropriate institutional representative confirming that the institution will support the project leader's required minimum commitment of **15-25% annual effort** for the proposed research project and detailing how that will be achieved.
  5. A *draft* budget that provides information on how the project will use the proposed funding during the first year and the remainder of the project period. Note: Maximum funding level is \$20,000 per year, direct costs. If your project is selected to go forward to NIH for approval, we will request a final budget that will need to be approved by the financial office at your institution. For this *draft* budget, we request that you use two NIH forms (Form Page 4 and Form Page 5, followed by budget justification on page 2 of the Form Page 5). NIH grant forms may be found at: <http://grants.nih.gov/grants/funding/phs398/phs398.html>.

Funding will depend on scientific merit and relevance to the INBRE's broad scientific theme of Comparative Functional Genomics\*. Applications will be reviewed by the INBRE PD, PC, EAC, and possibly other external reviewers. The credentials and proposed research of the candidate will be forwarded to Program Officials at the National Institute of General Medical Sciences (NIGMS), NIH, for final approval. INBRE project funding will require approval and issuance of the grant award by NIGMS.

The start date of the award will depend on the timing of approval by NIGMS, but we are targeting May 1, 2020 as our projected start date. If approved, the funding will be active for three years, contingent upon annual review by the EAC and grant continuation by the NIH. At the end of the three-year period, the Investigator will be eligible to competitively apply for two additional years of funding, each year again contingent upon EAC and NIH approval. Progress reports must be filed with the INBRE PD on a quarterly basis. Annual progress reports are also required to be submitted to both the NIH and the EAC. INBRE Investigators are expected to attend periodic INBRE-sponsored meetings that include technical and career development workshops.

**\*Research Theme: Comparative Functional Genomics:**

Defined as research that seeks to understand the functional significance of genomic information and its variation, Comparative Functional Genomics provides a thematic foundation for developing a multidisciplinary biomedical research network and infrastructure within Maine, by incorporating multiple model organisms, technologies, bioinformatic and computational analyses, and the experimental techniques of cell and molecular biology. Research projects that fit the theme of Comparative Functional Genomics might include (but are not limited to) investigations of regulatory genomic function, toxicology, neurobiology, immunology, and developmental and regenerative biology. Research in Comparative Functional Genomics is expected to generate novel biological insights with the potential to advance human health.