NH-INBRE-FUNDING OPPORTUNITY ANNOUNCEMENT
GRANT OPPORTUNITY FOR TWO YEAR PROJECTS
TO BEGIN JULY 1, 2018

1. Introduction. New Hampshire is one of 23 states (plus Puerto Rico) which together receive a very small portion of the overall NIH budget. In 1994, the U.S. Congress authorized the IDeA (Institutional Development Award) Program to broaden the geographical distribution of NIH funding for biomedical/behavioral research. The IDeA program aims to enhance the competitiveness of academic institutions in the 23 states that are eligible for NIH funding through the IDeA program. There are several different funding mechanisms used by the NIH IDeA program. One of these is the INBRE program (IDeA Network for Biomedical Research Excellence) which supports the creation of a network consisting of one or more research-intensive universities and several colleges in the same state. In 2009, the Geisel School of Medicine at Dartmouth, in cooperation with the University of New Hampshire, applied for a grant under the INBRE program, and was awarded five years of support in 2010. This grant was successfully renewed for five years in 2015.
An important goal of the INBRE program is to provide research opportunities for students from predominantly undergraduate institutions (PUIs), including community colleges. This includes providing funding for research at partner PUIs and support of other activities (e.g. seminars and workshops) that enhance the science and research culture within partner PUIs. This is designed to increase the fraction of students from partner PUIs who continue in health research careers following their graduation, with the hope that biotechnology, pharmaceutical, and related companies will establish new facilities within IDeA states based on the growth of the workforce with experience needed for careers in these areas.

2. Past History of NH-INBRE Research Grant Program. NH-INBRE issued its first Funding Opportunity Announcement (FOA; called an RFA then) in the Fall of 2009, seeking projects to be funded in the event our initial NH-INBRE grant application was funded by NIH. We received 33 applications and selected 14 projects for potential funding: 2 Full Projects (50% effort for 5 years; now referred to as Research Projects) and 12 Pilot Projects (25% effort for 3 years). These 14 projects received funding when our NH-INBRE application was funded by NIH in 2010.

We issued our second FOA in the Fall of 2012 with funding to begin in July, 2013 (when funding of the original Pilot Project grants ended). Of the 8 renewal and 9 new applications we received, 5 renewal and 3 new Pilot Projects were selected for 2 years of funding (7/1/2013-6/30/2015). When combined with the 2 ongoing Full 5 year projects we continued to support, that brought the number of grants then funded to 10. The third FOA, issued in fall, 2014, invited applications for funding to begin in 2015 if our first renewal application were successful. Because our renewal application was successful, we were able to fund 2 Research Project grants and 8 Pilot Project grants. We are now issuing the fourth NH-INBRE FOA, for grants that will be funded, beginning July 1, 2018, for two years, the final two years of the current NH-INBRE 5 year grant from the NIH.

3. Eligibility.
(a) Renewals. Principal Investigators (PIs) at NH-INBRE partner institutions who are currently funded by NH-INBRE and have received fewer than 7 years of NH-INBRE support as a PI, are eligible to submit a renewal application to extend their work for an additional two years.

(b) New Proposals. Faculty members at a NH-INBRE partner institution whose research interests have biomedical relevance and whose background and training have prepared them to conduct the proposed research are eligible to apply for grant support and encouraged to do so. This includes most faculty in the life sciences, including clinical researchers in nursing, as well as some in other areas including environmental science, computer science, chemistry, psychology, and physics. Some areas of the social sciences may have sufficient biomedical relevance to receive NH-INBRE support. Currently-funded faculty may also submit an application for a new project rather than for renewal of their current project as long as they have not been supported as a PI by NH-INBRE for more than 7 years.

A clear statement of the biomedical relevance of the proposed studies is required as part of the application. Projects do not need to address directly human health and human biology but should be related to the overall mission of the NIH to support biomedical and behavioral research. NIH maintains an extensive database that lists all of the grants that NIH is currently funding as well as grants funded during the past several years. This database can be consulted to see if the type of work being considered for an NH-INBRE grant fits into the overall NIH portfolio. The database can be accessed at https://projectreporter.nih.gov/reporter.cfm and can be searched by keywords.

Not all work conducted in the biological sciences is eligible. For example, many ecology projects have little or no biomedical relevance while some have considerable relevance (e.g. understanding compounds in the environment that have mutagenic effects or estrogen-like effects). While projects with little or no biomedical relevance may be excellent projects, they do not fit within the purview of the NIH and will not be supported by NH-INBRE. Any projects funded by NH-INBRE should fit within one or more of NH-INBRE's four broad research themes: (1) Microbial Pathogenesis; (2) Cellular and Molecular Biology; (3) Neurobiology and Behavior; (4) Human Health.

4. Requirements for Renewal of Projects currently supported by NH-INBRE.
Projects that are currently in their fifth year of funding must demonstrate progress in their research projects as measured by publications and grant applications. Those who have held a Full Project (50% effort) for 5 years are expected to have published at least one research paper with students as co-authors and to have submitted a grant proposal to a funding source outside of their school (e.g. NIH, NSF; etc., but not EPSCoR). The grant application need not have been successful, or may be one recently submitted and still awaiting evaluation for possible funding.

Those who have had support for three years support as an NH-INBRE PI are not expected to meet these requirements but will be required to summarize the progress they have made in their projects. Evaluation of progress will be part of the review process for all renewal applications submitted. Grant applications from investigators who have held an NH-INBRE grant and are submitting a new proposal will also be expected to describe the progress made towards the specific aims of their initial NH-INBRE grant.

5. Types of projects supported.
Partner faculty may submit requests for support for projects in which they commit 50% effort (**Research Project**, RP) or 25% effort (**Pilot Project**, PP). Both Research Project and Pilot Project

grants will be 2 years in duration. We anticipate there will be an additional round of grant selection in 2019 for projects that would be funded in July, 2020, upon successful renewal of the NH-INBRE grant from NIH, which will be submitted in March 2019.

Both types of projects can be Collaborative Projects. Collaborative projects must have a single PI from an NH-INBRE PUI partner and are called **Collaborative Research Projects** (CRP, 50% effort by the PI) or **Collaborative Pilot Projects** (CPP; 25% effort by the PI). Three of our current projects are Collaborative. The collaborators may be from Dartmouth or UNH or from a partner PUI but may not be from the PI's institution. A collaborator on a CRP or CPP can receive no more than 5% salary support from the NH-INBRE grant. The work to be done in the collaborating labs should synergize so that the project's goals and impact are greater than would be the case if each were a separate project. In CRPs and CPPs, the PI from a Partner school and the collaborator(s) each take responsibility for specific parts of the aims and research plan and play ongoing roles in the overall project as it progresses. Contact Chuck Cole (chuck.cole@dartmouth.edu) if you would like assistance in identifying potential collaborators for your project.

Note that additional situations exist where a project may have one or more collaborators without it being a CRP or CPP. In these situations, the collaborator would perform a minor role in the project and would not be involved in the development and direction of the overall project. Examples: (i) a collaborator might perform statistical or other analyses, help to interpret the data obtained, and participate in preparation of a manuscript including the data generated by the collaborator, but without the collaborator having a major intellectual or oversight role in the overall project; (ii) a collaborator might host a student from the PIs lab who comes to his/her lab to use special imaging tools or other equipment, without the collaborator playing a further role in the project. These collaborators can come from the same PUI as the project PI, from another Partner in the NH-INBRE network, or from any other institution, including Dartmouth and UNH. The role of any collaborators should be described in the grant application.

The grant application should include a letter from each collaborator, confirming his/her involvement in the project. If a project is not a CRP or CPP, but involves a collaboration, a letter from that person should also be included.

It is possible that a proposal submitted as a Research Project (RP) or Collaborative Research Project (CRP) will be conditionally approved as a Pilot Project (or Collaborative Pilot Project-CPP) and funded at a lower level than if it were a RP or CRP.

6. Letters of Intent.

The initial step in the grant application process for Partner faculty is the submission of a Letter of Intent (LOI), **due November 4, 2017**. The LOI should provide the name, professional title, and institutional affiliation of the Principal Investigator, the type of grant for which the PI is applying (RP, PP, CRP, CPP) and the names and institutional affiliations of any collaborators. Also required are (1) a working title of the proposed project; (2) a tentative set of Specific Aims; and (3) a paragraph addressing the biomedical relevance of the project, including how the project fits into one more of the NH-INBRE themes. This part of the LOI should not be longer than two pages. The LOI should be accompanied by a statement and signature from an appropriate institutional official confirming adherence to the Memorandum of Understanding (MOU) agreed to by their school. (One of the provisions of the MOU is a commitment from the school to approve release time from teaching and service obligations consistent with the percent of effort that the PI contributes to the project and as indicated in the proposed budget.)

The LOI should include a list of all the PI's publications and grant applications from the last 5 years. For CRPs and CPPs, the LOI should also list the collaborator's papers and grant applications for the past 5 years. Those publications that reflect NH-INBRE supported research (either through an NH-INBRE grant to the PI or through NH-INBRE research training funds provided to the Partner PUI) should be indicated with an asterisk and the names of students among the authors should be in bold type. This list should include manuscripts submitted but not yet published, and grant proposals submitted, whether successful, pending or unsuccessful. Manuscripts that are in preparation but not yet submitted should not be listed. The status of any submitted grants should be noted. Details about any active grants currently held by the PI or which provides support to the PI or his/her lab should be included.

Grants should be submitted to Jennifer Smith (Jennifer.smith@dartmouth.edu) through the PIs sponsored projects/business office. They may be submitted via email.

The LOIs will be evaluated by the Administrative Core of NH-INBRE (Bill Green, Steve Fiering, Chuck Cole, Bob Maue) to determine whether they are of sufficient biomedical relevance and fall within one or more of the NH-INBRE themes. **The PIs of those deemed suitable will be notified no later than November 18,** and will be invited to continue with the process by submitting a grant proposal.

At the time that PIs are informed about whether to proceed to prepare the grant application, Part II of this FOA will be issued with details on the format, required components, and page limits for specific sections of the proposal. Part II will also include specific instructions on grant budgets as well as the criteria that will be used to evaluate submitted proposals. Submitted proposals will be evaluated by both the NH-INBRE Administrative Core faculty and selected outside reviewers.

Contact Chuck Cole if you have questions about LOIs (chuck.cole@dartmouth.edu ; 603-6501628)

Summary of Important NH-INBRE Grant Submission Dates

Early October 2017		Funding Opportunity Announcement (FOA) with details about grant submission sent to Partner faculty
November 4, 2017		Deadline for submission of Letters of Intent (LOIs)
November 18. 2017		Notification of Partner faculty about their LOIs . Those Responsive to the request for LOIs and the FOA will be invited to prepare and submit grant applications. Part II of the FOA will be issued at this time.
January 16, 2018		Deadline for grant submission for NH-INBRE funding
February 2018		Following outside peer review, proposals recommended for funding by NH-INBRE Administrative Core will be sent to EAC for approval
Early March 2018		Partner faculty to be funded by NH-INBRE notified about whether their proposal has been approved by the EAC.

		Approved proposals will be forwarded to NIGMS/IDeA Program their approval.
July 1, 2018		Subcontracts for projects cannot be issued until NIH approval is received. Furthermore, subcontracts to PUIs cannot be issued until we have received our Notice of Award (NOA) for the year beginning July 1, 2018. If the Partner institution permits, funds from the first year budget can be expended in advance of the formal NOA from NIH. Faculty should plan for a July 1 starting date. For renewal projects, there should be no break in funding between the end of the 3 year grant period on June 30 and the start of the next one. For approved new projects, we will work with PUIs so that a full summer of research can be conducted.