

NH-INBRE Mentor and Mentee Relationship Guidance

The purpose of this document is to communicate the guidelines for NH-INBRE mentor-mentee relationships. The mentor-mentee relationship is one of the most important aspects of INBRE programs nationwide, and is a key component by which the National Institutes of Health evaluates the success of our program. These guidelines establish measures for a successful mentor and mentee relationship. It is not necessary to address all these areas immediately, nor is the guidance meant to limit relationships presently exceeding these standards.

1. Communication and Professional Development

- a. Each year, mentors and mentees should have at least two in-person meetings.
- b. Mentors are encouraged to inform mentees about meetings, seminars, and conferences appropriate for their fields of interest and encourage the attendance of the mentee and their students. A priority should be made for attending and participating in Dartmouth/UNH sponsored events, including Dartmouth's graduate student and postdoc poster sessions.
- c. Mentees should invite mentors to speak at the mentee's institution at least once during the lifespan of the mentee's research project. The mentee will take the lead on all meeting planning and logistics. The mentor may use the opportunity of giving a science lecture to discuss career paths, including graduate school, with undergraduate students.
- d. For professional development, the mentor can arrange for their mentee to speak at a Dartmouth or UNH research event, a professional development event for graduate students and postdocs (such as those offered through the Dartmouth Center for Advancement of Learning (DCAL) and the UNH Center for Excellence in Teaching and Learning), or may include the mentee in a classroom lecture or lab activity.
- e. Mentors should invite the mentee and their students to their laboratories to provide them with opportunities for learning research techniques and using state-of-the-art laboratory equipment. This is an opportunity for Dartmouth students and laboratory staff to help advance NH-INBRE research projects and undergraduate research training.
- f. The mentee should consider seriously the guidance provided by the mentor. The mentor will provide a confidential recommendation to the External Advisory Committee regarding the mentee, and a component of that summary will include a statement on how guidance was provided and incorporated into the mentee's research.

2. Research Advice and Guidance

- a. Mentors are encouraged to assist mentees in establishing and meeting research goals.
- b. Mentors are encouraged to be proactive in providing research project advice on research direction/approaches.
- c. Mentors are encouraged to help identify and address deficiencies that may be limiting the mentee's progress in research (e.g., access to research literature, equipment and supplies, etc.). If the mentor or mentee cannot address such deficiencies, then they should contact Steven Fiering, NH-INBRE Program Coordinator, who will identify suitable Dartmouth resources or contacts.
- d. Mentors can help mentees distinguish between real research progress and less productive lab activity that, while it may provide a useful and valuable experience for students, does not advance the scientific goals of the project or the career goals of the mentee.
- e. Mentors should be familiar with core services available at Dartmouth and UNH and can advise mentees about the opportunities to make use of the cores and their advanced instrumentation/state-of-the-art tools. If mentors feel that they are not sufficiently familiar with core/shared resources, they should contact Steven Fiering, who will identify a Dartmouth lab manager to provide that assistance to the mentee.

- f. The mentor may periodically communicate with the mentee to ensure that the mentee or his/her institution are addressing research compliance and grant management tasks.
- g. When the mentor and mentee are collaborating on a NH-INBRE funded research project, they should work together to carefully design the role of both the mentee's and mentor's labs in the collaboration, and to proactively resolve potential conflicts about research data ownership.

3. Research Career Development Guidance

- a. Mentors should serve as a resource in periodically advising mentees on whether the experiments proposed and underway are likely to yield data and support conclusions that will lead to one or more papers or a grant submission.
 - b. If applicable, the mentor should assist the mentee to refocus or modify the specific research aims in order to tighten research methodologies and work toward the accepted metrics of papers/grants that define a successful research project. The mentee will present proposed research changes (having been reviewed by the mentor) to Charles Cole, NH-INBRE Director of Research Projects, for a final decision.
 - c. The mentor should advise mentees about appropriate journals to consider for publication, and whether or not the mentee has sufficient data to consider publication, etc.
 - d. The mentor should encourage and assist mentees in developing an abstract for a poster or presentation and encourage student participation in that work.
 - e. The mentor can encourage and assist mentees in developing further collaborations with other researchers at Dartmouth, UNH, or elsewhere to broaden the scope of their research and core scientific competencies.
 - f. The mentor should read any abstracts, journal articles or grant proposals that the mentee intends to submit, and be a resource if input on those materials is requested.
 - g. If requested and if merited, the mentor should write a letter of support for the mentee's promotion and granting of tenure.
4. The mentor should communicate annually with a faculty member at the mentee's institution who is overseeing the mentee's activities and advancement, so that each can be aware of the roles both are playing. This will allow exchange of information about any problems or potential problems that may not be known to both of them.

NH-INBRE mentees have scientific and training goals to enable them to advance in their research projects. The challenge for NH-INBRE mentees is to learn to balance and blend the priorities of their teaching-focused institutions with the NH-INBRE focus on research and research training.

Mentors should acknowledge and advance NH-INBRE research projects while working within the mentee's existing institutional frameworks. The mentee may have career development requirements at their institution that place relatively little importance on research for promotion (if applicable, the mentee can give the mentor a copy of their institution's promotion criteria). The mentee often has active lecture and lab teaching schedules with little or no staff/student support. Most importantly, the mentee is conducting research at an institution with developing experience in sponsored projects and limited infrastructure needed to conduct research. These limitations can sometimes complicate and/or slow even the most routine research activities.