Hamel Center for Undergraduate Research

SURF for Interdisciplinary Teams (SURF IT)

Role and Responsibilities of SURF IT Faculty Mentors

The Summer Undergraduate Research Fellowship for Interdisciplinary Teams (SURF IT) is a new program designed to encourage, guide, and fund independent, interdisciplinary, team-based research in any discipline. More specifically, SURF IT brings together teams of undergraduates and their faculty mentors from different departments and/or colleges to study a complex problem. Together, the teams pose a research question/hypothesis, design an integrated approach through the lens of their respective disciplines, and analyze their findings/results to yield a unified conclusion.

The role and responsibilities of SURF IT faculty mentors will be unique, as the mentors themselves will be an interdisciplinary team. As you begin serving as faculty mentors, we urge you to review all SURF IT application guidelines and program requirements on the Hamel Center website and to contact us with questions or concerns as soon as they arise. What follows is some basic information that may be useful as you start out.

Mentor Eligibility:
- For the AY2023-24 SURF IT pilot, all tenure-track faculty members at UNH and UNHM are eligible, as well as non-tenure-track research, clinical, and extension faculty.

- Eligibility for all mentors also assumes the mentor's *availability* to work with the student researcher throughout the entire undergraduate research process – i.e., availability not only during the actual summer research period, but also *before* the research begins (to assist with project design and proposal writing) and *after* the research has been completed (to assist with analysis of final results and presentation of research). Faculty mentors whose availability may be compromised (e.g., by sabbatical leave, extensive travel/absence, a new job/position or relocation) should contact the Hamel Center director <u>before</u> the Pre-Proposal Application deadline in order to determine eligibility.

- We strongly encourage faculty members to mentor <u>no more than two</u> student projects per research period – i.e., during the academic year or summer (including REAP, SURF, IROP, and Undergraduate Research Awards <u>combined</u>) – to ensure that individual students receive sufficient guidance and supervision for their research. For faculty mentors who believe they have a strong rationale for mentoring more than two student projects per research period, we ask you to contact the Hamel Center director <u>before</u> the application deadline.

Interdisciplinary Co-Mentoring Responsibilities:
- Explore with the student team possible research topics that reflect the students' interdisciplinary interests and preparation.

  Note: For faculty mentors who have an existing interdisciplinary research project, students may participate in the research; however, students should <u>not</u> serve merely as research assistants. If participating in their faculty mentors' research, student teams should develop a specific research problem to investigate on their own with the advice and assistance of their faculty mentors. Students should have the opportunity to participate in <u>all</u> aspects of professional research: from the design and development of the project to the analysis and conclusions.

- Help the student team define and focus the project, including the development of a timetable to assure that the project can be managed within the time frame allotted.

- Identify the knowledge, experience, and skills the students need to conduct the project – and develop a plan for the students' acquisition of these before the summer research period begins.

- Discuss with the students the details of how the proposed team-based, interdisciplinary project will be carried out and the features of a strong project proposal (both **pre-proposal** and **full proposal**).
  - A description of SURF IT Pre-Proposal Application requirements, as well as the criteria for review of Pre-Proposal Applications, can be found on the SURF IT webpage.
  - For the full proposal due in spring, students will receive complete application guidelines as part of the required SURF IT INCO 590 course. Note: The SURF IT INCO 590 course (2 credits, pass/fail) is designed to prepare students to be effective members and leaders of interdisciplinary research teams. Faculty mentors are welcome to attend any of the class meetings.

- Help your student team determine if their project will require approval from a University review committee. Any projects involving interviews, surveys or questionnaires – i.e., all having to do with *human subjects* – must receive approval from UNH's Institutional Review Board (IRB) before the research begins. Similarly, research involving *vertebrate animals, infectious agents, DEA controlled substances, lasers, x-rays, hazardous chemicals, radioactive materials, carcinogenic material, recombinant or synthetic nucleic acid molecules, NMR/superconducting magnets,* and/or *patents and copyrights* must receive approval from the appropriate University review committee before the research begins. The Hamel Center must receive confirmation of research approval before dispensing funds for summer research. For more information about the research approval process, see the Hamel Center's Responsible Conduct of Research page.

- Review and critique the students' **pre-proposal** (in the fall) and **full proposal** (in the spring). While it is the responsibility of the student team to write each proposal in its entirety, it is important that the mentors review the proposals in time for modifications to be made before submission. *Keep in mind that both the pre-proposal and full proposal should be understandable by faculty review committee members who are not from the specific fields of study represented in the project.*

- Prepare a joint **Letter of Support** at the Pre-Proposal Application stage (fall), and a joint **Letter of Recommendation** at the full proposal stage (spring).
  - The SURF IT Faculty Mentors Pre-Proposal Letter of Support form (fall) is available online. It is the student team's responsibility to complete and sign *the top portion* of the form before giving it to you. You will then be responsible for writing a letter of support using the prompts on the form; putting the form and letter in a sealed, signed envelope; and giving the envelope to the student team for submission with the complete Pre-Proposal Application.
  - Instructions for the joint SURF IT Faculty Mentors Joint Letter of Recommendation due in spring will be part of the complete application guidelines provided to students as part of the required SURF IT INCO 590 course.

- Develop a time frame and a system of communication with the student team during the project development and preparation stage (spring) and during the actual research period (summer) that will allow for an appropriate balance of mentor guidance and student independence.

- Complete the Faculty Mentor Evaluation at the end of the research period. (The evaluation will be provided to you electronically.)

- Assist the student team in identifying appropriate forums in which to share their experience and research. Students who are awarded a Summer Undergraduate Research Fellowship (SURF) are required to present their work during the academic year following the summer research period. Many SURF recipients choose to participate in UNH's Undergraduate Research Conference (URC), but other conferences or departmental forums are also appropriate.