

## **Guidelines for Summer Student Research Mentors**

### **Summer Faculty Mentorship**

Many students have expressed interest in summer research this year, and funding and the number of mentors may both be limiting factors. The number of available funded spaces is uncertain right now. If there are more students than funded slots, departments will have to fund additional student projects from discretionary or grant funds. Faculty may want to talk with department chairs about the number of students being considered for a summer project. Last year there were 10 funded spots.

**Mentors should have no more than two(2) students for summer research projects. This is in the best interest of the student, the mentor and the distribution of projects throughout the school.**

**From a funding and presentation perspective, it is best not to create team projects, but of course we want to support collaboration. Two students working together should have clearly defined separate roles, not just both doing the same thing. Students have been advised of this information.**

Students will be expected, as always, to submit a strong application and members of the Research Committee will review them. Applications are judged on how well the student answers the questions on the application (see below).

### **PROGRAM BACKGROUND AND GOALS**

The School of Dental Medicine seeks to foster an interest in scientific investigation, involve Dental Students in research activities, and encourage ongoing research partnerships between students and faculty. This program promotes an environment of scientific inquiry within the School and is highly valued as an enrichment experience in the dental school curriculum

The goals of the Summer Research Program are for students to:

- Participate in the process of a scientific investigation
- Gain knowledge in a focused content area of mutual interest to the both student and faculty mentor
- Organize and communicate findings from their research experience

Students participating in the program will collect, analyze, and interpret the project data under the guidance of their faculty mentor. Upon completion of data analysis, **students will be expected to present at Professional's Day at the dental school and submit abstracts to Research ShowCASE and/or a national meeting.**

### **MENTOR RESPONSIBILITIES**

- This is pre-doctoral student research. **The scope of the project should be feasible in one summer**, with minimal carryover. It can be something original or a component of an ongoing investigation. The student should be able to submit the abstract as first author for a presentation. It is not intended to assist with graduate student projects.
- Offer guidance, but do not write the research project application.
- Set a realistic project and timeline.

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- Be clear about project expectations, goals.
- If IRB review is needed, you are responsible for submission, but students can always get help from Dr. Demko. Students may not start or receive funds if approval is not obtained.
- If there are any outside collaborations, be sure they are reliable and support the project in a timely manner.
- The student receives a stipend; your lab/department is responsible for other project costs.
- Be available and accessible for the majority of the 8 week project. There is flexibility in the timeline.
- Meet regularly to monitor progress, make suggestions, offer encouragement.
- Be willing to provide feedback on student performance.
- Contact student research director with problems, questions.

#### **TIMELINE and FUNDING – APPLICATIONS DUE APRIL 9, 2024**

- Stipend amount and numbers are still pending for 2024; these are payable in 2 installments dependent on progress.
- Travel money will likely be limited; last year there were 3 slots not including the SCADA winner. It would be good if departments can assist with additional travel money, but let's coordinate for the best use of funds.

#### **STUDENT RESPONSIBILITIES**

- Honor the full-time, 8 week commitment to the project. Work timelines are flexible and must be approved by your mentor. This means that if you have 'down-time', your mentor may ask you to assist with other projects.
- Complete the CITI initial training for Human Subjects Protection. This applies to everyone, even laboratory-based studies.
- Attendance at the summer research D-CODAS meetings.
- Submit summaries as requested by the project administration; comply with benchmark requests.
- Concurrent participation in other paid/volunteer opportunities is not permitted.

#### **Instructions to Student Applicants for Research Project Proposal – DUE mid\_March**

The project plan should be double-spaced in 12-point font and with one-inch margins. It should be no more than 5 pages, but sufficient to answer every question. Make sure all pages are numbered and your name is in the upper-right hand corner. Here is a suggested organization and the general questions your proposal application should answer:

- Objectives and Specific Aims: What do you want to do? Provide a short description that describes what this project is intended to accomplish; what research questions will it answer or research hypothesis will it test.
- Background and significance: Why is the work important? What has already been done? Provide a brief background for this proposal; what is the current state of knowledge; specifically identify

existing gaps that your proposal will address. State concisely the importance of this line of inquiry.

- Preliminary Studies: This section is potentially optional. It applies to projects that may be a continuation of a previous student's work or describes how it fits into your faculty mentor's research.
- Methods: What methods will you use to do the work?
  - Describe the experimental design and methodology to be used in this project. With your mentor's guidance, there should be sufficient detail to provide a clear understanding of the project's methods.
  - Some idea of sample size; how many experiments, how many surveys, how many interviews. How many will it take to give you a valid answer.
  - For surveys, how will you design questions; how will you reach the intended target audience.
  - Describe any collaborations outside of the dental school that you may need. If you have outside collaborations, these will require some additional support (letters or some assurance from your mentor). It's important to be sure that all the pieces are in place for your successful completion of the project.
  - Describe how you will analyze the data. What will you be estimating (the prevalence of smoking in our clinic population) or what will you be comparing (successful implants in patients with and without diabetes).
  - A general work schedule and timetable for progress helps you think the process through.
  - **Be clear on your role and responsibilities on the project. What specifically will YOU do.**
- Human subjects: If human subjects are involved, including all survey projects, think early about the IRB; even expedited reviews can take several weeks. Under some circumstances, your project may be exempted, but YOU cannot determine that; you must submit an IRB application and they will provide the exemption. Dr. Demko can provide assistance.
- Literature cited

Be sure to include a cover page with:

1. The title of the project
2. Your name
3. Your email (the one you most consistently check)
4. Your faculty mentor's name, department and email
5. The date of submission

Please submit electronically to Dr. Catherine Demko, Dental School Room 217 / [catherine.demko@case.edu](mailto:catherine.demko@case.edu). Be sure to copy your mentor on the submission.