Instructions for Research Project Proposal -2023

The project proposal should be double-spaced in 11-point font and with one-inch margins. Answer each question. There is no specific minimum or maximum word count; fully answer each question. Make sure all pages are numbered and your name is in the upper-righthand corner. Here is the required organization and the general questions your proposal application should answer:

- <u>Objectives and Specific Aims:</u> What do you want to do? Provide a short description that describes what this project is intended to accomplish; what <u>research question</u> will it answer or <u>research hypothesis</u> will it test.
- <u>Background and significance:</u> Why is the work important? What has already been done? Provide a brief background for this proposal; what is the current state of knowledge; you must include at least several references related to this line of research. Specifically identify existing gaps that your proposal will address. State concisely the importance of this line of inquiry.
- <u>Preliminary Studies:</u> This section is potentially optional, but is different than the Background. 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.
- **<u>Methods:</u> What methods will you use to do the work?**
  o Describe the <u>study design</u> and <u>methodology</u> 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. For example,
    ▪ Lab or pre-clinical projects: describe the laboratory methods to be used.
    ▪ Surveys: what survey instrument will you be using, currently published, previously used in mentor's work, to be designed. How will it be designed and tested. Who is your target audience and how will you reach them?
    ▪ Interviews, direct observation: Projects with direct patient contact may still be limited in summer 2023. But they are allowed with proper precautions.
    ▪ Secondary analysis; if a mentor has a de-identified dataset for analysis, this might be a possibility.
    ▪ Chart reviews: these will have to be further approved in new process and may cause delays. If the mentor has an active IRB to which you can be added, that may be possible.
  o Some idea of sample size; how many experiments, how many surveys. How many will it take to give you a valid answer.
  o 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 the successful completion of the project.
  o Where will you do the work? Be sure that you can easily communicate with mentors; you and your mentor will be asked to confirm what physical space you will need to do your project. .
  o Describe how you will analyze the data. What will you be describing, estimating (the prevalence of smoking in our clinic population) or what will you be comparing (successful implants in patients with and without diabetes).

- o TIMELINE: A general work schedule and timetable for progress helps you think through theprocess and must be included
- o Be clear on your role and responsibilities on the project. What experience and/or skills do you have that contribute to this project. What do you hope to learn? <u>What specifically will YOU do</u>.
- o <u>Projects with multiple students are typically discouraged because the goal is to conduct and present research conducted by one, funded student. This year, only projects with an individual student will be considered for the available funding.</u>

- <u>Human subjects:</u> 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. Contact me if you need help.
- <u>Literature cited</u>

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 to Dr. Catherine Demko catherine.demko@case.edu. Copy your mentor on the email.