

Undergraduate and Resident Research Funding Program (RRFP)
Guidelines for Applicants

Objectives:

The overall objective of this program is to help foster interest and support research activities for dental students and residents at LSUSD. Specific goals are to:

- 1.) Financially support the research activities of small student/resident lead investigations with relevance to oral health and craniofacial development.
- 2.) Enhance exposure of students and residents to critical thinking.
- 3.) Through the review process, provides important feedback to help guide student/resident research activities and improve the quality of oral health research at LSUSD.

Eligibility:

Full time dental students (D1-4) enrolled in the research honors program and residents at LSUSD are eligible and encouraged to apply if they have research ideas/interests. Each student/resident may apply for one award of up to \$2000, per year.

Considerations in preparing your application:

It is crucial for the applicants to be realistic in what they can achieve. Many will have significant clinical and/or educational commitments, thus designing a project that is achievable in the time available is crucial.

Each applicant should identify one or more faculty who can serve as mentors. Each may serve a different purpose. For example, one mentor may be a clinical expert in the dental material/procedure under investigation, one may be a basic scientist who can assist in study design, and another may have experience using the experimental protocol required. These mentors should be utilized to determine if the proposed project is significant and feasible. The mentors may also suggest improvements to the proposal.

Each applicant should also investigate if they have access to the equipment required to complete the project. It may be useful to consult with their department heads, the director of biomaterials research (Dr. Xu), or the director of the biomedical equipment core (Dr. Lallier). If the required equipment is not available at LSUSD, arrangements will need to be made with another institution.

It is important to ensure that the proposed study has sufficient sample sizes and that appropriate statistical analysis will be utilized to test the hypothesis. All applicants are required to consult with a statistician prior to the submission of their application. Qingzhao Yu, Ph.D. (qyu@lsuhsc.edu) is available for consultation on statistical methods.

Preparing your proposal:

A research proposal (typically 3-4 pages) should be concise while containing all appropriate information. A template describing the essential components required is provided in order to help guide applicants in the preparation of their research proposals. However, each proposal is unique and thus may vary from this template.

It is important to:

- 1). Explain the relevance of the study to oral health or dentistry (significance).
- 2). Identify the clinical problem or gap in knowledge. Also you should describe previous studies of importance as part of the introduction.
- 3). Write a succinct, testable hypothesis (usually a single sentence).

- 4). Ensure the proposed specific aims and experiments directly address the hypothesis.
- 5). Describe each experiment briefly and define the appropriate controls.
- 6). Describe how the data generated will be analyzed and interpreted.
- 7). State the expected outcomes or results.
- 8). Include a budget detailing major expenses, or how the money will be spent.

It is crucial that the student/resident is responsible for the intellectual content of the application. While applicants are encouraged to seek advice and guidance from faculty mentors, mentors should not write the applications. Mentors are encouraged however to review and critique the applications prior to submission to RRF for review. This may help strengthen the proposals.

Review process:

Once completed, the proposals should be submitted directly to Dr. Z. Tom Wen (zwen@lsuhsc.edu) as an email attachment (Word file). The proposal will then be forwarded to 2-3 faculty reviewers. In general one clinical and one basic science faculty member will be selected to review the application. The review process is anonymous; residents/students and supporting faculty will not be informed of who is reviewing their application. Reviewers will point out strengths and weaknesses of each proposal, suggest improvements, and identify any fatal flaws. Each will send a short report to Dr. Wen, who will combine the critiques and return them to the applicant. All major criticisms/suggestions of each reviewer should then be addressed in a brief point by point written response from the applicant. Each point may be incorporated or corrected into a modified proposal, or if the applicant does not consider a particular criticism valid, a brief explanation/clarification as to why should be offered. The written rebuttal and modified proposal should be emailed back to Dr. Wen. It will then be decided if the applicants response is sufficient to merit the requested award or if further modifications are required.

Awards:

Awards of up to \$2000 can be requested, although special dispensation may be considered in exceptional cases upon request. A concise budget of proposed expenditure is requested at the time of submission. Once approved, an account will be set up with the approved funds through the Center for Excellence in Oral and Craniofacial Biology. All supplies required for the research project should be ordered from this account. More details are available from Mary Gerry (mgerry@lsuhsc.edu). Only supplies directly related to the approved project may be purchased with these funds. It is NOT acceptable to purchase supplies for other purposes, or for other research projects from this account. It is also the responsibility of the resident/student to ensure the account is not overspent. If overspending occurs the student/resident or their head of department will be responsible for covering the short fall. All award are made upon the understanding that those responsible for conducting the research have received appropriate institutional approval. This includes IACUC approval for studies involving animals, IRB approval for studies involving human subjects and IBC for studies using biological specimens.

Contact:

All questions and comments should be directed to Dr. Wen (zwen@lsuhsc.edu , Room 6305).