

Faculty Member Contact Information

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Contact Info	
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Department	Department of Biomedical and Craniofacial Sciences

1 Funded, 2 Unfunded URCA Assistant(s)

Are you willing to work with students from outside of your discipline? If yes, which other disciplines?

- Yes

How many hours per week will your student(s) be required to work in this position?
(Minimum is 6 hours per week; typical is 9)

- 6

Will it be possible for your student(s) to earn course credit?

- No

Location of research/creative activities:

- SIU School of Dental Medicine - Sciences Building

Brief description of the nature of the research/creative activity?

- This research experience will focus on innovations in oral medicine education, with an emphasis on gamification, artificial intelligence (AI) integration, and the scholarship of teaching and learning in dental education.
- Current and upcoming projects include the development and evaluation of:
 - AI-based chatbot simulations to enhance clinical reasoning and patient communication skills
 - Gamified learning tools in oral medicine to improve knowledge retention and engagement
 - Educational interventions designed to align with case-based learning

Students will participate in educational research aimed at assessing the effectiveness of these tools in improving student learning outcomes. The ultimate goal is to generate scholarly work suitable for presentation at national meetings such as the American Academy of Oral Medicine (AAOM), the American Dental Education Association (ADEA), and manuscript publication.

Brief description of student responsibilities?

- The URCA Assistant will be actively involved in multiple phases of educational research and project development. Responsibilities may include:

- Conducting literature reviews related to oral medicine, gamification, and AI in healthcare education

- Assisting in the design and development of chatbot simulations and gamified case scenarios

- Supporting survey creation (e.g., Qualtrics) and data collection processes

Assisting with data analysis and interpretation of educational outcomes

- Contributing to the development of abstracts, posters, and scholarly materials

- Participating in regular project meetings and providing creative input on project design

This role is ideal for students interested in health professions education, innovation, and research dissemination. Students with an interest in oral medicine, dental education, technology, or academic careers are strongly encouraged to apply.

URCA Assistant positions are designed to provide students with *research or creative activities* experience. As such, there should be measurable, appropriate outcome goals. What exactly should your student(s) have learned by the end of this experience?

- By the end of this experience, the URCA Assistant(s) will:

- Demonstrate an understanding of educational research methodology in dental education

- Develop skills in critical appraisal of scientific literature

- Gain experience in AI applications and gamification strategies in healthcare education

- Contribute to at least one scholarly product (e.g., abstract, poster, or manuscript draft)

- Present or assist in the development of work suitable for submission to national conferences (e.g., AAOM, ADEA)

- Strengthen skills in interprofessional collaboration, communication, and project management

Requirements of Students

If the position(s) require students to be available at certain times each week (as opposed to them being able to set their own hours) please indicate all required days and times:

- N/A

If the location of the research/creative activities involves off campus work, must students provide their own transportation?

- Yes.
- Research involvement will be conducted in the Alton, Dental School Campus.

Must students have taken any prerequisite classes? Please list classes and preferred grades:

- N/A

Other requirements or notes to applicants:

- None additional.