

ORAL AND CRANIOFACIAL MOLECULAR BIOLOGY (OCMB)

OCMB 600. Oral Biology Clinical/Laboratory Rotations. 2 Hours.

Semester course; 6 laboratory hours. 2 credits. Enrollment is restricted to graduate students enrolled in the oral health research program. Students will participate in clinical/laboratory rotations. Students will work with mentors and gain practical experience in dentistry and dental research. Graded S/U/F.

OCMB 701. An Introduction to Oral Biology. 2 Hours.

Semester course; 2 lecture hours. 2 credits. Restricted to students enrolled in the oral health research graduate program or by permission of the instructor. An overview course on the development, structures and tissues of the head and neck. Topics include craniofacial and dental development, cancers of the head and neck, the oral microbiome, immune responses in the oral cavity, the connection between oral and systemic diseases and recent advances in bioengineering for oral disease.

OCMB 702. Oral Pathogenesis. 2 Hours.

Semester course; 2 lecture hours. 2 credits. Restricted to students enrolled in the oral health research graduate program or by permission of the instructor. This course will provide a basic understanding of the nature of disease and current therapeutic approaches to bacterial, viral and molecular diseases of the head and neck and bone pathologies originating from development defects and/or trauma. Students will learn about the molecular causes of diseases and general approaches to understanding and treating disease.

OCMB 703. Research Topics in Oral Biology. 1 Hour.

Semester course; 1 seminar hour. 1 credit. Restricted to students enrolled in the oral health research graduate program or by permission of instructor. This course will provide an in-depth discussion of current research in head and neck diseases. Students will be expected to critically evaluate relevant literature, discuss approaches to solving research topics and begin to identify possible areas of research for their dissertation. Graded as Pass/Fail.

OCMB 704. Oral Biology Seminar Series. 1 Hour.

Semester course; 1 seminar hour. 1 credit. This course will consist of a series of seminars by invited speakers addressing research topics in selected areas of oral health research and a series of student-led journal clubs. Graded P/F.

OCMB 705. Oral Biology Directed Research. 1-15 Hours.

Semester course; 1-15 laboratory research hours. 1-15 credits. Restricted to students enrolled in the oral health research graduate program or by permission of the instructor. This course will provide practical laboratory experience in participating laboratories. Graded Satisfactory/Unsatisfactory/Fail.

OCMB 706. Proposal Preparation. 1 Hour.

Semester course; tutorials and lectures. 1 credit. Restricted to students enrolled in the oral biology graduate program or by permission of the instructor. This course will provide students with the opportunity to draft an NIH application. Graded P/F.

OCMB 707. Research Skills and Career Development. 1 Hour.

Semester course; tutorials and workshops. 1 credit. Restricted to students enrolled in the oral health research graduate program or by permission of the instructor. This course will provide students with the opportunity to develop skills required to conduct and communicate their research, including assessing literature and managing databases, poster and oral presentations, finding research funding, preparing for writing the thesis, and exploring career opportunities outside academia. Students receive CO grading throughout enrollment with a pass/fail grade and credit earned during the final semester.