Oral Pathology, Radiology, and Medicine

Head
• John W. Hellstein

Professional certificates: oral and maxillofacial pathology; oral and maxillofacial radiology
Faculty: http://www.dentistry.uiowa.edu/oral-pathology-radiology-medicine-faculty
Web site: http://www.dentistry.uiowa.edu/oral-pathology-radiology-medicine

The Department of Oral Pathology, Radiology, and Medicine educates predoctoral students and professional students, who may pursue graduate study along with their professional training. The department has diverse curricular responsibility and a faculty with widely varied disciplinary expertise.

D.D.S. Student Training

The Department of Oral Pathology, Radiology, and Medicine teaches Doctor of Dental Surgery and other health care students about diseases that manifest in and around the oral and maxillofacial region. Students learn about the clinical, radiographic, laboratory, histopathologic, and therapeutic features of these diseases and about their etiology and natural history. They also study identification of systemic diseases through physical evaluation of patients.

Professional Programs of Study

• Certificate in Oral and Maxillofacial Pathology
• Certificate in Oral and Maxillofacial Radiology

Oral science involves the study of structure, function, and diseases of the oral and maxillofacial region. Study methods include examination of related histories, evaluation of clinical signs and symptoms, and use of biochemical, microscopic, and radiologic procedures to establish a diagnosis and plan for therapeutic management.

The department's programs are diverse and flexible, allowing students to obtain advanced clinical, didactic, and research-related education while earning a professional certificate. Students working toward one of the department's certificates may pursue a Master of Science in oral science in conjunction with the certificate; see "Graduate Study" below.

Certificates
The department offers the Certificate in Oral and Maxillofacial Pathology and the Certificate in Oral and Maxillofacial Radiology. The educational requirements of each certificate program meet the requirements for preparation of dental specialists set by the Commission on Dental Accreditation of the American Dental Association, the American Board of Oral and Maxillofacial Pathology, or the American Board of Oral and Maxillofacial Radiology.

Admission

Applicants must have successfully completed an accredited program leading to the D.D.S. or D.M.D., or a foreign equivalent, and must meet the admission requirements of the Graduate College. They must have a cumulative g.p.a. of at least 3.00 (or foreign equivalent) to be considered for admission.

International applicants whose first language is not English must present a satisfactory score on the Test of English as a Foreign Language (TOEFL).

The department's faculty makes final decisions on acceptance of applicants who meet the requirements for admission. A personal interview is required.

Graduate Study
Students earning one of the department's professional certificates may pursue a Master of Science in oral science while they work toward the certificate. They pursue the M.S. track that corresponds with their certificate (Certificate in Oral and Maxillofacial Pathology or Certificate in Oral and Maxillofacial Radiology). Each program combines the minimum requirements of the M.S. and the certificate; completion time usually is 36 to 48 months.

All students in the combined programs pursue comprehensive study of basic biologic and health sciences in preparation for teaching and research. They must complete the courses listed below, including the core courses and the basic science and departmental courses listed for their M.S. track. They also must prepare and submit a thesis based on the results of research conducted during their course of study. See Oral Science in the Catalog for additional information about requirements and admission.

CORE COURSES
OPRM:5200 Stomatology Literature Review arr.
OPRM:5226 Oral Pathology for Graduate Students arr.
OPRM:5242 Clinical Oral and Maxillofacial Radiology arr.
ORSC:5200 Seminars in Dental Research 1 s.h.
ORSC:5210 Dental Sciences Research Methodology 2 s.h.
ORSC:5212 Statistical Methods for Dental Research 3 s.h.
ORSC:5215 Research Design in Dentistry 2 s.h.
ORSC:5600 Research in Oral Science (taken for a total of 9 s.h.) 9 s.h.
OTO:8199 Basic Otolaryngologic Science 2 s.h.

ORAL AND MAXILLOFACIAL PATHOLOGY TRACK
OPRM:5227 Surgical Oral Pathology 1 s.h.
OPRM:5240 Histopathology 1 s.h.
OPRM:5256 Advanced Oral Pathology arr.
DPH:6017 Teaching Methods and Evaluation 2 s.h.
ORSC:5280 Advanced Dental Therapeutics 1 s.h.
MED:8133 Mechanisms of Health and Disease II 6 s.h.
MED:8134 Mechanisms of Health and Disease 6 s.h.
MED:8223 Mechanisms of Health and Disease 6 s.h.

ORAL AND MAXILLOFACIAL RADIOLOGY TRACK
OPRM:5243 Practical Oral and Maxillofacial Radiology arr.
OPRM:5245 Head and Neck Radiology arr.
FRRB:3110 Medical Physics I 2 s.h.
FRRB:3130 Radiation Safety and Radiobiology 2 s.h.
PATH:8133 Introduction to Human Pathology 4 s.h.

Facilities
Facilities reserved for the Department of Oral Pathology, Radiology, and Medicine include a radiology special procedures area; an interpretation room; a surgical oral pathology laboratory; a clinical pathology laboratory with areas for histopathology; and a seminar room for small groups of graduate and undergraduate students.

In addition, the College of Dentistry has joint-use research laboratories that are well equipped and staffed for conducting research involving histology, histochemistry, materials technology, radiobiology, ultrastructure, and electron probe analysis and quantification.

Courses
For D.D.S. Students
OPRM:8120 Fundamentals of Oral Radiology 1 s.h.
Methods of clinical, radiographic examination, record keeping; correlation of basic, clinical sciences.

OPRM:8235 Oral Pathology 4 s.h.
Diseases involving orofacial organs.

OPRM:8245 Introduction to Clinical Oral Radiology 1 s.h.
Principles, techniques of diagnosis, radiology, clinical pathology in clinical practice.

OPRM:8355 Systemic Disease Manifestations 1 s.h.
Clinical medicine for dental students; basic information for patient evaluation.

OPRM:8360 Clinical Oral Diagnosis 1 s.h.
Diagnosis of orofacial diseases by clinical, laboratory, radiographic and treatment planning methods; clinical case analysis.

OPRM:8361 Clinical Oral Radiology arr.
Making and processing intraoral, extraoral radiographs; principles of radiographic interpretation.

OPRM:8365 Clinical Oral Pathology 1 s.h.
Oral and maxillofacial diseases: integration of the clinical, historical, radiographic features; therapeutic management.

For Certificate Students
Courses offered by the graduate programs in oral science are listed in the Oral Science section of the Catalog.

OPRM:5200 Stomatology Literature Review 0-3 s.h.
Current literature in oral and maxillofacial pathology and radiology; presentation of graduate student research; development of lectures or seminars for D.D.S. or graduate students, or continuing education for peers and practicing dentists.

OPRM:5225 Manifestations of Oral and Paraoral Disease 0-3 s.h.
Clinical experience in diagnosing, managing patients.

OPRM:5226 Oral Pathology for Graduate Students 0-1 s.h.
Head and neck diseases, abnormalities.

OPRM:5227 Surgical Oral Pathology 0-1 s.h.
Experience in day-to-day operations of surgical oral pathology laboratory; advanced training in histopathologic diagnosis of oral and maxillofacial diseases. Corequisites: OPRM:5240, if not taken as a prerequisite.

OPRM:5228 Introduction to Surgical Oral Pathology 0-1 s.h.
Day-to-day operations of surgical oral pathology laboratory; histopathologic diagnosis of oral and maxillofacial diseases.

OPRM:5230 Research in Oral Pathology, Radiology, and Medicine 0-3 s.h.
Includes thesis preparation.

OPRM:5238 Introduction to Histopathology 0-1 s.h.
Case studies; histopathologic diagnosis of diseases that affect oral and maxillofacial region.

OPRM:5240 Histopathology 0-1 s.h.
Case studies; advanced training in histopathologic diagnosis of diseases that affect oral and maxillofacial region. Corequisites: ORDN:5202, if not taken as a prerequisite.

OPRM:5241 Hospital Oral Pathology, Radiology, and Medicine 0-3 s.h.
Management of patient consultations, diagnosis, therapy at a hospital-based dental service.

OPRM:5242 Clinical Oral and Maxillofacial Radiology 0-3 s.h.
Radiologic manifestations of diseases; emphasis on craniofacial complex.

OPRM:5243 Practical Oral and Maxillofacial Radiology 0-3 s.h.
Clinic participation; supervision of dental and dental hygiene students, review of their cases; participation in clinical radiology conferences, laboratory exercises.
OPRM:5244 Technical Oral and Maxillofacial Radiology  
Experience with technical maintenance of darkroom, clinical equipment; troubleshooting under supervision of radiology staff.

OPRM:5245 Head and Neck Radiology  
Hospital-based rotation in diagnostic radiology with participation in interpretation sessions; CT, MRI, nuclear medicine, ultrasound.

OPRM:5246 Craniofacial Radiology  
Hospital-based rotation in diagnostic radiology; exposure to interpretive sessions on ultrasound, CT, MRI, nuclear medicine.

OPRM:5256 Advanced Oral Pathology  
Diseases involving orofacial organs; emphasis on bibliographic research, biodynamic analysis of pathologic processes, diagnostic interpretation; content adapted to student interests. Requirements: graduate standing in oral pathology.

OPRM:9300 Oral Pathology Certificate Program  
Advanced dental clinical and didactic education; nondegree program toward eligibility for board certification in oral and maxillofacial pathology.

OPRM:9301 Oral Radiology Certificate Program  
Advanced dental clinical, didactic education; nondegree program toward eligibility for board certification in oral and maxillofacial radiology.