



University at Buffalo

School of Dental Medicine

# Academic Concentrations and Thesis Honors Program

## Class of 2026

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## Concentration Programs

The Academic Concentration (formerly Minors) Program was developed in 1972 to enable students to concentrate and expand their studies in disciplines in which they have a particular interest. Such efforts may later be used to enhance career goals such the emphasis on a particular area of interest in a general practice setting or, in some cases, the pursuit of specialty training. The term "concentration" in this context denotes the completion of a minimum number of hours in a particular area of dentistry of the student's choice, beyond that required of all students in the DDS program and is distinct from "minors" as used in baccalaureate programs and every graduate's general dentistry "major".

**Students interested in a concentration should consult with the individual program advisors. Applications should be made directly to the program advisor since they make admissions decisions.** Please note that certain concentrations may require participation prior to the beginning of the fall semester of the 4th year and may have limited enrollment.

This brochure has been compiled to inform you about the Concentrations program. Any questions or suggestions should be directed to Dr. Tammy Thompson, Associate Dean for Academic Affairs.

# Oral Biology

## Purpose

The goals of the Concentration in Oral Biology (COB) are to: 1) foster scholarly student activities through an organized, structured and supportive program; 2) expand the students abilities to think analytically and independently, and to develop their problem solving abilities; 3) encourage students who begin research early in the D.D.S. program to bring their research projects to some degree of completion; and 4) expose students to faculty role models so as to encourage their consideration of an academic career.

## Program Advisor

Dr. Jill M. Kramer ([jkramer@buffalo.edu](mailto:jkramer@buffalo.edu)) Department of Oral Biology, 517 Biomedical Research Bldg., 829-2551.

## Pre-requisites

The student must:

- Have a grade point average of 2.5 or greater.
- Register to complete the D.D.S. program with "Thesis Honors".
- Be sponsored by an appropriate faculty mentor.
- Be in good clinical standing as verified by the Associate Dean for Clinical Affairs.

## Admission

Submit a program proposal to the COB program advisor (Dr. Kramer). The program proposal will include a research proposal and course work. Proposals must be accepted by the program advisor for students to be accepted in the COB program.

## Requirements

1. Perform the proposed research over the course of the fourth year.
2. Attend a weekly research-oriented journal club (ORB519/ORB520 Critical Analysis of Literature in Oral Biology) for the Fall and Spring semesters.
3. Attend research seminars in the Department of Oral Biology (usually held on Mondays at noon throughout the Fall and Spring semesters).
4. Register for at least 2 credit hours of required coursework.

## Number of Students Admitted

Maximum of 10.

## Program

Students who are accepted into the concentration will be given every reasonable opportunity to pursue a research project. The amount of time allowed for research activities will vary depending on individual circumstances. It should be emphasized that students who participate in this program will be expected to successfully complete all clinical and didactic activities expected of other students in the D.D.S. program. Space and necessary supplies will be provided by the research mentor(s).

Students will be guided by a Research Committee consisting of three faculty members: the student's research mentor, one member of the Student Research and Thesis Honors Committee and an outside advisor (an individual not directly involved in the student's research). This committee will be responsible for monitoring student progress. Only students who show reasonable progress in **both their research program and in the clinical program** by the end of the Fall semester will be permitted to continue their participation in the Concentration into the Spring semester of the Senior Year.

## Administration

This program will be administered through the Department of Oral Biology.

## Required Course Work

At least one of the following recommended. Additional classes may be approved by the program advisor and research mentor:

*Table 1 - Required Course Work*

Course #	Course Name	Credits
ORB 545	Dynamics of Bone	2
ORB 500	Cranio Dev. Tissue Eng & Oral	2
ORB 510	Oral Immunology	4
OS 512	Research Design	2

# Oral Diagnostic Sciences

## Description

The purpose of this program is to develop a deeper understanding of the integration of four disciplines: Oral Radiology, Oral Pathology, Oral Medicine and Orofacial Pain in the diagnosis and treatment of our patients. Using case-based platform presentations and discussions, emphasis will be placed on various aspects of diagnostic methodologies and evidenced based treatment plans and protocols to build upon dental medicine fundamentals for patient care.

## Eligibility

This program is open to predoctoral (DDS) senior students in the first semester of the D4 program year who are interested in gaining deeper knowledge in Oral Diagnostic Sciences.

## Requirements

Interested individuals must formally apply for admission to the program. Applicant requirements include:

1. Provide a personal statement of no longer than 350 words explaining why they desire entry into the program
2. 2.5 or better total grade-point average (GPA)\*
3. Prefer student to have received at least B grade in each of the ODS courses of the third year (ODS832F/S, ODS836, ODS837, ODS834, ODS838, ODS842)
4. Students cannot participate in other concentrations
5. Be in good clinical and academic standing as verified by the Associate Dean for Clinical Affairs

\*Please submit your “unofficial” transcript with your applications.

Selection of applicants will be based on all of the above requirements by all participating faculty with the final decision by the Course Director.

## Academic Activities

Upon acceptance, students should expect to:

1. Register for ODS 854: ODS Seminars (1.0 credit/h pass/fail) for Fall 2025 & Spring 2026
  - a) Seminars will be held on Mondays from 4:30 – 5:30 pm beginning in August
2. Partake in clinical rotations in each discipline (TMD and Orofacial Pain, Oral Pathology, and Oral Radiology)
  - b) TMD and Orofacial Pain clinic (1 half-day session per semester)
  - c) Clinical Oral Pathology clinic (1 half-day session per semester)
  - d) Radiology clinic/seminar (1 half-day session per semester)
3. Participate in an off-campus outing to Albright-Knox Art Gallery or equivalent, on a selected first Friday of September.

## Application

E-mail required documentation to the Course Director, Dr. Nicole Hinchy at [nhinchy@buffalo.edu](mailto:nhinchy@buffalo.edu) by 9PM on May 15, 2025.

Director: Dr. Nicole Hinchy

Co-director: Dr. Patrick Anders

Participating faculty: Drs. Yoly Gonzalez, Guy Ditursi, Jose Luis Tapia

# Oral and Maxillofacial Surgery

## Purpose

A concentration in oral and maxillofacial surgery is offered to senior students who are considering the specialty as a career. Enrollment is limited to a maximum of seven (7) individuals who will be applying to Oral and Maxillofacial Surgery Residency training programs for specialty education. The program is directed by: Robert L. Cronyn, MS, DDS, JD.

## Criteria

Student Selection is based on the following criteria:

1. Academic standing. Students must be in good standing at the School of Dental Medicine and current in their graduation requirements (i.e., not on probation). Individuals with grade point averages above 3.2 and class rank in the top 1/3 will be given preference.
2. Submission of a current curriculum vitae (résumé). This should include previous education, class rank, current GPA, academic honors, and pertinent extracurricular activities.
3. A personal statement describing the applicant's desire to pursue further education in the concentration of Oral & Maxillofacial Surgery.
4. A personal interview with the director of the concentration.

## Requirement for Completion

1. Participation in at least 90 hours of didactic instruction in oral and maxillofacial surgery over two semesters. Students selected will be enrolled in OSU871 (Independent Study, Dr. Cronyn, 1 credit hour, S/U) during the Fall and Spring semesters of their senior year.
2. Participants in this Concentration will be expected to attend the following Oral & Maxillofacial Surgery seminars, conferences or lectures:
  - Tuesday morning Grand Rounds (most Tuesdays, 0700-0900)
  - Case conferences (last Tuesday each month, 0800-0900)
  - Preoperative conferences (most Thursdays, 0700 or 0800)
  - Orthognathic/Orthodontic Seminars (fourth Tuesday each month 0700-0800)
  - Pathology seminar (fourth Tuesday each month 1630)
  - OMS Literature Review (third Tuesday each month 0800-0900)
3. Completion of an externship in oral and maxillofacial surgery at an institution outside the University at Buffalo. The externship should be for a minimum of one week in length and should be to an institution that sponsors an oral and maxillofacial surgery-training program. This requirement can be completed any time before or during participation in this concentration.
4. Participation in at least two trauma on-call experiences at the Erie County Medical Center. The student will be expected to respond to all emergency calls to the oral and maxillofacial surgery service during the time on-call. Students will need to have all requirements completed for issuance of an ECMCC ID and access to the ECMCC campus.
5. Participation in two operating room surgical cases. The student will be expected to scrub and actively participate in the surgical management of the patient, including post-operative rounds.
6. Presentation at an oral surgery seminar. Each student will be expected to give a 30-minute presentation at one of the scheduled clinical case conferences during the latter part of the Spring semester.

Email all required application materials to: [rlcronyn@buffalo.edu](mailto:rlcronyn@buffalo.edu)

Deadline for applying to concentration: Thursday, Mar. 13, 2025, at 4:00PM

# Periodontics

## Purpose

The concentration in Periodontics is designed for students interested in obtaining additional clinical and didactic experience in periodontics. This is of particular value to students contemplating a general dental practice in which periodontics will play an important role as well as to students considering specialty training in periodontics.

## Program Advisor

Dr. Robert E. Schifferle, Department of Periodontics, 250 Squire Hall, 716-829-3845

## Admission

Students are selected during the spring semester of their third year. Selection is based on interest in periodontics rather than scholastic standing.

## Number of Students Admitted

Maximum of 10.

## Didactic Courses

A minimum of 4.5 credit hours of didactic course work is required. Some courses are offered by the Department of Periodontology and may fulfill the didactic part of this program. With approval of the program director, electives from other departments having relevance to periodontics may also fulfill the concentration requirements. (See program advisor for available courses and refer to Senior Elective Brochure.)

Courses accepted for Fall 2025 are:

- PER855 – Problem Solving in Periodontal Therapy
- PER914 – Postgraduate Treatment Planning
- PDO840 – Elective Clinic
- ORB545 RD – Dynamics of Bone (fall only)
- RDN853 – Adv Prosth-Gen Dentist
- RDN861 – Dental Practice Mgmt.
- OS812 – Res Design Oral Sciences
- OSU866 – Oral Surgery Elective
- 871 Independent Study (you must find a research mentor, up to 2.0 credit hours allowed)

## Clinical Requirements

- A minimum of three periodontal cases.
- One written periodontal case must be submitted by Thursday, Mar. 13, 2025, at 4:00PM
- Additional cases or written reviews of clinical procedures may be submitted for credit as Independent Study with the approval of the Program Director when the student has difficulty in fulfilling the 4.0 credit hour requirement.
- The student will be expected to assist in six post graduate surgical procedures and provide a written summary of three assists of 200-400 words by Thursday, Mar. 13,

2025, at 4:00PM. The assist reports can be submitted under the assignment link in PER843, PER844. Your report from Junior year will count as one of the three written reports.

- It is hoped you will be able to perform at least 1 periodontal surgical procedure in the predoctoral clinic. Prior to the procedure, you will need to review the surgical procedure with the faculty and schedule with Donna Brown.

# Prosthodontics

## Purpose

Prosthodontics is the specialty of esthetic, implant and reconstructive dentistry. The prosthodontic concentration is designed for those students interested in additional clinical and didactic experience in these areas of restorative dentistry, and to introduce students to prosthodontics as a specialty. This program is particularly intended for students who demonstrate above average interest and ability in all phases of restorative dentistry, and have a keen interest in this discipline.

## Deadline for Submission Application

Thursday, March 13, 2025, at 4:00PM.

## Announcement of Accepted Individuals

March 27, 2025.

## Number of Students Admitted

Maximum of 8.

## General Program Requirements

### Didactic:

The following courses are required:

- RDN 853 Advanced Prosthodontics for the General Dentist  
Dr. Jennifer Kuracina – one Thursday per month, 4:30-5:30PM, 8 sessions over fall and spring semesters
- RDN 900 Advanced Clinical Treatment Planning and Clinical Case Presentation  
Dr. Hyeong Kim. Mondays, 7:30-8:30 a.m., Room 222B Squire Hall (student must audit two classes in the spring semester).
- RDN 859 Fixed Prosthodontics: The Interdisciplinary Specialty  
Dr. Marshall Fagin. (spring semester).

### Clinical:

The student will work with one of the participating prosthodontist faculty in the tiers to complete two of five types of patient treatments:

1. A multi-unit fixed restoration on implants (adjacent crowns or FDP) or an implant-retained overdenture.
2. A comprehensive fixed (6 or more units) or combined fixed and removable prosthodontic reconstruction.
3. An anterior esthetic case: students must perform the appropriate diagnostic workup and execute treatment using appropriate indirect restorations.
4. A post-grad level complete or partial denture case.
5. Utilization of digital procedures: intraoral scanning, restoration design, and fabrication of a tooth or implant-borne restoration; or for digital fabrication of a complete denture. Students must present treatment plans for approval by the Concentration Program

Director. Patient treatment for these cases should be executed exclusively with the faculty mentor with whom a case was treatment planned to better ensure expeditious completion of treatment. Faculty mentors include Drs. AlMozayen, Bairam, Haraszthy, Kim-Pusateri, Kuracina, Nassar, Pusateri, and Stephan, and possibly other prosthodontists, depending on scheduling.

Presentation of cases to those in the program, as well as prosthodontic faculty, will take place at the end of the D4 spring semester.

**Self-study:**

The student must select a topic of interest in prosthodontics and prepare a current, evidence-based written report on it to be completed by the start of the spring semester. Topics must be approved by Dr. Kuracina by the end of September.

**Application**

Completed applications (hard copy) must be turned in to the bin outside Dr. Kuracina's office in room 215 Squire (yellow folder) no later than 4:00 PM on Thursday March 13th, AND an electronic copy must be emailed to [kuracin@buffalo.edu](mailto:kuracin@buffalo.edu) under the subject heading "pros conc app" by the same deadline.

# Thesis Honors

## General Information

The student research program provides an opportunity for dental students to become involved in research during the academic year as well as in the summer inter-session period.

Participation in research encourages critical review and analysis of scientific design - skills crucial to the development of clinical competence in the processes of patient diagnosis and treatment evaluation. Such experiences also provide the student with insight into additional career alternatives in dentistry. This opportunity has led several participants to pursue careers in academic dentistry on both a full- or part-time basis. In addition, research experience allows students to interact and work with faculty under more informal circumstances.

Many students work with a single faculty member on research in a specific area that extends over three or four years of their dental school experience. By compiling the results of completed research into a thesis and presenting the results of their efforts to the members of the Student Research and Honors Committee, students may graduate with thesis honors – a designation noted on the diploma.

Approximately 40 faculty members participate in the Student Research Program. Their research interests include all areas of the basic sciences and dental clinical sciences. Students are encouraged to contact these faculty members to pursue specific projects.

Attempts are made to subsidize participants whenever possible. Stipends for summer research students are made through the School of Dental Medicine. Additional awards are also made available by the American Association for Dental Research, on a competitive basis.

While there is no requirement for students to become involved in research while completing the requirements for the D.D.S. program, they are encouraged to do so. This experience adds an extra dimension to their education. The University at Buffalo School of Dental Medicine is a world center for dental research. Students who take advantage of this opportunity become far more knowledgeable of their profession regardless of whether they choose a career in dental research.

Graduation with Thesis Honors Students who have participated in clinical or basic science research, or who have ongoing projects, are eligible for graduation with Thesis Honors. This achievement is designated on the diploma and recognized at the graduation ceremonies.

Briefly, the requirements for Thesis Honors include compiling results or manuscript(s) into a short thesis that is submitted to the Research and Honors Committee and orally defended.

Through completion of this form and its return to Dr. Ding Xu and Dr. Camila Sabatini, the Student Research and Honors Committee will contact all students who have not yet met with us to discuss thesis guidelines and format, discuss potential problems, and evaluate their progress.

Name: \_\_\_\_\_

Advisor(s): \_\_\_\_\_

Thesis Subject Area: \_\_\_\_\_

Return to: Dr. Ding Xu and Dr. Camilia Sabatini