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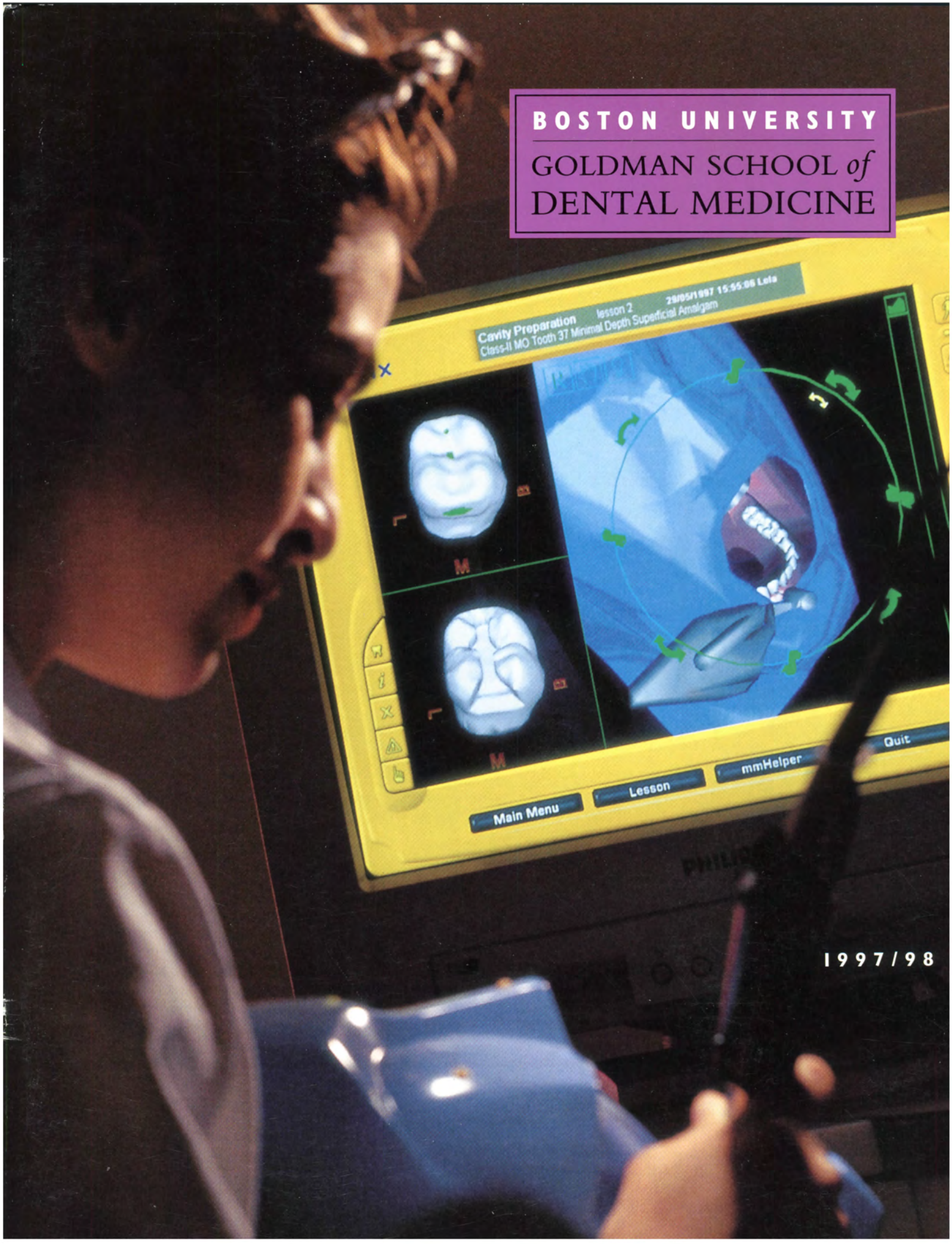
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Mission Statement

The mission of the Boston University Goldman School of Dental Medicine is to provide superior education to dental professionals throughout their careers, to pursue advanced basic and clinical research in oral medicine, and to offer outstanding health care services to the community within a respectful and supportive environment. We accept responsibility for our role in shaping the future of dental medicine and continuously seek innovations in education, science, technology, and health care management.

Administration

Spencer N. Frankl, DDS, MSD, FACD, FICD, *Dean of the School*
Donald F. Booth, DMD, *Associate Dean for Hospital Affairs*
Paula K. Friedman, DDS, Cert, MSD, FACD, *Associate Dean for Administration, Director of Advanced Standing Program*
Thomas B. Kilgore, DMD, FACD, *Associate Dean for Academic Affairs*
Stephen DuLong, DMD, *Assistant Dean for Clinical Services*
Dan Nathanson, DMD, Cert, MSD, *Assistant Dean for Continuing Education and External Affairs*
Sydell Shaw, DDS, *Assistant Dean for Predoctoral Admissions and Student Services*
Kathleen Ferland, AS, *Administrative Director*
Elizabeth DeSantis, BS, *Registrar*
Charles Terrell, MA, *Director, Student Financial Management*
Carl Franzblau, BS, PhD, *Director of Dental Research*
Glenn Kaufhold, BA, *Director of Development*
Christine McDonald, BA, *Director of Communications*
Valerie Laham Denomy, BA, *Executive Assistant to the Dean*
Richard D. Rabbett III, BLS, *Faculty Administrative Coordinator*

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On the cover: A DMD student practices a procedure with the latest in virtual dental medicine, the DentSim System. Operating as a virtual reality environment, DentSim is a computerized simulation system that not only gives instant, interactive feedback but also provides a unique opportunity for solo learning.

Contents

A student examines a patient in the School of Dental Medicine's predoctoral clinic. Practical experience is an essential principle of the School's educational philosophy.

Degree and Certificate Programs

DEGREE/CERTIFICATE		MAJOR AREAS
Predoctoral	DMD	Dental Medicine
	BA/DMD	Liberal Arts/Dental Medicine (offered with College of Liberal Arts)
Postdoctoral	CAGS	Advanced General Dentistry Dental Public Health Endodontics Operative Dentistry Oral and Maxillofacial Surgery Orthodontics Pediatric Dentistry Periodontology Prosthodontics
	MSD	Dental Public Health Endodontics Operative Dentistry Oral and Maxillofacial Surgery Oral Biology Orthodontics Pediatric Dentistry Periodontology Prosthodontics
	DScD	Dental Public Health Endodontics Operative Dentistry Oral and Maxillofacial Surgery Oral Biology Orthodontics Pediatric Dentistry Periodontology Prosthodontics
Graduate	MS	Dental Public Health Nutritional Sciences
	DSc	Nutritional Sciences Oral Biology
	PhD	Dental Science Oral Biology

Message from the Dean

AS WE APPROACH THE MILLENNIUM, the dental profession offers greater challenges than at any other time in its history. Science and technology constantly provide us with new diagnostic tools, materials, and medicines that enable us to deliver better and better health care to our patients. In addition, we have become educators in our communities, addressing not only the issue of oral health, but also the broader spectrum of physical well-being.

In this spirit, the faculty and administration of the Goldman School have made great strides in planning for the future of our students and of dental education in general. The Goldman School of Dental Medicine provides an ideal synthesis of the best biological and clinical training with the highest regard for human services. The curriculum is designed to be hands-on, offering the necessary experiential education and the opportunity to learn firsthand about practice management. For example, since 1989, the School has featured the APEX Program, an innovative new curriculum component in which predoctoral students serve paid internships in affiliated dental practices. In addition, Comprehensive Care Teams, made up of clinical faculty and students from each of the classes, work in a realistic group practice setting at the School clinics.

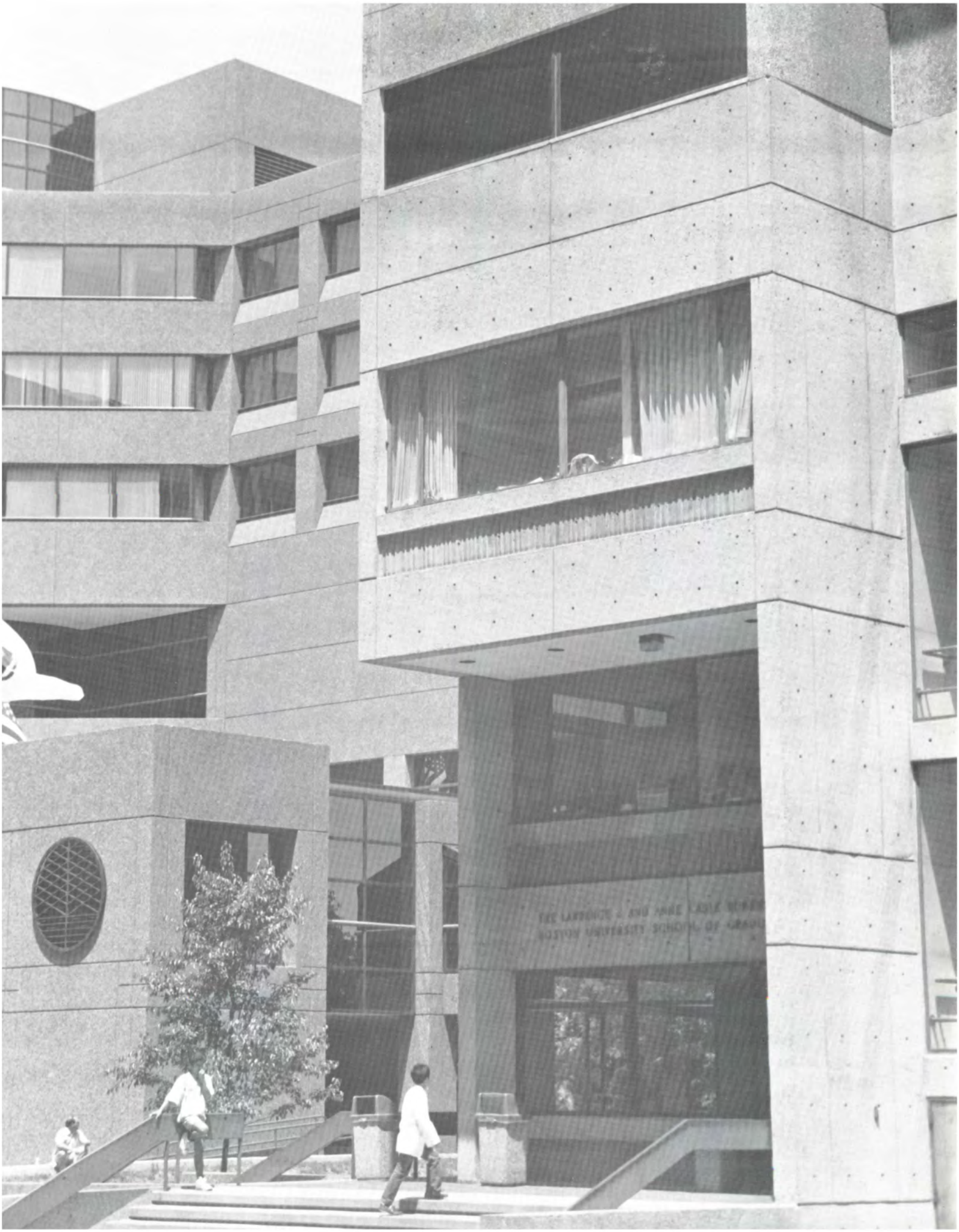
Through the years, the School has earned a position of international prominence in basic and applied research. Students in all programs have the opportunity to work with our outstanding faculty on a wide variety of investigative efforts. Knowledge and technology thus acquired are then incorporated into the classrooms and clinics, keeping the curricula at the forefront of modern dentistry. Our commitment to research has resulted in the ongoing expansion of laboratory space and facilities, the addition of faculty, and increases in private and federal funding for important research endeavors.

The School's graduates become leaders in the field—professionals who stimulate the growth of the profession and who are, in turn, enhanced by it. The School is proud of its Career Resource Center, which offers a computerized placement service with a list of dental job opportunities nationwide. This service is just one example of the School's commitment to ensuring the professional success of its graduates.

Throughout its history, the Goldman School of Dental Medicine—a vital part of Boston University—has witnessed great progress in teaching, research, and clinical care. The School has defined itself as a leader in dental education and has established a legacy of excellence that continues to grow.

Spencer N. Frankl

Spencer N. Frankl, DDS, MSD, FACD, FICD
Professor and Dean



Philosophy and Mission

At the Goldman School of Dental Medicine at Boston University, we strive to produce dentists of broad vision—women and men who will address with confidence the opportunities and challenges of modern dentistry. That means providing an innovative dental education that extends beyond the classroom.

Students at the School supplement their academic learning with extensive experience in the field, working in labs, established offices, and the community. This field experience teaches students that developing a good patient relationship and efficiently managing a dental office is as important as designing an effective treatment plan and using the most advanced materials and techniques. The School also places a high priority on research. Faculty and students collaborate on projects with the goals of extending the existing pool of medical knowledge and improving public health.

Although officially founded in October 1963, the Goldman School was actually established five years earlier, when the Boston University School of Medicine instituted a Department of Stomatology to provide postdoctoral education in dentistry. At that time, Boston University was the only institution in the country to offer a program devoted solely to specialty education in dentistry. Throughout its history, the Goldman School has established a remarkable record of accomplishment and has fulfilled the dental needs of a diverse population.

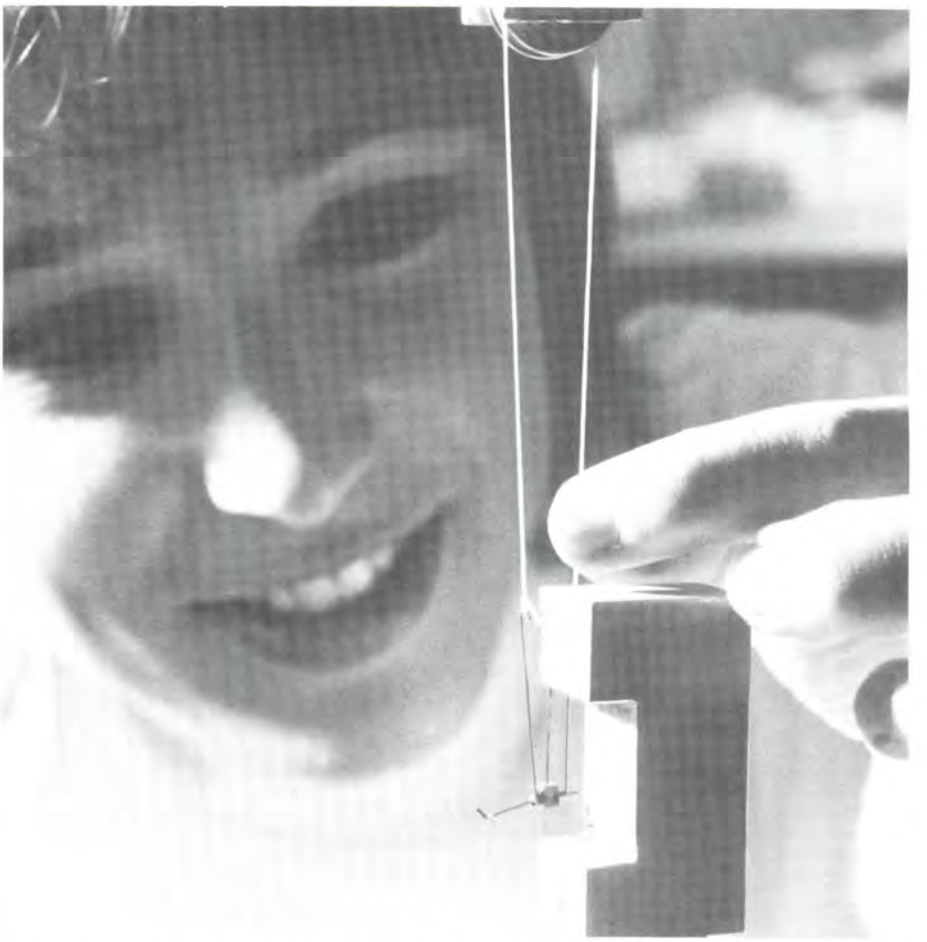
At one of the School's patient care clinics, a dental auxiliary records information regarding the condition of a patient's mouth. The goal of optimal care serves the educational needs of students, as well as the oral health needs of patients.

A DYNAMIC PLACE TO LEARN

Today the School provides predoctoral education leading to the DMD degree, and postdoctoral education in the following specialties: oral and maxillofacial surgery, orthodontics, periodontology, endodontics, pediatric dentistry, prosthodontics, and dental public health. The School has also instituted advanced education programs in general dentistry and operative dentistry, as well as graduate programs in oral biology, nutritional sciences, and dental public health.

The School's highly regarded faculty—many of whom are world-renowned in their fields—stress the direct relationship between the predoctoral and postdoctoral phases of dental education. The faculty and administration are continually adapting to the dynamic health care environment, exemplified by the establishment of the APEX Program, designed to assist students in making a smooth transition from dental school to dental practice.

Graduates of the Goldman School of Dental Medicine have been educated in a value-driven system where the needs of patients and a high standard of ethics are critically important. In addition to being clinically proficient as dental professionals, they bring a preventive and people-oriented approach to the profession. With "real world" experiences throughout their dental education, students have learned a responsibility to their community, their patients, and the dental profession.



A student tests the frictional properties of wire using the Instron machine, a mechanical testing device.

Dr. Dan Nathanson evaluating proposed cosmetic changes with the Dentavision Plus Imaging Computer. The School's imaging systems provide a "sneak preview" of the results of dental procedures. Composed of a video camera connected to a computer, these devices take still videos, which can be manipulated on screen to show the changes that would be created by the dental treatment plan under consideration. They thus serve as educational tools for students and patients. The systems can store images in the computer component as well as print "hard copy" (photographs).

Doctor of Dental Medicine

The Doctor of Dental Medicine Program prepares students for patient-oriented dental practice and emphasizes prevention and early detection of dental disease. Students develop a spirit of inquiry that leads them to seek better ways to promote and preserve oral and general health. The School is dedicated to comprehensive patient care and sees a strong correlation between students' personal and professional success and their concern for the well-being of their patients. Therefore, the School's primary goal is to educate dentists who are well grounded in the basic medical sciences, skilled in the exercise of clinical care, and, above all, sensitive to the needs of their patients. To this end, the curriculum combines coursework, a team approach to clinical care, and a series of planned, practical learning experiences in dental offices and clinics outside the School.

APEX

Central to the unique educational experience offered by the Goldman School is the APEX (Applied Professional Experience) Program, which is the first initiative of its kind in a dental school. Through this hands-on approach to dental education, students integrate classroom study with paid, professional experiences in dental offices as dental interns working side by side with practicing dentists.

More than 50 dental practices in the Boston area participate in the APEX Program. In addition, new APEX affiliations are being developed continuously, including sites in California, Florida, New York, Canada, and Puerto Rico. There are opportunities to intern in a dental practice close to the student's hometown. Students can live at home while developing valuable professional contacts for the future.

The program exposes students to an aspect of dentistry that cannot be taught in a classroom or clinic. Through role modeling and mentoring, the dental practitioners teach students different approaches to the delivery of care, from the business management of a practice to proper biological, psychological, and dental management of a patient. With this direct application of learning, the student's education is enhanced and made more relevant.

Student feedback indicates that the mentoring relationship formed by working in a professional environment with APEX dentists enhances students' confidence, their patient-communication skills, and their ability to comprehend the work presented in class, laboratory, and patient care. Graduates are seeing the benefits of this real world experience; many placements lead to job opportunities after graduation.

APEX benefits students by:

- providing an early understanding of the dental profession and facilitating the transition from dental school to dental practice
- increasing self-confidence and improving skills by providing the opportunity to work in a professional atmosphere
- linking students to valuable professional contacts for the future
- enabling students to help defray some of their educational expenses and living expenses

Fourth-Year APEX Externships

During the fourth year, students participate in another distinguishing component of the curriculum: a six-week required extramural experience. The Externship Program exposes students to alternative clinical settings and different modes of treatment and instruction as well as to the needs of a variety of patient populations. Students can choose from more than 20 extramural sites that are affiliated with the School, extending from the East to the West Coast. For some students, the externship provides an opportunity to spend time closer to home; for others, this is a time for exploring a part of the country that they might not otherwise have visited. The externship plays a vital role in the curriculum by allowing the student to practice his or her clinical and interpersonal skills in a more independent setting, with supervision, support, and guidance available from the extramural faculty members who serve as preceptors.

Extramural settings include military installations, Veterans Administration Hospitals, neighborhood health centers, prisons, and major medical centers located throughout the United States and Puerto Rico. Each site has at least one preceptor, who functions as teacher and clinician while supervising the student's overall experience. During their externship, students strengthen their skills in clinical diagnosis, treatment planning, patient and practice management, and emergency care as well as provide a complete range of restorative dental services to patients.

The Excel Program

The Excel Program is an optional four-week summer program for entering first-year students. Excel combines didactic coursework and social activities for those who opt to participate. In addition to providing modules in the basic science areas such as microscopic and gross anatomy and biochemistry, the program offers coursework to enrich students in communication and study skills. Excel helps students refresh their knowledge and get a head start on their dental education.

CLASSROOM AND LABORATORY CURRICULUM FOR THE DMD DEGREE

In the DMD Program, students integrate a comprehensive understanding of the science of dentistry with an ability to apply clinical judgment and technique. Courses build a foundation of knowledge and teach the analytical skills needed to apply that knowledge. In addition to required courses and clinical rotations, interested students may choose such electives as hospital dentistry, general anesthesia, otolaryngology, and senior seminars.

Chris Wodja

REED '97

Ever since he had his wisdom teeth extracted in college, Chris Wodja has been intrigued with dentistry and oral surgery in particular. Through the Applied Professional Experience (APEX) Program, Chris was able to immerse himself in the hands-on aspect of the profession in the first semester of his freshman year. Armed with an intensive four-month training in the basic sciences and clinical skills, Chris returned home to work with Dr. Mark Carlson, an oral and maxillofacial surgeon in Seattle.

"Although I had worked with Dr. Carlson as a surgical assistant when I was an undergraduate at the University of Washington, I was lacking essential education that would make my understanding complete. I received that education at BU," Chris said.

Because of Chris's interest in dental implants, he was able to work with the APEX office in structuring a second rotation in which he could experience various aspects of implantology over a five-month period. After completing two months of oral surgery in Seattle, Chris returned to the Goldman School to finish out his rotation in prosthodontics and begin his research on bone cell regulation with Dr. Philip Trackman, a world expert on the enzyme lysyl oxidase. "APEX is giving me the chance to explore my interests and my options," Chris said.

The First Year

The first year begins with a preparatory program introducing dental terminology, the specialties, preventive dentistry, oral radiology, and dental assisting techniques, all in preparation for early exposure to clinical dentistry. Basic science courses, which are separate and distinct from the courses taught to the medical students, are taught jointly by the faculties of the Schools of Medicine and Dental Medicine. This foundation year includes preclinical dental sciences and APEX rotations in dental offices as dental interns.

The Second Year

The second year comprises the basic, preclinical, and clinical sciences. As the focus shifts to the clinical sciences, there is increased opportunity for the student—as a member of a Comprehensive Care Team—through a mentoring approach, to treat patients in the School. Team meetings stimulate learning and address questions and problems that arise in any dental practice.

The Third and Fourth Years

The third and fourth years are a combination of coursework and clinical care. As a member of a Comprehensive Care Team, the student assumes greater responsibility for patients, treats more complex dental needs, and has increasing exposure to the specialty areas of dentistry. Students are supported and guided in their development as clinical care providers through a faculty mentoring program. The fourth year is designed for flexibility to allow the senior student to pursue his or her particular interests and concentrate on achieving excellence in clinical patient care, as well as to give him or her the opportunity to participate in research and community-service activities. The clinical curriculum comprises approximately 1,000 hours in each of the third and fourth years.

Course Descriptions

First-Year Courses

SDM PH 510 Introduction to Dental Practice Students learn the concept and application of four-handed dentistry and gain experience in radiology, CPR, practice management, and communication skills to prepare them to function as interns in dental offices. *Ms. Peck and staff.* 110 hours, 2 cr, 1st sem.

SDM MD 510 Anatomical Sciences A coordinated presentation of the material normally found in the traditional courses of gross anatomy, histology, and neuroanatomy. Gross anatomy is treated in its broadest aspects. There is a distinct emphasis on clinical applications of anatomical principles and on the use of the Socratic method. Morphology is learned by lecture, dissection, films, and clinical discussions. Clinical instructors in the various dental departments instruct students in the examination of the oral cavity, eye, ear, nose, and throat. The microscopic anatomy of cells, tissues, and organs is taught emphasizing the relationship of structure to function and to macroscopic anatomy as well as recent advances in histochemistry and electron microscopy. The last section of this course gives an integrated view of the nervous system. Instructors discuss the specific anatomical structure of the central and peripheral nervous systems and use clinical correlations to show the effects of lesions on various areas of the nervous system. *Dr. Zoller and staff.* 229 hours, 6 cr, 1st & 2nd sem.

SDM MD 512 Biochemistry The nature of the chemical processes that occur in the living cell. Biochemistry applied to clinical experience; genetics, immunochemistry, and radiation. *Dr. Schreiber and staff.* 68 hours, 2 cr, 1st sem.

SDM OB 511 Oral Biology I A comprehensive consideration of the embryology, microscopic and macroscopic structure, and functions of the orofacial complex. Material from the other basic sciences is expanded and related to the oral cavity. Emphasis is on the normal state of oral health. *Dr. Oppenheim and staff.* 45 hours, 1 cr, 2nd sem.

SDM PE 511 Periodontology An introduction to the normal periodontium and an overview of periodontal disease, stressing diagnosis and prevention. *Dr. Polins and staff.* 20 hours, 1 cr, 2nd sem.

SDM MD 514 Physiology/Endocrinology/Neurophysiology Physiology of cells, tissues, organs, and integrated body functions, physiological basis for the understanding of clinical conditions. Laboratory exercises in physiological observation and measurement are supplemented with animal experimentation and demonstration. An integrated approach to endocrinology and reproduction. Hormonal aberrations and their end results in humans are presented in clinical correlations. Sex, reproduction and its control, and the psychological effects of sex hormones. *Drs. Lehman, O'Bryan, and staff.* 116 hours, 2 cr, 1st & 2nd sem.

SDM PH 514 Epidemiology/Biostatistics Descriptive, analytical, and experimental methods of epidemiology. Principles of epidemiology are applied to disease states. Biostatistics, logic, and procedural details of experimentation in medical and dental science, including biological measurement, data description and summary, statistical inference, comparison, association among variables, and principles of experimental design. *Dr. Boffa and Ms. Rose.* 18 hours, ½ cr, 1st sem.

SDM RS 510 Dental Anatomy A lecture and laboratory course introducing normal tooth morphology and the anatomy and occlusion of the healthy dentition. The laboratory tooth-carving exercises are foundations for second-year restorative dentistry courses. *Dr. Exarchos and staff.* 111 hours, 4 cr, 1st & 2nd sem.

SDM RS 513 Preclinical Operative Dentistry Comprehensive introduction to

intracoronal tooth restorative systems in a laboratory environment. Includes amalgam, cast gold, and bonding materials. *Drs. McManama, Kelcher, and staff.* 55 hours, 3 cr, 2nd sem.

SDM OB 512 Scientific Methodology An introduction to the principles of scientific inquiry. This course coordinates with the material presented in Biostatistics/Epidemiology, stressing experimental design, analytical thinking, and scientific communication. Critical evaluation of current dental literature. *Drs. Kukuruzinska, Fournier, and staff.* 12 hours, ½ cr, 1st sem.

SDM MD 515 Microbiology Bacteriology, parasitology, virology, mycology, and immunology prepare students for a detailed study of infectious diseases, general characteristics of pathogenic bacteria, viruses, rickettsiae, and fungi–causing infections in humans. Laboratory instruction covers the elements of bacteriological and immunological technique and observation of the characteristic properties of common microorganisms, including their biochemical activity and genetics. *Dr. Kupchik and staff.* 64 hours, 2 cr, 2nd sem.

***Second-Year* Didactic Courses**

SDM MD 521 Pharmacology General principles of drug action in the body and toxicology of drugs presented in lectures, conferences, and laboratories. Extensive use of clinical pharmacologic data facilitates development of skills important for critical evaluation of data pertaining to drugs. *Dr. Estes and staff.* 64 hours, 3 cr, 2nd sem.

SDM MD 520 Pathology (General) Core curriculum covering fundamental mechanisms and general principles of pathology. Didactic sessions largely comprising lectures, gross and microscopic laboratories, seminars, clinicopathologic conferences, and multidisciplinary seminars. *Drs. Gottlieb and Rogers.* 84 hours, 3 cr, 1st sem.

SDM PH 521 Behavioral Sciences Develops the behavioral framework for the effective delivery of health care. Discusses effective patient communication skills and behavioral aspects of managing patient pain and anxiety. Provides students with knowledge and skills that assist them in the transition from student to health care provider. *Dr. Wiesen.* 12 hours, ½ cr, 2nd sem.

SDM OS 520 Biology of Disease Lectures, case presentations, and demonstrations illustrate the relationships between the pathological processes of disease and their clinical manifestations. Emphasis is on the dental management of patients with complex medical problems. *Dr. Thomas and staff.* 50 hours, 2 cr, 1st & 2nd sem.

SDM EN 521 Endodontics Provides the dental student with a clear understanding of the biological foundations of the pulp and periapical disease and teaches them to discuss the cause and progression of pulpal and periapical disease. Diagnostic modalities are introduced, and the laboratory phase gives preclinical experience in therapy techniques. Lecture and laboratory. *Dr. Hoyo and staff.* 66 hours, 3 cr, 2nd sem.

Thomas Kilgore

Associate Dean for Academic Affairs
Professor of Oral and Maxillofacial Surgery

Communication. Dedication. Innovation. As the associate dean for academic affairs and the architect of the oral surgery component of the predoctoral program, Dr. Thomas Kilgore has participated in the evolution of the School's curriculum for 23 years. "We're not teaching in an ivory tower," he states. "The external education through the APEX (Applied Professiona Experience) and externship programs enriches both students and faculty. Students are asking and challenging us to provide pragmatic teaching based on rationale, science, and dialogue. As faculty, we must espouse a sound educational philosophy, especially when continuously instituting change.

"Effective communication is integral to the success of our programs. As associate dean, I schedule pre- and postdoctoral courses, coordinate the educational philosophies of the faculty, solve problems, and stay attuned to student's feedback on the academic instruction. Through my involvement with alumni, I have a sense of continuity between alumni and students. The alumni reflect the evolution of the School. What I always hear from them is that they appreciate the people as well as the curriculum. Dedicated faculty and staff incorporate change successfully."

Advocating a philosophy of active and continuous learning necessitates strong student relations. "We must listen to students not solely for their views on the curriculum. There is a great deal of change in student's lives between the ages of 25 and 30: they're getting married, having children, or caring for elderly relatives. There is a network of support from the Admissions Office, the registrar, the Dean's Office, and the Office of Academic Affairs so students can excel academically while maintaining balance in their lives. Students are the primary reason we are here."

SDM OB 520 Oral Biology II The second-year course in oral biology expands on concepts introduced in the first year. Emphasizes specific oral structures and functions and introduces the biology of oral disease-states. Includes a section on clinical nutrition as it relates to systemic diseases and oral health. *Dr. Oppenheim and staff.* 47 hours, 2 cr, 1st & 2nd sem.

SDM OS 521 Pain Control An introduction to management of medical emergencies, including American Heart Association certification in basic life support. In preparation for the student's entry into clinical practice, the course presents the pharmacology and techniques of local anesthesia as well as prescription writing. *Dr. Hunter and staff.* 23 hours, 1 cr, 2nd sem.

SDM PE 520 Periodontology Clinical and microscopic characteristics of the periodontium in healthy and diseased states. Contains a clinical component in which students perform preventive periodontal procedures on their student partners. *Dr. Polius and staff.* 88 hours, 3 cr, 1st & 2nd sem.

SDM OD 522 Oral Diagnosis and Radiology Instruction in the systemic background and the effect of oral diseases on total patient health, focusing on the patient interview, comprehensive examination, diagnosis, and treatment. An exhaustive presentation of oral and maxillofacial radiology includes radiation physics and quality assurance. Didactic, laboratory, and clinical instruction. *Dr. Boustany and staff.* 62 hours, 2 cr.

SDM OR 521 Orthodontics Focuses on orofacial growth and development and introduces the concepts and practical aspects of orthodontic diagnosis and treatment. *Dr. Thomas.* 13 hours, 1 cr, 2nd sem.

SDM RS 524 Preclinical Fixed Prosthodontics A comprehensive introduction to extracoronal full-coverage tooth restoration systems. Both single-tooth crowns and multiple-tooth bridgework are taught in a laboratory environment. *Dr. Brown and staff.* 176 hours, 5 cr, 1st & 2nd sem.

SDM RS 522 Preclinical Removable Prosthodontics A comprehensive lecture and preclinical laboratory course addressing complete and partial denture construction. *Dr. Emerling and staff.* 117 hours, 5 cr, 1st & 2nd sem.

SDM RS 520 Preclinical Operative Dentistry A continuation of the first-year course. *Drs. Keleher, McManama, and staff.* 134 hours, 5 cr, 1st & 2nd sem.

SDM RS 526 Biomaterials An in-depth study of the physical and chemical properties of materials related to the practice of dentistry—their uses, handling, and effects. *Drs. Nathanson, Giordano, and staff.* 50 hours, 2 cr, 1st & 2nd sem.

SDM PD 521 Preclinical Pediatric Dentistry A comprehensive laboratory introduction to the techniques of pediatric dentistry and orthodontic techniques. Includes the technical aspects of restorative dentistry, space maintenance, cephalometric analysis, and orthodontic tooth movement. *Drs. Boutassa, Thomas, and staff.* 52 hours, 2 cr, 2nd sem.

Third-Year Didactic Courses

SDM PH 531 Dental Career Perspectives, Ethics, and Law Overview of the dental profession, career, and practice opportunities. Designed to help the student explore professional and personal goals and discuss various career opportunities available to dental graduates. Includes an examination of professional ethics as they relate to the dentist's relationships to peers, patients, and the community. Discussion of professional malpractice laws and the judicial system as it relates to professional liability. *Ms. Mann, Ms. Kranz, and staff.* 18 hours, 1 cr, 2nd sem.

SDM PA 530 Oral Pathology Prepares the student to recognize, analyze, and appreciate primary and secondary disease conditions of the oral and para-oral regions, and to respond in an appropriate manner when patients exhibit these conditions. *Dr. Richardson.* 68 hours, 2 cr, 1st & 2nd sem.

SDM PE 530 Periodontology A continuation of the concepts presented in the second year, with emphasis on the diagnosis and clinical management of periodontal disease, including the principles and techniques of periodontal surgery. *Dr. Polius and staff.* 30 hours, 1 cr, 1st & 2nd sem.

SDM OS 530 Oral Surgery An introduction to the basic concepts and techniques of tooth removal as well as minor and major oral surgical problems. A section of this course introduces the student to the principles of hospital dental practice. *Dr. Cataudella and staff.* 30 hours, 1 cr, 1st & 2nd sem.

SDM OR 530 Orthodontics A continuation of the basic concepts presented in the second year, with emphasis on the diagnosis and treatment of specific orthodontic problems. *Dr. Thomas.* 14 hours, ½ cr, 1st & 2nd sem.

SDM OS 532 Pain Control Lectures build on the concepts presented in the second year, emphasizing the psychology of pain, hypnosis, nitrous oxide, and intravenous sedation. *Dr. Hunter and staff.* 13 hours, ½ cr, 1st & 2nd sem.

SDM OS 534 Physical Diagnosis Presents principles of and procedures in the physical evaluation of the dental patient. Students learn to perform a physical examination, obtain a patient history, and evaluate patient information. *Dr. Cottrell.* 12 hours, ½ cr, Year 1.

SDM RS 536 Aesthetic Dentistry A comprehensive look at techniques of dentistry as a cosmetic art. Methods presented include ceramic restorations, composite techniques, and tooth bonding systems. *Dr. Cataldo.* 15 hours, ½ cr, 2nd sem.

SDM RS 532 Removable Prosthodontics Analysis of the edentulous and partially edentulous patient and use of removable prosthesis. Emphasis on diagnosis, prosthetic design, and materials. Correlation with comprehensive clinical practice. *Dr. Emerling and staff.* 31 hours, 1 cr, 1st & 2nd sem.

SDM RS 534 Fixed Prosthodontics Detailed study of the proper diagnosis, treatment plan, and techniques for fixed prosthetic appliances. Stress is placed on the integration of periodontal and endodontic considerations that may affect the final prosthetic appliance. *Dr. DuLong and staff.* 30 hours, 1 cr, 1st & 2nd sem.

SDM RS 530 Operative Dentistry Dental restorative care, including diagnosis, prevention, treatment planning, and establishment of sensitivity to the patient's health and comfort. Delivery of actual clinical care in operative and associated disciplines. *Dr. McManama and staff.* 20 hours, 1 cr, 1st & 2nd sem.

SDM PD 530 Pediatric Dentistry Oral health problems during development and growth of the orofacial structures of the child and adolescent. Training in patient management, preventive and restorative dentistry, treatment of traumatic dental injuries, and minor tooth movement. *Dr. Boutassa and staff.* 29 hours, 1 cr, 1st & 2nd sem.

SDM OD 530 Oral Diagnosis/Oral Medicine Lectures, case presentations, and seminars illustrate the basic principles of oral diagnosis and oral medicine and their effect on comprehensive treatment planning. Emphasis is on the diagnosis and management of the medically compromised patient. *Dr. Boustany and staff.* 90 hours, 2 cr, 1st & 2nd sem.

SDM PR 538 Occlusion A lecture/laboratory course taking the student from normal dental anatomy and occlusion, through analysis of deviations from normal or natural dentition, to an approach to maintenance of healthy occlusal patterns in restorative dentistry and correction of occlusal patterns and disharmonies. Concepts from the course are integrated with courses in operative dentistry, prosthodontics, periodontics, and orthodontics. *Dr. Kong and staff.* 39 hours, 2 cr, 1st sem.

The Comprehensive Care Curriculum In the second year, students are assigned patients for comprehensive dental care. With few exceptions, the student dentist performs all the necessary dental care for the assigned patient and therefore assumes the position of general practitioner or family dentist. As their technical and communication skills develop, students are assigned increasingly challenging cases. The comprehensive care curriculum comprises approximately 100 hours in the second year and approximately 1,000 hours in each of the third and fourth years.

The following courses are part of the Comprehensive Care Clinical Curriculum in years 2–4.

SDM RS 620, 630, 640 Restorative Dentistry This three-year clinical continuum focuses on individual tooth restorations as well as fixed single-unit and fixed multiple-unit prosthesis. Students receive hands-on training in a full range of restorative dentistry including amalgam and composite resin restorative systems as well as porcelain and gold fixed prosthesis. Explores the use of ceramics, composite material, and bonding techniques in cosmetic dentistry. This approach emphasizes coordinating restorative treatment with the patient's overall dental health care. *Dr. DuLong and staff.* 18 cr

SDM EN 630, 640 Endodontics This two-year clinical continuum consists of the diagnosis and treatment of pulpal and perapical dental pathology requiring endodontic intervention. *Dr. Shamritsky and staff.* 3 cr

SDM PE 620, 630, 640 Periodontology This three-year clinical continuum emphasizes not only treatment of the patient's existing periodontal disease, but also maintenance of healthy periodontium through patient education. *Dr. Polins and staff.* 7 cr

SDM RS 622, 632, 642 Removable Prosthodontics This three-year clinical continuum addresses the diagnosis of both fully and partially edentulous mouths as well as the design and fabrication of complete and partial denture appliances. *Dr. Emerling and staff.* 8 cr

Clinical Rotations

The following required clinical courses are taught as part of a special assignment or block rotation and supplement the comprehensive care experience.

SDM PH 610, 620, 630 Applied Professional Experience Rotations in each of the first three years. Students participate in practice management and patient care with a dentist mentor in a range of community dental practice settings. *Ms. Mann, Ms. Peck, and APEX preceptors.* 13 cr

SDM OD 630, 640 Oral Diagnosis, Radiology, Patient Recall, and Emergency Dental Care Clinical rotations in the Division of Oral Diagnosis and Radiology in the third and fourth year. Allows students to conduct and interpret radiographs for new dental patients, perform initial screening examination, and diagnose incoming patients. Working with faculty comprehensive-care team leaders, students gain the analytical and decision-making skills necessary to develop a comprehensive treatment plan and coordinate patient care. During rotations students are periodically assigned to the dental emergency area. Under the supervision of faculty of the appropriate clinical departments, students have the opportunity to gain experience in diagnosing and managing patients with acute dental emergencies. Includes periodic assignments in managing patients returning for follow-up appointments. Emphasis is on preventive dentistry, patient education, and appropriate triage to meet patient requirements. *Drs. Boustany, Guarente, and staff.* 5 cr

SDM OS 640 Oral Surgery and Hospital Dentistry A clinical externship in Oral and Maxillofacial Surgery in the third or fourth year. Students may have the opportunity to perform minor oral surgery procedures in the dental school and participate in the care of hospitalized patients on the oral and maxillofacial surgery service at Boston Medical Center. Requires night call in the emergency room at Boston Medical Center. *Dr. Cataudella and staff.* 3 cr

SDM PD 630, 640 Pediatric Dentistry/Orthodontics Rotations in the children's dentistry clinic in the third and fourth years. Students receive training in preventive and restorative dentistry, treatment of traumatic dental injuries, and orthodontic tooth movement. *Drs. Bourassa, Thomas, and staff.* 4 cr

SDM PH 644 Extramural Training Program Six-week selective externships in the fourth year at sites outside the Medical Center expose the student to alternative clinical settings, modes of treatment, and instruction. In addition, the course sensitizes students to the specific needs of diverse patient populations. *Ms. Kranz and extramural preceptors.* Year 4, 4 cr

The Fourth-Year Courses

SDM DCM 540 Geriatric Dentistry A series of seminars discussing the unique aspects of managing the dental needs of the geriatric patient. *Dr. Friedman and staff.* 8 hours, 1 cr, 1st sem.

SDM RS 540 Implantology A comprehensive lecture and laboratory course that presents the scientific basis and clinical applications of modern dental implantology techniques. Covers both the surgical and prosthetic restorative aspects of implants. Students perform implantology procedures in a laboratory setting. *Dr. Jacobson.* 20 hours, 1 cr, 1st sem.

SDM OD 540 Oral Diagnosis/Radiology Seminars exploring topics in advanced radiology such as CAT scanning and MRI. The diagnosis and management of the medically compromised patient are discussed in depth. *Dr. Boustany and staff.* 24 hours, 1 cr, 2nd sem.

SDM DCM 542 Practice Management Provides information necessary to develop a dental practice. Includes jurisprudence, insurance, estate planning, office design, financing, personnel management, and cost accounting. Guest speakers. *Drs. Boffa, Altshuler, and staff.* 16 hours, 1 cr, 1st & 2nd sem.

SDM RS 542 Treatment Planning Seminar Discussion of advanced diagnostic and treatment planning problems, with special emphasis on the rationale for decision making in a private practice setting. Case presentation format. *Dr. McManama.* 24 hours, 1 cr, 1st & 2nd sem.

Electives

In addition to the core curriculum, comprehensive care training, APEX, and externship rotations, students may opt to take any of the following electives:

Elective Seminars A multidisciplinary series of elective seminars and demonstrations on topics relating to advances and newer concepts in the field. *Staff and guest lecturers.* Year 4, ½ cr

SDM OS 648 Hospital Anesthesiology During this two-week elective rotation in the fourth year, the student is assigned to the Clinical Anesthesiology Service at Boston Medical Center. The student functions as a member of the team, administering general anesthesia for the full spectrum of surgical cases. Emphasizes the pharmacology and physiology of anesthesiology as well as evaluation and management of the acute-care hospital patient. *Dr. Hunter, Dr. Willock, and staff.* Year 4, ½ cr

SDM OS 649 Hospital Dentistry Externships Elective externships in oral and maxillofacial surgery services in several hospitals throughout the United States are available in the summer between the third and fourth years. Rotations of varying length focus on major oral surgery and hospital dentistry. *Dr. Cataudella.* 1 cr

SDM OB 648 Research Mentors are available to assist students in myriad research projects in the basic sciences, clinical sciences, and dental public health. Students have the opportunity to participate in scientific presentations and competitions and submit papers for publication. A predoctoral research committee, available to direct the student to an appropriate mentor, reviews student research proposals and evaluates the student's research experience. *Dr. Kukuruzinska.* 1 cr

ADVANCED STANDING PROGRAM FOR INTERNATIONAL STUDENTS

Students with a dental degree from countries other than the United States or Canada are invited to apply for admission to a program leading to the DMD degree. Students are credited for portions of their previous dental training and experience and can usually anticipate a course of study lasting two years. The program's clinical component assigns the student to comprehensive care patients in a range of extramural sites including clinical specialty rotations, clerkships in institutional dental clinics, and community health care centers.

SEVEN-YEAR LIBERAL ARTS/ DENTAL EDUCATION PROGRAM

Secondary-school seniors with outstanding academic records may earn both the baccalaureate degree and the DMD degree from Boston University in seven years. The first three years and one summer are spent in the College of Liberal Arts, where the student takes the required professional science courses and electives in the humanities and natural sciences. The final four years are spent at the Goldman School of Dental Medicine. If accepted, qualified applicants are admitted to both the College of Liberal Arts and the Goldman School. Continuation in the program is subject to an annual academic review and the maintenance of certain minimum academic standards. The *Undergraduate Programs Bulletin* provides a detailed description of the program and its specific requirements. Inquiries about the Seven-Year Program should be addressed to the Boston University Office of Admissions, 121 Bay State Road, Boston, MA 02215; 617/353-2300.

Postdoctoral and Graduate Programs

The Boston University Goldman School of Dental Medicine is internationally renowned for its excellent postdoctoral and graduate programs. Our graduates are leading practitioners, policymakers, researchers, and teacher/clinicians worldwide.

The degrees and specialties offered at the School are described below:

Certificate of Advanced Graduate Study

The School has been a pioneer in the development of rigorous and challenging specialty programs in which students first establish a firm theoretical foundation through a group of well-designed core courses and then assume responsibility for direct patient care with close supervision and feedback.

Boston University has a special commitment to superior patient-care programs. One manifestation of this commitment is an excellent and experienced faculty working intensively with students on a one-to-one basis. The establishment of a University-wide employee dental health plan and the opening of a second dental health care facility help ensure an optimum patient load.

Certificate of Advanced Graduate Study (CAGS) programs vary in duration. Students may pursue a CAGS in the following areas:

- Advanced general dentistry (12 months)
- *Dental public health* (24 months)
- Endodontics (24 months)
- Advanced operative dentistry (22 months)
- Oral and maxillofacial surgery (48 months)
- Orthodontics (25 months)
- Pediatric dentistry (24 months)
- Periodontology (34 months)
- Prosthodontics (36 months)

Clinical Requirement In addition to completing required courses and participating in all assigned clinical activities, candidates for the Certificate of Advanced Graduate Study must demonstrate proficiency in the clinical aspects of their specialty and any applicable related fields; they must also receive the endorsement of their department in order to receive the certificate.

Master of Science in Dentistry

Students who are admitted to a CAGS program and are interested in research or advanced teaching may pursue the Master of Science in Dentistry. On completion of the requirements, the MSD degree is awarded either in the same area as the CAGS or in oral biology. The MSD is not offered with the advanced general dentistry program.

Most MSD programs allow students to acquire a Master of Science in Dentistry and a Certificate of Advanced Graduate Study. Duration of a combined program may vary depending on the length of time of the CAGS program. In addition to the CAGS requirements, the MSD requires that each student complete a major research project and thesis of professional caliber under faculty supervision. The goal is for each student to develop the ability to focus, analyze, and organize around complex data or a particular problem and to address the issue(s) in a way that contributes to the literature. Students pursuing both a CAGS and an MSD in a clinical program are required to spend the time noted above in the advanced specialty education program and approximately one additional year devoted to research.

Research Requirements

1. The student must submit a protocol for a research project on which to base a master's thesis. The research may be oriented toward a problem with clinical significance, or it may be concerned with a basic science subject related to dentistry. It should be designed to contribute significant information to dental or biological knowledge.
2. The candidate's credentials and protocol are reviewed by the chairman of the department representing the clinical specialty and a primary thesis advisor. When they have been approved, the student may proceed with his or her investigation. The project is conducted by the candidate in consultation with the department chairman and with the guidance of the primary thesis advisor.
3. At the outset of the research phase, the department chairman selects a thesis advisor in accordance with the student's background and specialty interest. The advisor must be a faculty member of Boston University and is responsible for the selection of a topic, supervision of all phases of the research project, conduct of tutorials, academic guidance, evaluation of progress, and assistance in writing the thesis.

Successful completion of the program requires that the student complete a thesis according to departmental guidelines and present the research project in a seminar. Each thesis is evaluated first by the student's advisor and then by a second reader selected by the Masters Thesis Committee. Upon completion of the project, the Masters Thesis Committee reviews final drafts of the student's thesis, suggests changes as necessary, and makes a final recommendation on awarding the degree. The deadline for the thesis defense is 21 days before the expected degree award date.

4. The investigation should possess a degree of originality and sophistication in order to merit the advanced degree. The department chairman, thesis defense panel, or dean may reject a thesis on the basis of such elements as content, style of writing and composition, or assembly format. If rejected, the thesis is returned to the candidate for revision or rewriting.
5. If a candidate's achievement proves to be inadequate when the candidate is questioned by the thesis defense panel, despite the fact that the thesis itself may be satisfactory, he or she will not be recommended for award of the advanced degree. The candidate may redefend the thesis before a thesis defense panel at the designated time during the succeeding school term.

Comprehensive Examination After presenting the department chairman with evidence of satisfactory completion of studies (but before the submission of the thesis) the MSD candidate may be required to pass a written and/or oral examination given by the Masters Thesis Committee designated by the department chairman. The candidate is required to demonstrate to the panel adequate knowledge in his or her major and in related fields.

Doctor of Science Programs

Both the Doctor of Science Program in Dentistry and the Doctor of Science Program in Oral Biology prepare a limited number of highly motivated students who wish to acquire advanced clinical and research expertise. Candidates for DSc or DScD degrees must hold a DMD, a DDS, or the equivalent. The program is designed to train graduates who are capable of taking leadership roles in education, research, and health policymaking.

Research Requirements Students accepted into the Doctor of Science Program in Dentistry and the Doctor of Science Program in Oral Biology are required to fully participate in the research activities of the advisor's laboratory, learning experimental approaches by carrying out specific research protocols related to a dissertation project. In addition to learning appropriate techniques, students are taught how to devise research strategies to answer specific questions, relate the strategy to previous studies and analyze the resulting data, and communicate research findings. The student should be able to formulate a hypothesis and develop a protocol to test it. Furthermore, he/she should be capable of writing a well-developed manuscript and grant application.

Students pursuing a Doctor of Science degree must commit a minimum of three years to the program. During the first year, the thesis advisor selects related didactic courses to support the student's area of research. Courses may be selected from curricula offered by the Boston University School of Dental Medicine postdoctoral program, the Medical and Dental Sciences graduate programs, or other Schools at Boston University. The department chairman gives final approval of courses selected. Few or no didactic courses are required during the second and third years, which focus on conducting and completing the research. In most cases the dissertation or manuscript can be written in the last few months of the program. Each project is designed to be completed in three years.

PhD Program in Oral Biology

A PhD degree in oral biology is being developed by the Department of Periodontology and Oral Biology. The program is designed for highly motivated students preparing for academic and research careers focusing on biological and molecular mechanisms pertinent to oral biology and oral medicine. The degree will be awarded by the Goldman School of Dental Medicine and will meet all academic standards as defined and administered by the Division of Graduate Medical Sciences at Boston University School of Medicine. It is anticipated that the program's duration, including coursework, research project, and thesis preparation and defense, will be approximately five years. Inquiries regarding this program should be directed to the Department of Periodontology and Oral Biology.

Other Graduate Programs

The Master of Science degrees in Dental Public Health and Nutritional Science, and the Doctor of Science degree in Nutritional Science provide challenging learning experiences that prepare students for careers in teaching, research, and health-related industries.

Specific program descriptions and requirements are to be found later on in this section.

DENTAL PUBLIC HEALTH

Fred Boustany, DMD, DSc, *Chairman*

Master of Science in Dentistry in Dental Public Health for Dentists

The 24-month MSD/CAGS program provides the student with broad knowledge and practical experience in health care delivery. The program prepares the dentist for a career in dental public health and is designed to meet the educational and residency requirements of the American Board of Dental Public Health.

Students take courses at the Goldman School and relevant courses at the Boston University School of Public Health. The courses form the matrix from which directed field activities evolve.

Emphasis is placed on leadership skills, social and cultural determinants of health behavior, preventive dentistry, and dental health education. Students have the opportunity to conduct research, and are encouraged to publish papers in professional journals. Courses in oral diagnosis, oral pathology, and basic sciences in clinical specialties may be elected.

Combined Clinical Speciality/Dental Public Health Master of Science in Public Health Dentistry

This three-year program emphasizes the requirements of clinical specialty training. The program exposes future clinical specialists to health care issues at a societal level through in-depth clinical training and study of a wide range of current issues in health care delivery and public health.

Doctor of Science in Public Health Dentistry

This four-year program shares the same goals of the master's program—combined specialty and dental public health, with an emphasis on in-depth exposure to research

issues. This program prepares the student for an academic career.

Doctor of Science in Dentistry in Dental Public Health for Dentists

This three-year program trains dentists for leadership roles in formulating health policy in academic and government settings. Oral examination and successful defense of a dissertation are required. Students may take additional courses at Boston University's School of Public Health, College of Communication, School of Education, and School of Management.

Certificate of Advanced Graduate Study in Dental Public Health for Dentists

A one-year residency in dental public health is offered to dentists who hold an MPH degree. The Goldman School provides an unusually strong program for individuals interested in careers in state and federal health departments, community health programs, and health maintenance operations. The program is designed to fulfill the residency requirements of the American Board of Dental Public Health. Students may take courses offered by the Goldman School and by other Schools and Colleges of the University.

Master of Science in Dental Public Health for Dental Auxiliaries

The nine-month program for hygienists and assistants is designed to develop and enhance the managerial and analytical skills essential to attain leadership roles in today's changing dental health care field. Career-oriented applications of knowledge, theory, and experience are an integral part of the courses in computer applications, biostatistics and epidemiology, research methods, management, dental care issues, and health care management and finance.

Because learning by experience teaches additional skills important in career settings, a research project or practicum of the student's choice is a significant part of the program. Research projects may include survey design and analysis; educational program development; community program planning, implementation, and/or evaluation; media development; and marketing/public relations. Graduates of the Master of Science Program in Dental Public Health pursue careers in business, dental education, and industry. Applicants must hold a certificate in dental hygiene, dental assisting, or dental technology and should have either a bachelor's degree or several years of relevant work experience.

To receive the MS degree, students must maintain a 3.0 grade point average while fulfilling the curriculum requirements, and complete a research project or practicum.

The following two-year curriculum forms the core of the dental public health programs. Additional course selection is contingent upon the specific program of study.

Curriculum
Year 1

SPH HS 702 Introduction to Health Services 3 cr, 1st sem.*

SPH SB 721 Behavioral Sciences and Public Health 3 cr, 1st sem.

SDM PH 763 Bioethics and Law ½ cr, 1st sem.

SDM PH 802 Current Topics in Information Technology 2 cr, 1st sem.

SDM PH 803 Biostatistics 2 cr, 1st sem.

SHD PH 830 Research Writing 2 cr, 1st sem.

SPH EB 711 Epidemiology 3 cr, 2nd sem.*

SDM PH 764 Psychosocial Issues in Dentistry 2 cr, 2nd sem.

SDM PH 804 Advanced Topics in Statistical Analysis Using Computers 2 cr, 2nd sem.

SDM PH 808 Health Care Management and Finance 2 cr, 2nd sem.

SDM PH 831 Presentation Skills 2 cr, 2nd sem.

SDM PH 872 Current Issues in Dental Public Health 1 cr, 2nd sem.

Curriculum
Year 2

SDM PH 806 Multivariate Statistical Methods 2 cr, 4th sem.

SDM PH 840 Advanced Topics in Financial Planning 2 cr, 3rd sem.

SDM PH 874 Advanced Topics in Dental Public Health 1 cr, 4th sem.

SDM PH 910 Public Health Field Experience 2 cr, 3rd sem.

SDM PH 911 Public Health Field Experience 2 cr, 4th sem.

SDM PH 991, 992 Research: Public Health Dentistry 4cr

In addition, the student selects three additional courses offered by the School of Public Health*

*See *School of Public Health Bulletin* for a detailed description. Course selection may vary according to School of Public Health schedule.

Paul Farsai

Geriatric Fellow
DMD '94, AEGD '95

"General dentistry will play an increasingly important role in the future," according to Paul Farsai, a recent graduate of the DMD and Advanced Education in General Dentistry (AEGD) programs. The AEGD program emphasizes the role of the general dentist as primary care provider, as in an actual practice. "A patient would never see a specialist first," Farsai says. "I'm responsible for the initial diagnosis, treatment planning, and coordination of care with the various specialists. But I also have to explain my reasons for treatment to the patients so that they're comfortable with their treatment." The program also focuses on office management and advanced clinical knowledge and skills.

Communication, Paul found, is an integral part of learning. "Many of my APEX rotations were in geriatric dentistry. I had excellent role models, and that convinced me to pursue geriatric dentistry. Each instructor has something to offer, but you have to take the initiative and watch how they approach challenges, and then go one-on-one with them."

While completing the Geriatric Fellowship program, Paul will earn a concurrent master's in public health. The fellowship entails participation in the Home Medical Service. "This fellowship will provide me with the experience I need, particularly through the Home Medical Service. I'll be treating my elderly patients in their homes, making house calls, in effect."

ENDODONTICS

Herbert Schilder, BA, DDS, FACD, FICD, *Chairman*

Certificate of Advanced Graduate Study in Endodontics

This 24-month course of study is designed to meet the formal educational requirements of the American Board of Endodontics. Intensive training is given in clinical endodontics and correlated basic and medical sciences, as well as in other dental subjects related to endodontic practice. Supervised clinical training encompasses both surgical and nonsurgical endodontics, ensuring the acquisition of diagnostic and operative facility in this area. Extensive opportunities exist for combined treatment of endodontic-periodontic problems and for endodontic management of teeth involved in major oral rehabilitative procedures.

All students must be prepared to meet the library requirements that familiarize them with the development of endodontic theory and practice and permit intelligent evaluation of current techniques.

A thesis is required to document student participation in ongoing departmental research projects.

*See the *School of Public Health Bulletin* for a detailed description. Course selection may vary according to School of Public Health schedule.

Curriculum

Year 1

SDM EN 801 Endodontics I 8 cr, 1st & 2nd sem.

SDM EN 803 Endodontics II 2 cr, 1st sem.

SDM EN 805 Endodontics V 8 cr, 1st & 2nd sem.

SDM EN 807 Seminar: Endodontic Radiology 1 cr, 1st sem.

SDM EN 809 Microbiology in Endodontics 1 cr, 2nd sem.

SDM EN 811 Seminar: Endodontic Diagnosis and Treatment Planning 1 cr, 1st & 2nd sem.

SDM EN 814 Seminar: Restoration of Endodontically Involved Teeth ½ cr, 2nd sem.

SDM EN 818 Endodontics in Pediatric Dentistry ½ cr, 2nd sem.

SDM OB 761 *Oral Microbiology* 1 cr, 2nd sem.

SDM OB 763 Basic Processes in Oral Biology 4 cr, 1st & 2nd sem.

SDM OB 767 Oral Immunology 1 cr, 2nd sem.

SDM OS 828 Pain and Anxiety Control 1 cr, 1st sem.

SDM OS 831 Head and Neck Anatomy 1 cr, 1st sem.

SDM OS 761 Medical Management of the Surgical Patient 2 cr, 1st sem.

SDM PE 761 Topics in Periodontology 1 cr, 2nd sem.

SDM PH 763 Bioethics and Law ½ cr, 1st sem.

SDM PH 803 Biostatistics 2 cr, 1st sem.

SDM EN 911 Clinical Endodontics 10 cr, 1st & 2nd sem.

SDM EN 981 Research: Endodontics 9 cr, 1st & 2nd sem.

Year 2

SDM EN 802 Endodontics II 4 cr.

SDM EN 806 Endodontics V 4 cr.

SDM EN 810 Pulp and Periapical Pathobiology ½ cr, 2nd sem.

SDM EN 812 Seminar: Endodontic Diagnosis and Treatment Planning ½ cr, 3rd sem.

SDM EN 813 Seminar: Surgical Endodontics ½ cr, 1st sem.

SDM EN 816 American Board of Endodontics Preparation ½ cr, 2nd sem.

SDM EN 912 Clinical Endodontics 10 cr, 3rd & 4th sem. and summer

SDM EN 982 Research: Endodontics 9 cr, 3rd & 4th sem. and summer

Master of Science in Dentistry in Endodontics

The MSD program lasts approximately one year and entails a research project, thesis, and thesis defense.

SPH EN 991 Research: Endodontics
Other coursework may be assigned at the discretion of the research advisor and the department chair.

Doctor of Science in Dentistry in Endodontics

A limited number of DScD candidates are accepted into the program. Candidates must complete all basic science and clinical requirements as well as a major research effort related to endodontics, usually in conjunction with the research faculty of the University.

SPH EN 992, 993, 994 Research: Endodontics
Other coursework may be assigned at the discretion of the research advisor and the department chair.

NUTRITIONAL SCIENCES

Frank Oppenheim, DMD, Dr med dent, PhD, *Chairman*

Both the MS in nutritional sciences and the DSc in nutritional sciences degrees are designed for individuals preparing for academic or research careers in nutrition.

Students in either program may fulfill their major course and research requirements at the Goldman School and their minor requirements in one of the related basic areas of science at the Graduate School's Division of Medical and Dental Sciences.

A minimum of 12 credits of research is required of all degree candidates. Students may take elective courses in the Graduate School Division of Medical and Dental Sciences in such areas as anatomy, biochemistry, microbiology, pathology, pharmacology, physiology, neurosciences, and endocrinology. A minimum residency of four semesters is required for the MS in nutritional sciences. Students entering the DSc program with a DMD or a master's degree in nutrition must complete a minimum residency of six semesters and earn a minimum of 32 credits. Students entering the DSc program with a baccalaureate degree must complete a minimum residency of eight semesters and earn a minimum of 64 credits.

Curriculum

SDM NS 777 Nutritional Science 2 cr, 1st or 2nd sem.

SDM NS 781 Application of Nutritional Principles 2 cr, 1st & 2nd sem.

SDM NS 785 Seminars: Nutritional Sciences 2 cr, 1st & 2nd sem.

SDM NS 788 Advances in Nutritional Sciences Variable cr, 1st & 2nd sem.

SDM NS 888 Advanced Tutorial in Nutritional Science 2 or more cr, 1st & 2nd sem.

SDM NS 891 Research in Nutritional Sciences By arrangement, 4 cr, 1st & 2nd sem.

ORAL BIOLOGY

Frank Oppenheim, DMD, Dr med dent, PhD, *Chairman*

The Oral Biology Program is designed for students who wish to pursue an academic and research-oriented career. As such, the program is flexible and is especially suited for those whose interests may span more than one discipline. Research programs focusing on oral medicine–related problems may be conducted in conjunction with other

departments within the Boston University Medical Center or affiliated institutions. Every effort is made to provide training in research that will enable students completing this program to continue as independent investigators.

In conjunction with their basic research studies, students receive advanced training and experience in biomedical specialties. This training may lead to either the Master of Science in Dentistry or the Doctor of Science in Oral Biology. With the approval of the appropriate clinical department, students may opt for a combined program that includes training in one of the clinical specialties (periodontology, endodontics, operative dentistry, prosthodontics, dental public health, oral and maxillofacial surgery, pediatric dentistry, or orthodontics), leading to the additional award of the Certificate of Advanced Graduate Study. The clinical requirements of the selected specialty program must be fulfilled to the satisfaction of that department's faculty.

The MSD program can normally be completed in two years. Attainment of the DSc degree requires a minimum of three years. Requirements for combination with a clinical specialty depend on the requirements of the chosen specialty.

The following curriculum comprises the core of the Oral Biology Program. Course selection is contingent upon the student's program of study.

Curriculum

Year 1

SDM OB 761 **Oral Microbiology** 1 cr

SDM OB 763 **Basic Processes in Oral Biology** 4 cr

SDM OB 840 **Advanced Seminar in Oral Biology** 1 cr

SDM OB 850 **Oral Biology Journal Club** 1 cr

SDM PH 803 **Statistics** 2 cr

GMS BI 756 **Biochemistry** 3 cr*

GMS BI 751 **Biochemistry and Morphology** 3 cr*

SDM OB 991 **Research: Oral Biology** 2 cr

Year 2

SDM OB 842 **Advanced Seminar in Oral Biology** 1 cr

SDM OB 852 **Oral Biology Journal Club** 1 cr

SDM OB 992 **Research: Oral Biology** 2 cr

ORAL AND MAXILLOFACIAL SURGERY

Donald F. Booth, DMD, *Chairman*

The Oral and Maxillofacial Surgery Program offers an integrated curriculum of clinical training, basic science study, and research, all within the hospital environment. The program is open to all graduates of dental schools accredited by the Council on Dental Education of the American Dental Association. Preference is given to applicants who show high academic achievement and an aptitude for oral and maxillofacial surgery. A maximum of two positions, fully funded through Boston Medical Center, are open annually.

Certificate of Advanced Graduate Study in Oral and Maxillofacial Surgery

The CAGS Program in oral and maxillofacial surgery training at the Goldman School is a 48-month postdoctoral course of study designed to satisfy the training requirements of the American Board of Oral and Maxillofacial Surgery and the Council on Dental Education of the American Dental Association. The Oral and Maxillofacial Surgery Program is a cooperative effort with Tufts University School of Dental Medicine and is carried out at Boston Medical Center, Tufts New England Medical Center, and the Boston Veterans Administration Hospital. Also associated with the program are the Franciscan Children's Hospital and Rehabilitation Center in Brighton, and the Chelsea Old Soldiers Home.

Curriculum

Year 1

SDM OS 860 **Principles of Surgery** 2 cr

SDM OS 861 **Head and Neck Anatomy** 2 cr

SDM OS 862 **Applied Head and Neck Anatomy** 3 cr

SDM OS 863 **Advanced Medicine** 3 cr

SDM OS 864 **Physical Diagnosis** 3 cr

SDM OS 865 **Experimental Surgery** 3 cr

SDM OS 881 **Clinical Oral Surgery** 3 cr

*Students without an adequate foundation in biochemistry take either Biochemistry or Biochemistry and Morphology in lieu of the Advanced Seminar in Oral Biology and the Oral Biology Journal Club. See the *School of Medicine Bulletin* for a detailed description.

Janet Peters

DMD
Associate Professor of Diagnostic Sciences and Patient Services

"What makes the Advanced Standing Program so interesting for me—and, I believe, for the students—is the diversity of the class," says Janet Peters. "Not only is there a fascinating combination of cultures, but the students have very different types and levels of education and clinical experience."

Dr. Peters says that having the program under its own directorship allows advanced standing students to receive individualized attention to address their unique needs. Some of the program innovations she has initiated since becoming director in 1991 include the following: providing an English course; offering specialty rotations for some students; accelerating qualified students in their coursework; and conducting seminars on current dental issues.

"The advanced standing students come to the School with a particularly focused energy," comments Dr. Peters. "The intensity of their purpose gives the program its cohesiveness and excitement."

Hélène Buithieu

DMD, MSD '92
in Pediatric Dentistry

To better qualify herself for a faculty position she had accepted at the Montreal University Dental School's Department of Pediatric Dentistry, Hélène decided to pursue training in dental research.

"The MSD program at the Goldman School was excellent for this purpose," she says. "Both the preparatory courses and the clinical and laboratory resources provided me with a wealth of research opportunities. I know I learned more current research methods here than if I pursued this degree in my home country."

Hélène's research project explored the effects of glass ionomers on the performance of porcelain inlays. She conducted her investigation in the laboratories of the Biomaterials Department, under the mentorship of Professor and Department Chairman Dan Nathanson. "Dr. Nathanson really helped me refine my topic and focus my study," she comments. "It was great to have access to that kind of expertise and guidance."

Hélène, who commuted to Montreal each weekend to be with her husband and baby, says she thoroughly enjoyed her Goldman School experience. "The knowledge I brought back to Montreal was an asset to both the dental school and my career."

Year 2

SDM OS 869 Anesthesia 3 cr
SDM OS 870 Neurosurgery 3 cr
SDM OS 871 Critical Care 3 cr
SDM OS 872 Emergency Room 3 cr

Year 3

SDM OS 866 Orthognathic Surgery 1 cr
SDM OS 868 Oral Pathology 2 cr
SDM OS 913 Clinical Oral Surgery 6 cr

Year 4

SDM OS 914 Clinical Oral Surgery 6 cr

Master of Science in Dentistry in Oral and Maxillofacial Surgery

The MSD Program, approximately one year in duration, entails a research project, thesis, and thesis defense.

SDM OS 991, 992 Research: Oral and Maxillofacial Surgery 4 cr, 1st & 2nd sem.
Other coursework may be assigned at the discretion of the research advisor and department chairman.

ORTHODONTICS

Anthony A. Gianelly, DMD, PhD, MD, *Chairman*

Certificate of Advanced Graduate Study in Orthodontics

This 23-month CAGS program in orthodontics is designed for those interested in the specialty practice of clinical orthodontics. The curriculum is arranged so that approximately half the time is devoted to clinical training. The remainder of the program is devoted to lectures and seminars in the basic sciences and clinical subjects related to orthodontics.

The intent of the program is to educate students to become competent clinicians who can successfully analyze and treat dentofacial deformities. Emphasis is placed on craniofacial growth and development, cephalometrics, biomechanics, occlusion, and neuromuscular physiology.

The program provides both the formal educational requirements and the partial clinical bases for the examinations of the American Board of Orthodontics.

Curriculum

Year 1

SDM OB 763 Cellular and Oral Biology 4 cr, 1st & 2nd sem.

SDM OS 831 Head and Neck Anatomy 1 cr, 1st sem.

SDM OS 866 Orthognathic Surgery 1st & 2nd sem

SDM OS 761 Medical Management of the Surgical Patient 2 cr, 1st sem.

SDM PH 803 Introduction to Biostatistics/ Epidemiology 2 cr, 1st sem.

SDM PH 804 Advanced Topics in Statistical Analysis Using Computers 2 cr, 2nd sem.

SDM PH 741 Behavioral Sciences 1 cr, 1st sem.

SDM PH 763 Bioethics and Law ½ cr, 1st sem.

SDM OR 803 Orthodontics I
8 cr, 1st & 2nd sem.

SDM OR 805 Orthodontics Seminar I
8 cr, 1st & 2nd sem.

SDM OR 807 Orthodontics Seminar II
1 cr, 1st & 2nd sem.

SDM OR 820 Orthodontic Documentation
1 cr, 1st sem.

SDM OR 900 Temporomandibular Joint Disorders and Myofacial Pain 2 cr, 1st & 2nd sem.

SDM OR 911 Orthodontic Clinical Practice
15 cr, 1st & 2nd sem.

SDM OR 981 Research: Orthodontics 2 cr, 1st & 2nd sem.

Year 2

SDM OS 867 Orthognathic Surgery 3rd & 4th sem.

SDM PR 761 Occlusion 2 cr, 3rd sem.

SDM OR 821 Orthodontic Documentation
1 cr, 3rd sem.

SDM OR 822 Orthodontics Seminar II
3 cr, 3rd & 4th sem.

SDM OR 902 Temporomandibular Joint Disorders and Myofacial Pain 2 cr, 3rd & 4th sem.

SDM OR 912 Orthodontic Clinical Practice
17 cr, 3rd & 4th sem.

SDM OR 920 Literature Review 4 cr, 3rd & 4th sem.

SDM OR 982 Research: Orthodontics 2 cr, 3rd & 4th sem.

Master of Science in Dentistry in Orthodontics

The MSD Program lasts approximately one year and entails a research project, thesis, and thesis defense.

SDM OR 991 Research: Orthodontics 4 cr, 1st & 2nd sem.
Other coursework may be assigned at the discretion of the research advisor and the department chairman.

Doctor of Science in Dentistry in Orthodontics

A limited number of candidates are accepted into the DScD program, which takes at least three years to complete. Candidates must complete all basic science and clinical requirements for the CAGS program as listed above. In addition, the program requires that candidates complete a major research effort related to orthodontics. This research is usually conducted in conjunction with research faculty of the University.

SDM OR 992, 993, 994 Research: Orthodontics 12 cr, 1st–6th sem.
Other coursework may be assigned at the discretion of the research advisor and the department chairman.

PEDIATRIC DENTISTRY

Christopher V. Hughes, DMD, PhD, *Chairman*

The Department of Pediatric Dentistry of the Goldman School provides a supervised oral prevention and treatment service for program participants.

Certificate of Advanced Graduate Study in Pediatric Dentistry

The CAGS curriculum in pediatric dentistry is designed to meet the formal educational requirements for specialization and for certification by the American Board of Pediatric Dentistry.

Participants in the 24-month program are provided the necessary clinical experience and formal study to diagnose and treat any oral health problem within the pediatric age group. The following areas of competence are stressed in pediatric dentistry:

- diagnosis and treatment planning
- preventive dentistry
- growth and development
- orthodontics
- specialized operative and prosthodontic techniques
- pulp therapy in primary and immature permanent dentitions
- periodontology
- pediatric oral pathology
- hospital dentistry
- conscious sedation
- behavioral sciences and their application to the pediatric patient
- care of the special-needs patient

So that the techniques discussed in lectures, seminars, and demonstrations may be directly applied to the patient, pertinent clinical operations are performed upon carefully selected children.

Emphasis is given to management of the young hospitalized child, including complete restorative and surgical care under general anesthesia for the exceptional child.

Affiliated Institutions

Franciscan Children's Hospital and Rehabilitation Center Located at 30 Warren Street in Brighton, this general pediatric hospital is licensed for pediatrics and rehabilitation. It is nonsectarian and nonprofit. Emphasis is placed on acute pediatric problems, total rehabilitation programs for children with orthopedic conditions or disorders of the nervous system, and treatment of children with such handicaps as speech impairment or hearing loss. The philosophy of treatment involves the team approach, since no one specialty can render all necessary care. The Dental Department provides comprehensive care with an emphasis on preventive dentistry. All postdoctoral students in pediatric dentistry perform dental care, under the guidance of staff members, in both the outpatient departments and the operating room.

Boston Medical Center, located adjacent to the Boston University Medical Center, offers a variety of health services and is a major teaching hospital of the medical center. Boston Medical Center provides treatment to the poor and indigent in both inpatient and outpatient settings. Boston Medical Center supports a general practice residency program in dentistry and is a component of the Boston University Oral Surgery Training Program. Pediatric Dentistry residents of the Goldman School regularly participate in clinical rotations provided by Boston Medical Center's Department of Pediatric Medicine and Department of Dentistry.

Curriculum

Year 1

SDM OP 803 Seminar: Operative Dentistry 1 cr, 1st & 2nd sem.

SDM OS 761 Medical Management of the Surgical Patient 2 cr, 1st sem.

SDM OB 761 Oral Microbiology 1 cr, 2nd sem.

SDM OB 763 Basic Processes in Oral Biology 4 cr, 1st and 2nd sem.

SDM OB 767 Oral Immunology 1 cr, 2nd sem.

SDM PD 800 Preclinical Technique ½ cr, 1st sem.

SDM PD 801 Preclinical Technique Lab 2 cr, 1st sem.

SDM PD 802 Lecture: Pediatric Dentistry 7 cr, 1st & 2nd sem.

SDM PD 806 Orthodontics 4 cr, 1st & 2nd sem.

SDM PD 816 Pediatric Oral Pathology, Oral Medicine, and Periodontology 2 cr, 1st & 2nd sem.

SDM PD 820 Preventive Dentistry 3 cr, 1st & 2nd sem.

SDM PD 832 Growth and Development ½ cr, 2nd sem.

SDM PH 763 Bioethics and Law ½ cr, 1st sem.

SDM PH 800 Introduction to Biostatistics/ Epidemiology 1 cr, 2nd sem.

SDM PR 825 Biomaterials 2 cr, 1st & 2nd sem.

SDM PE 827 Applied Dental Pharmacology 1 cr, 2nd sem.

SDM OS 828 Pain and Anxiety Control 1 cr, 1st sem.

SDM OS 831 Head and Neck Anatomy 1 cr, 1st sem.

SDM PD 911 Clinical and Hospital Pediatric Dentistry 7 cr, 1st & 2nd sem.

SDM PD 915 Orthodontic Clinic 1 cr, 2nd sem.

Year 2

SDM PD 804 Seminar: Pediatric Dentistry 4 cr, 3rd & 4th sem.

SDM PD 808 Lecture: Orthodontics 5 cr, 3rd & 4th sem.

SDM PD 818 Pediatric Oral Pathology, Oral Medicine, and Periodontology 2 cr, 3rd & 4th sem.

SDM PD 822 Seminar: Advanced Pediatric Dentistry 7 cr, 3rd & 4th sem.

SDM PD 824 Advanced Pediatric Dentistry Case Presentations 3 cr, 3rd & 4th sem.

SDM PR 832 Temporomandibular Disorders and Myofacial Pain 1 cr, 3rd sem.

SDM PD 912 Clinical and Hospital Pediatric Dentistry 8 cr, 3rd & 4th sem.

SDM PD 916 Orthodontic Clinic 2 cr, 3rd & 4th sem.

SDM PD 918 Anesthesia Rotation 1 cr, 3rd sem.

SDM PD 919 Operating Room Rotation 1 cr, 3rd sem.

SDM PD 826 Pediatric Dentistry Literature Review 2 cr, 4th sem.

SDM PD 982 Research: Pediatric Dentistry 2 cr, 3rd & 4th sem.

Master of Science in Dentistry in Pediatric Dentistry

The MSD program lasts approximately one year and entails a research project, thesis, and thesis defense.

SDM PD 993 Research: Pediatric Dentistry 4 cr, 1st and 2nd sem.

Doctor of Science in Dentistry in Pediatric Dentistry

A limited number of candidates are accepted into the DScD program, which takes at least three years to complete. Candidates must complete all basic science and clinical requirements for the CAGS program as listed above. The program also requires that candidates complete a major research effort related to pediatric dentistry. This research is usually conducted in conjunction with research faculty of the University.

Combined Pediatric Dentistry and Dental Public Health

This program offers excellent clinical training and a perspective that includes both community and global concerns. After successfully completing two years of pediatric dentistry and one year of dental public health, the student receives a Certificate of Advanced Graduate Study (CAGS) in Pediatric Dentistry and a Master of Science in Dentistry (MScD) in Dental Public Health.

PERIODONTOLOGY

Frank Oppenheim, DMD, Dr med dent, PhD, *Chairman*
Thomas E. Van Dyke, DDS, PhD, *Director*

Certificate of Advanced Graduate Study in Periodontics

The first year of the 34-month CAGS program emphasizes the sciences essential to understanding the principles of clinical periodontology. These include clinical medical sciences, microbiology/immunology, periodontology, principles of occlusion, orthodontics, oral medicine, oral pathology, and oral biology. The second and third years are devoted to the clinical practice of this specialty, with additional instruction in the clinical sciences and clinical research. Residents are also involved in teaching and off-site clinical service. This program is designed to meet the formal educational requirements of the American Academy of Periodontology and the American Dental Association. Graduates become Board-eligible upon completion of Part I of the Board Examinations.

Curriculum

Year 1

SDM EN 819 Endodontics for Periodontists ½ cr, 2nd sem.

SDM OB 761 Oral Microbiology 1 cr, 1st sem.

SDM OB 763 Basic Processes in Oral Biology 2 cr, 1st & 2nd sem.

SDM OB 767 Oral Immunology 1 cr, 2nd sem.

SDM OS 828 Pain and Anxiety Control 1 cr, 1st sem.

SDM OS 831 Head and Neck Anatomy 1 cr, 1st sem.

SDM OS 761 Medical Management of the Surgical Patient 2 cr, 1st sem.

SDM PA 820 Oral Pathology 1 cr, 1st sem.

SDM PD 832 Growth and Development ½ cr, 2nd sem.

SDM PE 801 Periodontology I 4 cr, 1st & 2nd sem.

SDM PE 807 Seminar: Treatment Planning in Periodontics 2 cr, 1st & 2nd sem.

SDM PE 809 Principles of Prosthetic Reconstruction 1 cr, 2nd sem.

SDM PE 811 Orthodontic Mechanotherapy 2 cr, 2nd sem.

SDM PE 815 Periodontal Literature Review I 4 cr, 1st & 2nd sem.

SDM PE 817 Seminar: Grand Rounds 2 cr, 1st & 2nd sem.

SDM PE 819 Seminar: Periodontal Surgery 2 cr, 1st & 2nd sem.

SDM PE 823 Periodontal Therapy I 4 cr, 1st & 2nd sem.

SDM PE 827 Applied Dental Pharmacology 1 cr, 2nd sem.

SDM PE 830 Oral Medicine 1 cr, 2nd sem.

SDM PE 833 Practice Management 2 cr, 1st & 2nd sem.

SDM PE 834 Scientific Paper Writing 1 cr, 1st sem.

SDM PE 911 Clinical Periodontology 15 cr, 1st & 2nd sem.

SDM PH 800 Introduction to Biostatistics/ Epidemiology 1 cr, 2nd sem.

SDM PH 763 Bioethics and Law ½ cr, 1st sem.

SDM PH 741 Behavioral Sciences 1 cr, 1st sem.

SDM PR 761 Occlusion 2 cr, 1st sem.

SDM PR 816 Implantology 4 cr, 2nd sem.

Year 2

SDM PE 802 Periodontology II 4 cr, 3rd & 4th sem.

SDM PE 808 Seminar: Treatment Planning in Periodontics 2 cr, 3rd & 4th sem.

SDM PE 818 Seminar: Grand Rounds 2 cr, 3rd & 4th sem.

SDM PE 820 Seminar: Periodontal Surgery 2 cr, 3rd & 4th sem.

SDM PE 825 Periodontal Therapy II 2 cr, 3rd & 4th sem.

SDM PE 829 Periodontal Literature Review II 4 cr, 3rd & 4th sem.

SDM PE 912 *Clinical Periodontology* 15 cr, 3rd & 4th sem.

Year 3

SDM PE 803 Periodontology III 4 cr, 5th & 6th sem.

SDM PE 839 Periodontal Literature Review 4 cr, 5th & 6th sem.

SDM PE 901 Periodontal Therapy III 4 cr, 5th & 6th sem.

SDM PE 913 Clinical Periodontology 15 cr, 5th & 6th sem.

SDM PE 983 Research: Periodontology 4 cr, 5th & 6th sem.

Master of Science in Dentistry in Periodontology

The MSD program lasts approximately one year and entails a research project, thesis, and thesis defense.

SDM PE 991 Research: Periodontology 4 cr, 5th & 6th sem.

Other coursework may be assigned at the discretion of the research advisor and the department chairman.

Combined Periodontology and Dental Public Health

This program offers excellent clinical training and a perspective that includes both community and global concerns. After successfully completing three years of specialty training in periodontology and one year of the Dental Public Health Program, the student will be awarded a Certificate in Advanced Graduate Study (CAGS) in Periodontology and a Master of Science in Dentistry (MScD) in Dental Public Health.

RESTORATIVE SCIENCES

ADVANCED EDUCATION IN GENERAL DENTISTRY

Dan Nathanson, DMD, MSD, *Acting Chairman, Department of Restorative Sciences*
John Ictech-Cassis, DMD, *Director*

The General Practice Residency in Dentistry, which begins on July 1 and continues for 12 months to June 30, is an educational program leading to a Certificate in Advanced Graduate Studies (CAGS). The program offers patient-care, didactic, and hospital experience at the postdoctoral level and enhances the new graduate's competence and confidence as a dental practitioner. Through expert guidance, the program increases the student's management abilities, clinical judgment, and patient-care skills. The program benefits from the School's unique position as the largest postdoctoral training facility in the country. Stipends are offered to a limited number of qualified students.

The curriculum includes a lecture series in fixed partial dentures; operative, removable partial and complete dentures; periodontology; oral pathology; orthodontics,

Assistant Clinical Professor of Restorative Sciences Leila Rosenthal assists a student in a laboratory class.

endodontics; restorative; and implantology. The Treatment Plan Seminar and Periodontal-Prosthetics Lecture Series run all year long. Case presentations are given by faculty and residents. Oral surgery, general anesthesia, and literature reviews are also part of the curriculum.

The program provides substantial exposure to fixed prosthodontics, removable prosthodontics, periodontal therapy, endodontics, oral surgery, and implants. Utilizing patient-care experience both within the School and through rotations at affiliated institutions, the program will enhance the graduate's ability to make judgments in diagnosis, treatment planning, and sequence of treatment. It will also provide understanding, experience in practice management and administration, and the ability to interact with all health practitioners treating the patient.

First Semester

SDM OS 761 Medical Management of the Surgical Patient 2 cr, 1st sem.

SDM OS 828 Pain and Anxiety Control 1 cr, 1st sem.

SDM PE 764 Periodontology for the General Practitioner ½ cr, 1st sem.

SDM EN 820 Endodontics for the General Practitioner ½ cr, 1st sem.

SDM PH 741 Behavioral Sciences 1 cr, 1st sem.

SDM PR 809 Prosthodontic Seminar and Literature Review 1 cr, 1st sem.

SDM PR 810 Case Presentation and Treatment Planning Seminar 1 cr, 2nd sem.

Second Semester

SDM OR 760 Orthodontics for the General Practitioner ½ cr, 2nd sem.

SDM PA 810 Clinicopathologic Seminars in Oral and Dental Disease ½ cr, 2nd sem.

SDM PD 760 Pediatric Dentistry for the General Practitioner ½ cr, 2nd sem.

SDM PE 827 Applied Dental Pharmacology 1 cr, 2nd sem.

SDM PE 833 Practice Management 2 cr, 1st and 2nd sem.

SDM PR 807 Case Presentation Seminars 1 cr, 1st & 2nd sem.

SDM PR 816 Implantology 1 cr, 2nd sem.

SDM PR 823 Hospital Dentistry ½ cr, 2nd sem.

SDM PR 905 General Dentistry Clinic 15 cr, 1st and 2nd sem.

ADVANCED OPERATIVE DENTISTRY

Dan Nathanson, DMD, MSD, *Acting Chairman, Department of Restorative Sciences*
Nargess Ashayeri, DMD, CAGS, MSD, *Clinical Director, Esthetic Restorative Dentistry*

Certificate of Advanced Graduate Study in Advanced Operative Dentistry

The 24-month CAGS program offers advanced education in the conceptual, biological, and practical components of operative dentistry. Specifically intended for those pursuing teaching careers, the program includes training in basic sciences, biomaterials, lecture presentation, research methods, and the clinical aspects of restorative dentistry.

Initial activities include lectures, seminars, and preclinical training with special emphasis on resin and porcelain systems.

The clinical component of the program includes both patient care and student teaching. Particular emphasis is placed on diagnosis and treatment planning, on the significance of periodontal health, of esthetics and cosmetic dentistry, and on conventional restorative procedures.

The program provides an opportunity to develop the academic and clinical skills required to participate in a dental school faculty.

Curriculum

Year 1

SDM EN 820 Endodontics for the General Practitioner ½ cr, 1st sem.

SDM OB 761 Oral Microbiology 1 cr, 2nd sem.

SDM OB 811 Treatment Planning in Restorative Dentistry 1 cr, 1st & 2nd sem.

SDM OP 802 Advanced Restorative Systems 1 cr, 2nd sem.

SDM OP 803 Seminar: Operative Dentistry 1 cr, 1st & 2nd sem.

SDM OP 805 Principles of Operative Dentistry and Preclinical Technique 2 cr, 1st sem.

SDM OP 807 Preclinical Technique 1 cr, 1st sem.

SDM OP 809 Esthetic Restorative Dentistry 1 cr, 2nd sem.

SDM OP 911 Clinical Operative Dentistry 6 cr, 2nd sem.

SDM OP 916 Literature Review 1 cr, 1st & 2nd sem.

SDM OS 761 Medical Management of the Surgical Patient 2 cr, 1st sem.

SDM OS 828 Pain and Anxiety Control 1 cr, 1st sem.

SDM OS 831 Head and Neck Anatomy 1 cr, 1st sem.

SDM PA 801 Oral Pathology 1 cr, 1st sem.

SDM PE 827 Applied Dental Pharmacology 1 cr, 2nd sem.

SDM PE 833 Practice Management 2 cr, 2nd sem.

SDM PE 761 Topics in Periodontology 1 cr, 2nd sem.

SDM PH 741 Behavioral Sciences 1 cr, 1st sem.

SDM PH 803 Biostatistics 2 cr, 2nd sem.

SDM PR 801 Fixed Partial Dentures 2 cr, 1st & 2nd sem.

SDM PR 807 Case Presentation Seminar 1 cr, 1st & 2nd sem.

SDM PR 761 Occlusion 2 cr, 1st sem.

SDM PR 816 Implantology 4 cr, 1st & 2nd sem.

SDM PR 823 Prosthodontic Topics 1 cr, 1st & 2nd sem.

SDM PR 825 Postdoctoral Biomaterials 2 cr, 1st & 2nd sem.

SDM PR 832 Temporomandibular Disorders 1 cr, 2nd sem.

SDM PR 901 Prosthodontic Literature Review 4 cr, 2nd sem.

SDM PE 817 Grand Rounds Seminar 1 cr, 1st & 2nd sem.

Year 2

SDM OB 812 Treatment Planning in Restorative Dentistry 1 cr, 3rd & 4th sem.

SDM OP 810 Esthetic Restorative Dentistry 1 cr, 2nd sem.

SDM OP 917 Literature Review 1 cr, 3rd & 4th sem.

SDM OP 919 Student Teaching 1 cr, 3rd & 4th sem.

SDM PE 818 Grand Rounds Seminar 1 cr, 3rd & 4th sem.

SDM PR 808 Case Presentation Seminar 1 cr, 3rd & 4th sem.

SDM OP 982 Research: Operative Dentistry 2 cr, 3rd & 4th sem.

Master of Science in Dentistry in Advanced Operative Dentistry

The MSD program, approximately one year in duration, entails a research project, thesis, and thesis defense.

SDM OP 991 Research: Operative Dentistry 4 cr, 1st and 2nd sem.
Other coursework may be assigned at the discretion of the research advisor and the department chairman.

Doctor of Science in Dentistry in Operative Dentistry

A limited number of candidates are accepted into this DScD program, which takes at least three years to complete. Candidates must complete all basic science and clinical requirements for the CAGS program as listed above. The program also requires that candidates complete a major research effort related to operative dentistry. This research is usually conducted in conjunction with research faculty of the University.

POSTGRADUATE PROSTHODONTICS

Dan Nathanson, DMD, MSD, *Acting Chairman, Department of Restorative Sciences*
Steven M. Morgano, DMD, *Director, Postdoctoral Prosthodontics*

Certificate of Advanced Graduate Study in Prosthodontics

The 36-month prosthodontic program provides the candidate with a comprehensive knowledge of fixed and removable prosthodontics. The curriculum includes instruction in complete dentures, removable partial dentures, fixed partial dentures, implantology, geriatrics, temporomandibular disorders, and maxillofacial prosthodontics. The didactic background and the clinical and laboratory skills of these prosthodontic areas are stressed. Emphasis is placed on the periodontal integrity of the patient and the supportive therapy of all other disciplines in achieving total patient care. This integration is achieved through interdisciplinary joint seminars with the other specialties and through coordinated treatment planning.

An important aspect of this curriculum is the intensive and systematized library reading requirements, designed to acquaint the student with the principal facets of the prosthodontic specialty, including dental materials, gnathology, occlusion, treatment philosophies, and case selection.

This program follows the ADA guidelines for graduate programs in prosthodontics and the multidisciplinary scope of the American Board of Prosthodontics for specialty certification examination eligibility.

Two different tracks are available for the 36-month program. The clinical track leads to the CAGS. Qualified students may elect the research track, in which students complete a research project, thesis, and thesis defense in the third year and are awarded both the CAGS and the MSD degree.

Curriculum

Year 1

SDM EN 819 Endodontics for Prosthodontists ½ cr, 2nd sem.

SDM OB 761 Oral Microbiology 1 cr, 2nd sem.

SDM OB 763 Basic Processes in Oral Biology 4 cr, 1st & 2nd sem.

SDM OB 767 Oral Immunology 1 cr, 2nd sem.

SDM OS 831 Head and Neck Anatomy 1 cr, 1st sem.

SDM OS 761 Medical Management of the Surgical Patient 2 cr, 1st sem.

SDM PA 801 Oral Pathology 1 cr, 1st sem.

SDM PE 761 Topics in Periodontology 1 cr, 2nd sem.

SDM PE 817 Grand Rounds Seminar 1 cr, 1st & 2nd sem.

SDM PE 827 Applied Dental Pharmacology 1 cr, 2nd sem.

SDM OS 828 Pain and Anxiety Control 1 cr, 1st sem.

SDM PE 830 Oral Medicine 1 cr, 1st sem.

SDM PE 833 Practice Management 2 cr, 1st & 2nd sem.

SDM PH 741 Behavioral Sciences 1 cr, 1st sem.

SDM PH 763 Bioethics and Law ½ cr, 1st sem.

SDM PH 800 Introduction to Biostatistics/Epidemiology 1 cr, 2nd sem.

SDM PR 761 Occlusion 2 cr, 1st sem.

SDM PR 801 Fixed Partial Dentures 2 cr, 1st sem.

SDM PR 803 Complete Denture Prosthodontics 2 cr, 1st & 2nd sem.

SDM PR 806 Removable Partial Dentures 2 cr, 1st & 2nd sem.

SDM PR 807 Case Presentation Seminar 1 cr, 1st & 2nd sem.

SDM PR 814 Removable Prosthodontics: Overlay Denture 1 cr, 2nd sem.

SDM PR 815 Basic Prosthodontic Techniques 2 cr, 1st sem.

SDM PR 816 Implantology 1 cr, 1st & 2nd sem.

SDM PR 818 Principles of Gnathology 1 cr, 2nd sem.

SDM PR 821 Maxillofacial Prosthetics 1 cr, 2nd sem.

SDM PR 825 Postdoctoral Biomaterials 1 cr, 2nd sem.

SDM PR 911 Clinical Prosthodontics 6 cr, 1st & 2nd sem.

SDM PR 823 Prosthodontic Topics 1 cr, 1st & 2nd sem.

SDM PR 914 Full-Mouth Reconstruction 1 cr, 2nd sem.

Year 2

SDM PE 818 Grand Rounds Seminar 1 cr, 3rd & 4th sem.

SDM PR 808 Case Presentation Seminar 1 cr, 3rd & 4th sem.

SDM PR 822 Maxillofacial Prosthetics 1 cr, 3rd & 4th sem.

SDM PR 826 Postdoctoral Biomaterials 1 cr, 3rd & 4th sem.

SDM PR 901 Prosthodontic Literature Review 4 cr, 3rd, & 4th sem.

SDM PR 912 Clinical Prosthodontics 12 cr, 3rd & 4th sem.

SDM PR 823 Prosthodontic Topics 1 cr, 3rd & 4th sem.

SDM PR 832 Temporomandibular Disorders 1 cr, 3rd sem.

Year 3

SDM PR 913 Clinical Prosthodontics 12 cr, 5th & 6th sem.

SDM PR 920 Student Teaching 2 cr, 5th & 6th sem.

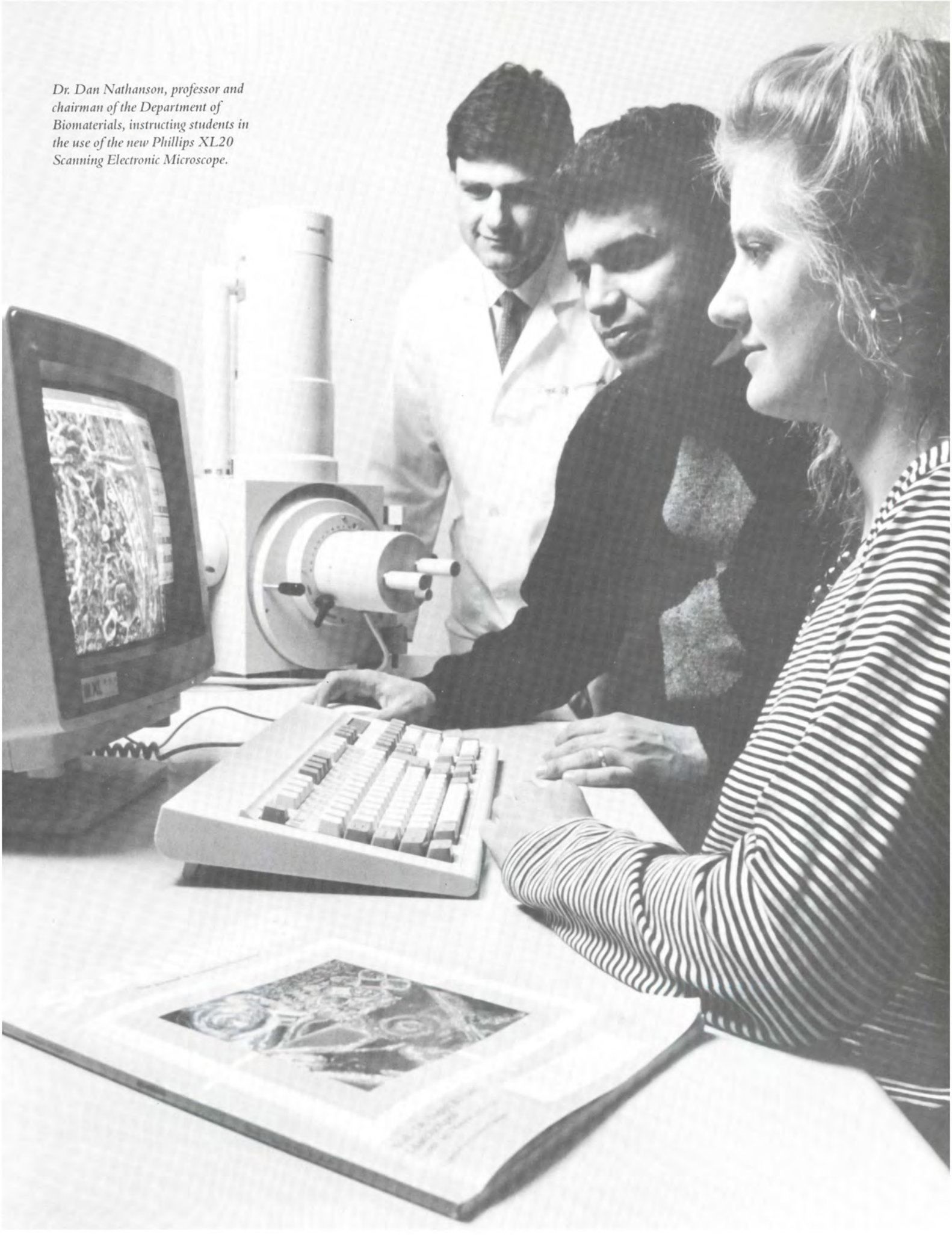
Master of Science in Dentistry in Prosthodontics

The MSD degree entails a research project, thesis, and thesis defense and is available as an integral component of the 36-month program for qualified students.

SDM PR 991 Research: Prosthodontics 2 cr, 3rd year
Other coursework may be assigned at the discretion of the research advisor and the department chairman.

Doctor of Science in Dentistry in Prosthodontics

A limited number of candidates are accepted into this DScD program, which takes at least two additional years to complete. Candidates must complete all basic science and clinical requirements for the CAGS program as listed above. The program also requires that candidates complete a major research effort related to restorative dentistry. This research is usually conducted in conjunction with research faculty of the University.



Dr. Dan Nathanson, professor and chairman of the Department of Biomaterials, instructing students in the use of the new Phillips XL20 Scanning Electronic Microscope.

Postdoctoral and Graduate Courses

Courses are coded with a departmental abbreviation and are arranged alphabetically by the department code.

Codes used are as follows:

EN	Endodontics
NS	Nutritional Sciences
OB	Oral Biology
OP	Operative Dentistry
OR	Orthodontics
OS	Oral and Maxillofacial Surgery
PD	Pediatric Dentistry
PE	Periodontology
PH	Dental Public Health
PR	Prosthodontics

Endodontics

SDM EN 801, 802 Endodontics I Details essentials of endodontic diagnosis, treatment planning, and therapy. All forms of endodontic treatment are discussed and evaluated, with emphasis on indications for nonsurgical and surgical therapy as well as the correlation of these therapies to other phases of dentistry such as periodontology, restorative dentistry, and pediatric dentistry. Develops the fundamental philosophy and techniques of patient care. *Dr. Schilder and faculty.* 8 cr, 1st & 2nd sem.

SDM EN 803 Endodontics II Prerequisite for clinical program. Participation in endodontic procedures performed on extracted teeth. Lectures and clinical demonstrations by the endodontic staff cover the range of clinical procedures to be perfected by students during the clinical phases. *Dr. Schilder and faculty.* 2 cr, 1st sem.

SDM EN 805, 806 *Endodontics V* Seminars based on intensive and comprehensive readings in the literature of endodontics covering all facets of endodontic diagnosis, prognosis, treatment planning, and therapy. *Dr. Hoyo.* 8 cr, 1st & 2nd sem.

SDM EN 807 Seminar: Endodontic Radiology A review course for the postdoctoral endodontic student. Details radiographic technique, radiation hygiene, and the chemistry of photography to minimize the exposure of patients and dental staff. *Dr. Shamritsky.* 1st sem.

SDM EN 809 Microbiology in Endodontics Designed to provide a comprehensive understanding of the microbiological spectrum in pulpal-periapical disease. Emphasis on clinical and biological approach, with therapeutic considerations. *Dr. Matsuoe.* 1 cr, 2nd sem.

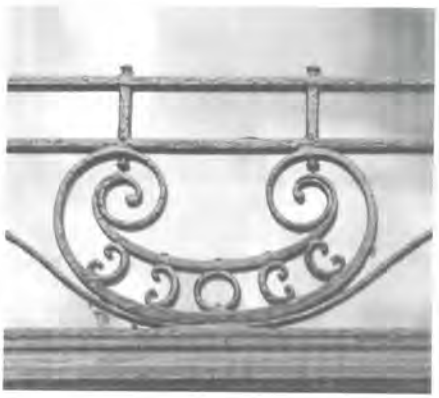
SDM EN 810 Pulp and Periapical Pathobiology Seminar for advanced endodontic students. Comprehensive and up-to-date look at pulp and periapical tissues with clinical correlates. Students present cases and analyze histologic aspects. *Dr. Richardson.* ½ cr, 2nd sem.

SDM EN 811, 812 Seminar: Endodontic Diagnosis and Treatment Planning Develops logical approaches to endodontic diagnosis and treatment planning procedures. Includes discussion of a wide range of endodontic problems not usually encountered in clinical courses. *Dr. Melnick.* 1½ cr, 1st, 2nd, & 3rd sem.

SDM EN 813 Seminar: Surgical Endodontics Based on case studies involving periapical surgery. Presentations and discussions emphasize diagnosis, treatment techniques, and complications during periapical surgery. *Endodontics faculty.* ½ cr, 1st sem.

SDM EN 814 Restoration of Endodontically Involved Teeth Presentation of rationale and operative procedures best employed in restoring endodontically treated teeth and in using them as long-term abutments for prosthetic appliances. *Dr. Cassis.* ½ cr, 2nd sem.

SDM EN 816 American Board of Endodontics Preparation Students are examined orally on a specific topic from a series of subjects related to endodontics, followed by class discussion. After discussions of all topics in the series, students are given written and oral examinations designed to closely parallel American Board Examinations. Evaluations based on ability to display knowledge. *Endodontics faculty.* ½ cr, 2nd sem.



SDM EN 818 Endodontics in Pediatric Dentistry Seminars emphasize the treatment of traumatic injury, including discussions on diagnosis, pulpotomy, apexification, fractures, luxation, and evulsion of teeth (both primary and secondary). *Pediatric Dentistry Faculty.* ½ cr, 2nd sem.

SDM EN 819 Endodontics for Periodontists and Prosthodontists Focuses on the biological foundations of pulp and periapical disease and the diagnosis and treatment of periodontic and prosthodontic endodontic problems. For first-year students. *Dr. Schilder.* ½ cr, 4 wks.

SDM EN 911, 912 Clinical Endodontics Clinical participation in surgical and nonsurgical phases of endodontic therapy. Special attention to development of diagnostic skills and clinical endodontic facility and to the application of a therapeutic approach formed in consultation with other dental specialties. *Dr. Schilder.* 20 cr, 4th sem. and summer

SDM EN 981, 982 Research: Endodontics Approved research in endodontics. Designed as a partial requirement for the Certificate of Advanced Graduate Study in Endodontics. Four semesters and summer. *Selected preceptor.* 18 cr, 4th sem. and summer

SDM EN 991 Research: Endodontics Research in endodontics and related fields designed as a partial requirement for the MSD in endodontics. *Selected preceptor.* 9 cr, 2 sem.

Nutritional Sciences

SDM NS 777 Nutritional Science A nutritional approach to the understanding of the processes of cellular molecular biology believed to be related to the maintenance of health in humans. 1 sem.

SDM NS 781 Application of Nutritional Principles An overview of nutritional concepts, the nutrients, diseases where nutrition may have a primary or a secondary effect, clinical manifestations of such disorders with particular emphasis on the head and neck region, and the evaluation of diet in the management of patients. Designed for graduate dental students with a strong background in the biological sciences as related to nutritional principles. 2 sem.

SDM NS 785 Seminars: Nutritional Sciences Weekly research seminar. Presentations and discussions by students and staff. The critical evaluation of current scientific literature in nutrition and in the communication of related ideas. 2 sem.

SDM NS 788 Advances in Nutritional Sciences Prereq: SDM NS 781 and consent of instructor. Interdisciplinary, comprehensive approach to the science of nutrition. Lectures, laboratory, and clinical demonstrations. Two sections offered alternate years. May be repeated for credit. 1st or 2nd sem.

SDM NS 888 Advanced Tutorials in Nutritional Sciences These weekly sessions are offered only to candidates for the Doctor of Science degree. The purpose is to examine basic and advanced topics to assure that each individual candidate is knowledgeable in all areas of the profession. The tutorials also serve as a means of assuring that each candidate is adequately prepared to take the oral qualifying examination. Limited to five students per semester. 1 or 2 sem.

SDM NS 891 Research: Nutritional Sciences Arrangements are made with basic science and/or clinical laboratories with specialized equipment for carrying out research in nutrition. Variable cr. 2 sem.

Oral Biology

SDM OB 761 Oral Microbiology Distribution, ecology, and pathogenic potential of oral microbiota. Pathogenicity of components of bacterial plaque and their role in the development of oral diseases. Mechanisms of local and systematic resistance to pathogenic oral microbiota. *Dr. Oppenheim and faculty.* 1 cr, 1 sem.

SDM OB 763 Basic Processes in Oral Biology Examines biological processes at the cellular and molecular levels. Provides a basis to understand the events that regulate inflammation; wound healing; bone formation and resorption; salivary proteins and physiology; tooth development, eruption, and movement; and fluoride action. *Dr. Oppenheim and faculty.* 4 cr, 1st & 2nd sem.

SDM OB 767 Oral Immunology Defense mechanisms that the host utilizes against exogenous matter. Although the immune system is protective, there is also a destructive aspect that affects most tissue. The course examines these seemingly divergent mechanisms. *Dr. Oppenheim and faculty.* 1 cr, 1 sem.

SDM OB 840, 842 Advanced Seminar in Oral Biology Individual or small-group discussions concentrating on the scientific basis of the student's area of investigation. *Primary thesis advisor.* 2 cr, 1st, 2nd, 3rd, & 4th sem.

SDM OB 850, 852 Oral Biology Journal Club Monthly review and discussion of current pertinent literature in oral biology and related fields. *Oral Biology faculty.* 2 cr, 1st, 2nd, 3rd, & 4th sem.

SDM OB 991, 992, 993 Research: Oral Biology Investigation necessary to satisfy requirements for the MSD and DSc degrees. Consists of a research project conducted in any of the biomedical sciences with focus on oral structures and/or functions. For the DSc degree a thesis defense is required. *Dr. Oppenheim and selected preceptors.* 4 cr, 3–5 sem. and summer

Orthodontics

SDM OR 803 Orthodontics I Seminar of diagnosis and treatment planning of malocclusions. Case analysis of a wide range of problems with emphasis on treatment strategies used to resolve the malocclusions. *Dr. Eisen.* 1 cr, 1st & 2nd sem. 90 hrs.

SDM OR 805, 806 Orthodontic Seminar I Lectures and seminars concerning topics of current interest, with an emphasis on biomechanics. In addition, each resident is responsible for writing a critical review of a specific topic. *Dr. Thomas.* 8 cr, 2nd sem. 90 hrs.

SDM OR 820 Orthodontic Documentation Designed to provide the resident with the basic skills necessary to complete American Board of Orthodontics Case Presentation. Topics include intra- and extra-oral photography, impression techniques, model trimming, and case write-ups. *Dr. Dietz.* 2 cr, 1st & 3rd sem. 15 hrs.

SDM OR 822 Orthodontic Seminar II Orthognathic surgery lectures and seminars discussing the diagnosis, treatment planning, and treatment of craniofacial deformities. Documentation and midtreatment analysis of progress both demonstrate the ability to achieve the original treatment objectives and indicate possible changes in treatment strategy. *Dr. Dietz and faculty.* 1 cr, 4th sem. 45 hrs.

SDM OR 900, 902 Temporomandibular Joint Disorders and Myofacial Pain Develops facility in the diagnosis and treatment of these disorders. Instruction combines discussion, lecture, and clinical experience. *Dr. Gildea.* 4 cr, 4 sem. 60 hrs.

SDM OR 911, 912, 913, 914 Orthodontics Clinical Practice Supervised clinical practice in orthodontics in outpatient orthodontic clinic. *Dr. Gianelly and faculty.* 33 cr, 1st, 2nd, 3rd, & 4th sem.

SDM OR 920 Seminar: Literature Review A weekly seminar concentrating on critical evaluation of current and classical orthodontic literature. Provides residents with the foundation necessary to take the American Board of Orthodontics exam. *Dr. Gianelly.* 4 cr, 3rd, & 4th sem. 90 hrs.

SDM OR 982 Research: Orthodontics Guided investigation of the field of orthodontics or its preclinical sciences. Partially fulfills the requirements for the Certificate of Advanced Graduate Study. *Selected preceptor.* 4 cr, 2 sem.

SDM OR 991 Research: Orthodontics Guided investigation of the field of orthodontics or its related preclinical sciences. Partially satisfies requirements for the Master of Science in Dentistry. *Selected preceptor.* 4 cr, 1st and 2nd sem.

Oral and Maxillofacial Surgery

SDM OS 860 Principles of Surgery The entire spectrum of oral surgery, emphasizing proper diagnosis and treatment. Management of the medically compromised patient is included with proper respect for the application of basic science knowledge to patient care. *Dr. Booth and faculty.* 2 cr, year 1

SDM OS 861, 862 Head and Neck Anatomy Intensive course of lectures and dissection with demonstrations of surgical and clinical approaches and techniques. *Dr. Kronman.* 5 cr, year 1

SDM OS 863 Advanced Medicine Allows advanced education students to gain proficiency and in-depth knowledge of evaluation and treatment of patients with acute and chronic systemic illnesses. *Dr. Kaslowicz.* 3 cr, 1 year

SDM OS 864 Physical Diagnosis An extensive course in the principles and practice of physical diagnosis and laboratory diagnosis. Consists of lectures, seminars, and patient evaluation at the Boston Veterans Administration Hospital. *Dr. Kaslowicz.* 3 cr, year 1

SDM OS 865 Experimental Surgery Advanced surgical course emphasizing several surgical techniques under sterile operating-room conditions. Dogs and primates used as subjects. *Dr. Shepherd.* 3 cr, year 1

SDM OS 866 Orthognathic Surgery Designed to familiarize students with the problems associated with the diagnosis and treatment of dentofacial deformities. Stresses orthodontic principles and surgical techniques, and team evaluation. *Drs. Cottrell and Dietz.*

SDM OS 868 Oral Pathology Graduate oral pathology is designed to rekindle an interest and impart a depth of knowledge in selected areas of pathology related to the oral and paraoral structures including oral manifestations of systemic disease. *Dr. Cataldo.* 2 cr, year 3

SDM OS 869 Anesthesia All clinical aspects of anesthesia practiced under the direct supervision of anesthesia staff members. Includes nasal and oral endotracheal intubation, hypotensive anesthesia, and the management of anesthetic emergencies. *Dr. Gabriel and staff.* 3 cr, year 2

SDM OS 870 Neurosurgery A three-month rotation as a member of the resident staff at the University Hospital at Boston University Medical Center. The rotation consists of operating room assisting and managing pre- and postoperative neurosurgical patients as well as seminars in neurosurgery. *Dr. Spatz.* 3 cr, year 2

SDM OS 871 Critical Care A three-month rotation divided equally between the surgical

intensive care units at Boston Medical Center. The resident functions as an active member of the critical care residency team providing a full range of care to acutely ill patients. *Dr. Dennis.* 3 cr, year 2

SDM OS 872 Emergency Room A three-month rotation in the emergency room at Boston Medical Center. The resident works as an integral member of the emergency room team providing care to the full spectrum of medical and surgical emergencies seen in a busy inner-city emergency room. *Dr. Moyer.* 3 cr, year 2

SDM OS 881, 882, 883, 884 Clinical Oral Maxillofacial Surgery A four-year continuum consisting of clinical rotations on the oral and maxillofacial surgery services of Boston Medical Center, New England Medical Center, and the Boston Veterans Administration Hospital. Includes rotations in internal medicine, neurosurgery, emergency room, and surgical intensive care units. *Oral Surgery faculty.* 19 cr, 8 sem.

SDM OS 991, 992 Research: Oral and Maxillofacial Surgery Guided scientific investigation in oral and maxillofacial surgery and related fields. Partially completes the requirements for the Master of Science in Dentistry. *Selected preceptor.* 4 cr, 7th & 8th sem.

Oral Pathology

SDM PA 801 Oral Pathology Lectures and seminars on differential diagnosis of a variety of significant oral conditions. *Dr. Richardson.* 1½ cr, 1st sem.

SDM PA 810 Clinicopathologic Seminars in Oral and Dental Disease Designed to develop heightened appreciation of and expertise in confronting clinical diagnostic problems. Selected representative cases of mucosal, jawbone, and salivary gland problems, as well as endodontic problem solving, are discussed in a differential diagnosis format. Residents review cases and construct diagnoses before the seminar session. Introduces interpretation of microscopic features. Discusses iatrogenic disease and cases of diagnostic negligence with the intent of risk avoidance. *Dr. Richardson.* ½ cr, 2nd sem.

SDM PA 820 Oral Pathology Lectures and discussion on advanced topics in clinical oral pathology of specific concern to periodontology. Participatory course, with an introduction to microscopic interpretation of tissue changes. *Dr. Richardson.* 1 cr, 1 sem.

Pediatric Dentistry

SDM PD 760 Pediatric Dentistry Seminar A series of seminars that review diagnosis, treatment planning, and therapeutic and preventive procedures for the pediatric dental patient. Emphasizes examination, behavior management, radiology, restorative dentistry, preventive dentistry, pulp therapy, developmental anomalies, and traumatic injuries. *Dr. Hughes.* ½ cr, 2nd sem.

SDM PD 800 Preclinical Technique Lecture A series of lectures and demonstrations reviewing selected restorative procedures and orthodontic, diagnostic, and laboratory techniques utilized in pediatric dentistry. *Pediatric faculty.* ½ cr, 1st sem.

SDM PD 801 Preclinical Technique Laboratory A comprehensive laboratory introduction to pediatric dentistry and orthodontic techniques. Residents perform a series of exercises which emphasize the technical aspects of restorative dentistry, orthodontic appliance fabrication, and diagnostic tools used in orthodontics. *Pediatric faculty.* 2 cr, 1st sem.

SDM PD 802 Lecture: Pediatric Dentistry Lectures and seminars on the theory and practice of pediatric dentistry. Factors related to treatment planning and measures for control of oral disease in children, in greater detail. *Dr. Hughes.* 7 cr, 1st & 2nd sem.

SDM PD 804 Seminar: Pediatric Dentistry Comprehensive review of the literature pertinent to prevention and control of dental and oral deformities and diseases in the child. *Dr. Hughes.* 4 cr, 3rd & 4th sem.

SDM PD 806, 808 Lecture: Orthodontics Emphasis on growth and development, cephalometrics, diagnosis and treatment planning, and the evaluation of the normal and abnormal conditions in the primary, early mixed, and late mixed dentitions. *Dr. Kapala.* 9 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PD 812 Behavior Management Psychological development of the child is emphasized. Nonpharmacologic management techniques are presented taking into consideration the legal and social limitations placed upon pediatric dentists and the protection of the developing psyche of the child. *Dr. Hughes and faculty.* 2 cr, 1st & 2nd sem.

SDM PD 814 Lecture: Special Needs Patients All aspects of dental care for the patient with special needs, including access to the dental office, examination of the uncooperative patient, diagnosis, behavior management, and modifications of restorative techniques. Preventative dental programs for patients with special needs are stressed. *Dr. Perlman.* 2 cr, 1st & 2nd sem.

SDM PD 816, 818 Lecture: Pediatric Oral Pathology, Oral Medicine, and Periodontology Emphasis is placed on the diagnosis and treatment of oral lesions and periodontal disease and the recognition of manifestations of systemic illness seen in the child and adolescent. *Dr. D'Ambrosio.* 4 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PD 820 Preventive Dentistry Lecture and literature review of all aspects of preventive dentistry, including nutrition and dental health, oral hygiene, flouride treatment modalities, and implementation of preventive dental programs in pediatric dental practice. *Dr. Ruiz.* 3 cr, 1st & 2nd sem.

SDM PD 822 Advanced Pediatric Dental Seminar A lecture and seminar series covering advanced concepts of growth and development, behavior management, nitrous oxide/oxygen

Eleni Kousvelari

DDS, MSc, DSc
Class of '76

"For me, science is a way of life," reflects Eleni Kousvelari, who graduated in 1976 with a DDS in prosthodontics. A recipient of a Doctor of Science degree in oral biology from the School of Graduate Dentistry, as well as a former faculty member, Dr. Kousvelari is director of research programs in salivary glands and AIDS at the National Institute for Dental Research, Division of Extramural Research, National Institute of Health.

"I try to understand the step-by-step biological process," says Dr. Kousvelari, who left Greece after receiving her DDS, knowing she wanted to pursue research in dental school.

"When I visited Boston University, I liked the atmosphere and the friendliness of the School," she recalls. "I knew the environment was an excellent one for me to pursue what I wanted."

After Boston University, she went on to become an assistant professor in the Department of Oral Diagnosis at the University of Connecticut. Dr. Kousvelari then decided to pursue full-time research related to dental science and disease at a scientific institute, with the goal of understanding salivary proteins on the gene level and the possible effect of such regulation on salivary gland functions. She went on to work as a senior staff fellow in the Clinical Investigations Patient Care Branch at the NIDR.

"My interest is in examining the underlying processes of dental disease," she explains. "When you're in research you are always hoping that one day you may find something that will help improve people's health; that has been the inspiration for me."

analgesia and conscious sedation, hospital dentistry, and the special-needs patient. Extensive use of videotapes of actual treatment situations. Guest lecturers from various health care disciplines participate in this course. Oral, clinical, and written examinations are given four times as part of this yearlong seminar series. *Drs. Roseman and Cheney.* 3 cr, 3rd & 4th sem.

SDM PD 824 Advanced Pediatric Dental Case Presentations Second-year residents are required to make three comprehensive oral and written case presentations of patients they have treated while in this program. To complete this course successfully, residents must demonstrate a thorough understanding and mastery of taking a dental and medical history; communicate effectively with other health care professionals; develop a complete and accurate diagnosis; and formulate an appropriate treatment plan for patients. Case presentations are supported by slides, study models, and other appropriate visual aids. Residents must also demonstrate skills in accurate recordkeeping, clinical treatment of the patient, and the provision of follow-up recommendations. *Drs. Roseman and Cheney.* 3 cr, 3rd & 4th sem.

SDM PD 826 Pediatric Dentistry Literature Review This critical evaluation of current and classic dental literature helps prepare students for qualifying section examination of the American Board of Pediatric Dentistry. *Dr. Hughes.* 2 cr, 4th sem.

SDM PD 832 Growth and Development Designed to reinforce basic concepts of orofacial development and its significance in the multidisciplinary approach to the management of usual and special conditions, including cleft palate and other craniofacial disorders. *Dr. Kapala.* ½ cr, 2nd sem.

SDM PD 911, 912 Clinical and Hospital Pediatric Dentistry Supervised clinical and hospital experience in the total dental and oral care of the child and adolescent patient. Measures employed for caries control and maintenance of periodontal health, restoration of missing members of the dentition, and correction of oral and dentofacial deformities. *Dr. Hughes and staff.* 15 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PD 915, 916 Orthodontics Clinic for Pediatric Dentistry Residents Development of clinical expertise through practical application of principles developed in lecture and seminar. *Dr. Kapala.* 5 cr, 2nd, 3rd, & 4th sem.

SDM PD 918 Anesthesia Rotation This rotation introduces the resident to the basic principles of general anesthesia. Pre- and postoperative evaluation of the surgical patient is stressed. The resident participates in the administration of general anesthesia to dental and medical surgical cases. *Anesthesia staff.* 1 cr, 5 weeks, year 2.

SDM PD 919 Operating Room Rotation This rotation introduces residents to restorative and surgical management of dental patients *under anesthesia. Case selection,* pre- and postsurgical evaluation, and hospital protocol are reviewed. *Dr. Sheff and staff.* 1 cr, 5 weeks, year 2.

SDM PD 982 Research: Pediatric Dentistry Guidance for investigation that fulfills one of the requirements for the CAGS. Research topic chosen from the preclinical and clinical subjects associated with pediatric dentistry. *Selected preceptor.* 4 cr, 3rd, & 4th sem.

SDM PD 993 Research: Pediatric Dentistry Research project, thesis, and thesis defense toward fulfillment of requirements for MSD in Pediatric Dentistry. 4cr, 1st & 2nd sem.

Periodontology

SDM PE 761 Topics in Periodontology Basic concepts for specialists interacting with the discipline of periodontology. Course includes selected topics in periodontal biology and pathology, rationale of periodontal therapy, nonsurgical and surgical treatment, and posttherapeutic evaluation. *Dr. Dibart and faculty.* 1 cr, 2nd sem.

SDM PE 801, 802 Periodontology I, II Formation, clinical anatomy, microscopic structure, and physiology of the periodontium and the pathogenic processes affecting its integrity. Etiology, epidemiology, and diagnosis of periodontal disease and the biologic bases of periodontal therapeutic modalities. Emphasis in third and fourth semesters on healing processes after therapy. *Dr. Ruben.* 8 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PE 803 Periodontology III A review of the biology, epidemiology, diagnosis, and treatment of periodontal disease. Prepares third-year students for Specialty Board Examination. *Dr. Amar.* 1 cr, year 3.

SDM PE 807, 808 Seminars: Treatment Planning in Periodontics Weekly case presentations followed by discussion of various alternatives of periodontal therapy and integrated dental disciplines. *Dr. Van Dyke & faculty.* 4 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PE 809 Principles of Prosthetic Reconstruction Factors influencing the diagnosis, prognosis, and treatment planning for dentitions requiring prosthetic reconstruction. Emphasis on periodontal structures and their influential concepts of occlusion and their clinical application. *Staff.* 1 cr, 2nd sem.

SDM PE 811 Orthodontic Mechanotherapy for Periodontics and Prosthodontics Basic principles for tooth movement and their application to clinical situations. Treatment planning and orthodontic mechanics stressed. Provides a solid knowledge of adult tooth movement. *Drs. Arena and Blanco.* 2 cr, 2nd sem.

SDM PE 815 Periodontal Literature Review I Weekly seminar focusing on extensive reading and critical evaluation of classic and current periodontal literature. Provides the student with the background necessary to develop and defend rationales for therapy. For first-year students. *Drs. Van Dyke and Amar.* 4 cr, 1st & 2nd sem.

SDM PE 817, 818 Seminar: Grand Rounds Weekly case presentations by second-year periodontic and prosthodontic students, emphasizing comprehensive treatment planning. Students and faculty discuss ideal and alternative treatment plans. Stresses importance of interdisciplinary coordination of treatment. For first- and second-year students. *Dr. Van Dyke & faculty.* 2 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PE 819, 820 Seminar: Periodontal Surgery Weekly student presentations of surgical cases, concluding with discussion of the surgical diagnosis and the objectives and methods of surgery. *Dr. Van Dyke & faculty.* 4 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PE 823 Periodontal Therapy I An introduction to the rationale for and objectives of periodontal therapy. Weekly lectures cover data collection, treatment planning, and the role of initial therapy in periodontal treatment. For first-year students. *Dr. Dibart and faculty.* 4 cr, 1st & 2nd sem.

SDM PE 825, 826 Periodontal Therapy II Lecture series stressing the objectives, advantages, indications, rationales, and techniques of the many surgical procedures used in periodontics. For first-year students. *Dr. Blanco.* 2 cr, 3rd & 4th sem.

SDM PE 827 Applied Dental Pharmacology Discussion of the major drug classes and their relationship to management of the dental patient, including contraindications, precautions, adverse reactions, and drug interactions. For first-year students. *Dr. Cohen.* 1 cr, 2nd sem.

SDM PE 829 Periodontal Literature Review III A weekly seminar going over the most recent articles from the main periodontology journals. This is part of the student's preparation for the in-service examination and the American Board of Periodontology exam. For second-year students. *Dr. Van Dyke & faculty.* 4 cr, 3rd & 4th sem.

SDM PE 830 Oral Medicine A systemic approach to the oral manifestations of systemic disease as well as a discussion of common oral lesions stressing therapeutics. *Dr. Shapiro.* 1 cr, 1st sem.

SDM PE 833 Practice Management Addresses many of the nontechnical aspects of dental practice, including office location, design, financing, and staffing. Discusses professional advice, business management, recall practice, referral issues, insurance, retirement plans, and investment strategies. *Dr. Isenberg and guest lecturers.* 2 cr, 1st & 2nd sem.

SDM PE 834 Scientific Paper Writing Intended to give students an appreciation of the process of writing scientific papers and a better understanding of scientific criticism. This is achieved by didactic lectures and by practical experience in scientific writing. *Dr. Graves.* 1 cr, 1st sem.

SDM PE 901, 902 Periodontal Therapy III Weekly seminar on extensive reading in the literature of periodontology and related dental and basic services. Provides broad foundation

necessary for practice and teaching. For second-year students. *Dr. Van Dyke.* 4 cr, 5th & 6th sem.

SDM PE 911, 912, 913 Clinical Periodontology Clinical periodontal practice emphasizing the elements of case documentation, patient evaluation and examination, diagnosis, prognosis, and treatment planning. Complete periodontal therapy performed under staff guidance. *Dr. Van Dyke.* 45 cr, 1st, 2nd, 3rd, 4th, 5th, & 6th sem.

SDM PE 991, 992 Research: Periodontology Research in periodontology or its related preclinical sciences. Partially satisfies requirements for the Master of Science in Dentistry. *Dr. Oppenheim and faculty.* Year 3.

Dental Public Health

SDM PH 763 Bioethics and Law Introduces the fundamentals of biomedical ethics. Focuses on professional ethics as they affect the practicing dentist. *Ms. Frankl.* ½ cr, 1st sem.

SDM PH 741 Behavioral Sciences Focuses on developing a framework for delivering total health care. Examines the meaning and impact of effective communication skills, managing transitions, enhancing patient relations, and managing stress and pain. *Dr. Wiesen.* 1 cr, 1 sem.

SDM PH 764 Psychosocial Issues in Dentistry Introduces students to a series of important nonclinical issues for a practicing dentist, including domestic abuse, eating disorders, issues in aging, substance abuse, and practice management. Emphasizes both the relevance of these topics to dental public health and the importance of effective communication skills in managing these issues. *Staff.* 1 cr, 2nd sem.

SDM PH 800 Introduction to Biostatistics/ Epidemiology Designed to provide the student with skills in basic concepts of clinical research methods and statistical analysis. Acquaints the student with basic data types and summary statistics for the study of disease in human populations. For students who have not had prior experience with statistics and epidemiology. *Dr. Boffa.* 1 cr, 1 sem.

SDM PH 802 Current Topics in Information Technology Designed for students with no prior computing experience. Familiarizes the student with IBM/PC-compatible hardware, the DOS operating system, and file management, database, and spreadsheet applications. Focuses on use of Microsoft Windows, electronic mail, Medline, and the Internet. *Dr. Boffa and Ms. Rose.* 2 cr, 1st sem.

SDM PH 803 Biostatistics Introduces the concepts and techniques of biostatistics used in dental research and referred to in dental literature. Emphasizes the fundamentals of statistical logic and presents the basic principles of experimental design, statistical inference, and probability. Examples from current basic sciences research, survey research, and clinical trials augment the presentation of statistical theory. *Ms. Rose.* 2 cr, 1 sem.

SDM PH 804 Advanced Topics in Statistical Analysis Using Computers Prereq: SDM PH 803. In-depth coverage of concepts taught in Biostatistics I. Includes a more detailed discussion of estimation techniques, central limit theorem, analysis of variance, regression and correlation, and analysis of covariance. Multivariate techniques are covered in conjunction with SPSS (Statistical Package for Social Sciences) facilities at the Boston University Office of Information Technology. *Ms. Rose.* 2 cr, 2nd sem.

SDM PH 806 Multivariate Statistical Methods Explores interrelationships of experimental variables using multivariate statistical techniques such as multiple regression, logistic regression, factor analysis, and discriminant function analysis. Emphasizes the use of current statistical software as a tool for generating these analyses and discusses the interpretation of statistical output. *Dr. Boffa and Ms. Rose.* 1 cr, 2nd sem.

SDM PH 808 Health Care Management and Finance Topics include accounting principles, budgetary processes, accounting documentation, and cash flow analysis, with an emphasis on dental care delivery using computer simulation. *Dr. Boffa.* 2 cr, 2nd sem.

SDM PH 820 Dental Care Issues Disciplines of management, economics, sociology, law, political science, and behavioral science as they relate to health and health care issues. *Ms. Peck.* 1 sem.

SDM PH 830 Research Writing Identifies and defines the components and uses of a research protocol, the underlying research methodology and data, and the construction of a prudent work schedule essential to complete a research project. Includes the development of a protocol based on the student's thesis topic. *Dr. Douglass.* 2 cr, 1st sem.

SDM PH 831 Presentation Skills Develops and fine-tunes teaching and presentation abilities. Focuses on instructional design, presentation graphics, and presentation skills. Hands-on learning experience. *Dr. Zlotkowski and Mr. Mistretta.* 2 cr, 2nd sem.

SDM PH 840 Advanced Topics in Financial Planning Includes cost accounting and financial planning in the implementation and management of public health programs and dental care. Finance tools such as net present value and various measures of return on investment are developed by looking at the costs and benefits of public health policies. Discusses aspects of program management such as loans, financing, leasing, and investments. Emphasizes computer spreadsheet software use. *Dr. Jacobs.* 2 cr, 3rd sem.

SDM PH 910, 911 Public Health Field Experience Students attain public health, primary care, or public health policy and administration experience through placement at one of several extramural sites. Experience may be correlated with the student's research topic. *Selected preceptor.* 4 cr, 1st & 2nd sem.

SDM PH 991, 992 Research: Public Health Dentistry Investigation necessary to satisfy requirements for the MSD and DSc degrees.

May include preclinical or clinical aspects of public health dentistry. In most instances, an epidemiologic or biostatistical correlation is required. *Selected preceptor.* 4 sem. and summer

RESTORATIVE SCIENCES

Advanced Education in General Dentistry

SDM PE 764 Periodontology for the General Practitioner Provides an overview of various clinical entities that the general dentist encounters daily. Emphasizes recognition and diagnosis of periodontal disease along with classification of periodontal conditions in different states of health and disease. The course also gives an overview of treatment modalities, including surgical procedures for the general dentist. *Dr. Setayesh and faculty.* ½ cr, 1st sem.

SDM EN 820 Endodontics for the General Practitioner Lectures and seminars focusing on diagnosis and treatment. Provides an overview of various endodontic concepts, including the contemporary rationale and methodology of root canal therapy. Discusses the development of diagnostic skills and approaches to endodontic emergencies. *Dr. Hoyo and faculty.* ½ cr, 1st sem.

SDM PR 809 Prosthodontics Seminar and Literature Review An in-depth review of procedures and techniques in restorative dentistry, including an extensive review of a wide range of research articles discussing restorative procedures and innovations. *Dr. Cassis.* 1 cr, 1st sem.

SDM PR 810 Case Presentation and Treatment Plan Seminar A comprehensive seminar exploring diagnosis, treatment planning, and management of ongoing clinical cases. *Dr. Cassis.* 1 cr, 2nd sem.

SDM OR 760 Orthodontics in General Dentistry A review of orthodontics in general dentistry focusing on recognition and diagnosis of malocclusions, interceptive orthodontics, space maintenance, and realignment of space. *Dr. Kapala.* ½ cr, 2nd sem.

SDM PA 810 Clinicopathologic Seminars in Oral and Dental Disease Designed to develop heightened appreciation of and expertise in confronting clinical diagnostic problems. Selected representative cases of mucosal, jawbone, and salivary gland problems are discussed in a differential diagnosis format, as well as endodontic problem solving. Residents review cases and construct diagnoses prior to the seminar session. Introduces interpretation of microscopic features. Discusses iatrogenic disease and cases of diagnostic negligence with the intent of risk avoidance. *Dr. Richardson.* ½ cr, 2nd sem.

SDM PD 760 Pediatric Dentistry Seminar A series of seminars designed to review the diagnosis, treatment planning, therapeutic, and preventive procedures for the pediatric dental patient. Emphasizes examination, behavior managment, radiology, restorative dentistry, preventive dentistry, pulp therapy, developmental anomalies, and traumatic injuries. *Staff.* ½ cr, 2nd sem.

SDM PR 807 Case Presentation Seminar A series of seminars on diagnosis and treatment planning of prosthodontic reconstructions. Case presentations and patient management are analyzed to illustrate the pitfalls in therapy and their programmed avoidance. *Dr. Morgano.* 1 cr, 2nd sem.

SDM PR 823 Hospital Dentistry The entire spectrum of hospital dentistry emphasizing proper patient admission, care, and discharge. Infection control, operating room protocol, and laboratory services are included with proper respect for the physical evaluation and diagnosis of the medically compromised patient. *Dr. D'Ambrosio.* ½ cr, 2nd sem.

SDM PR 905 General Dentistry Clinic This yearlong clinical component consists of approximately 3,300 hours of comprehensive patient care. Residents are supervised and evaluated according to specific criteria: quality of the clinical work, ability to assess their own work, diagnostic skills, patient referrals, and ability to work with a range of dental specialists. In effect, the residents act as coordinators of the patients' total oral health care. *Dr. Cassis and faculty.* 15 cr, 1st & 2nd sem.

Advanced Operative Dentistry

SDM OP 802 Advanced Restorative Systems Lectures, seminars, and clinical instruction in the treatment of individual teeth using recently introduced methods and materials. Topics include: CAD-CAM inlays, processed resins, posterior direct resins, cast ceramic restorations, porcelain indirect veneers, direct resin veneers, glass ionomer materials, new post/core systems, and other promising techniques. *Dr. McManama.* 1 cr, 2nd sem.

SDM OP 803 Seminars: Operative Dentistry Literature review format seminars. Small group discussions to critically review current literature on topics in restorative dentistry. Students design and present lectures to the group. *Drs. McManama and Ashayeri.* 1 cr, 1st & 2nd sem.

SDM OP 805 Principles of Operative Dentistry and Preclinical Technique Reviews the methods of designing and implementing a preclinical technique course in conventional operative dentistry. Includes seminars, demonstrations, audio-visual techniques and direct teaching contact with freshman and sophomore predoctoral students. Special attention is given to cavity design, matrix systems, moisture and infection control, tooth morphology, occlusion, and esthetics. *Drs. McManama and Kelelier.* 2 cr, 1st sem.

SDM OP 807 Preclinical Technique Laboratory instruction in instrumentation, development of cavity preparation, and provisional restorations. Cavities fabricated and restorative materials placed with attention to outline form, retention and resistance form, line and point angles, reestablishment of tooth morphology, occlusion contact placement, and function. *Drs McManama, Kelelier, Zebouni, and Mr. Haddad.* 1 cr, 1st sem.

SDM OP 810 Esthetic Restorative Dentistry Introduces students to the most recent developments in esthetic restorative dentistry. Course is designed to prepare students for clinical patient care in this rapidly changing and exciting field. Topics include ceramic and resin veneers, posterior resins, complex composite resins, ceramic inlays/onlays, CAD-CAM restorations, and vital bleaching and techniques of shade modification. *Drs. Cataldo, McManama, Nathanson, and Smith.* 1 cr, 3rd sem.

SDM OP 811, 812 Treatment Planning in Restorative Dentistry Seminar course presents and discusses various complicated aspects of treatment planning. Cases presented and discussed relate to practical restorative dentistry. *Dr. McManama.* 2 cr, 1st, 2nd, 3rd, 4th sem.

SDM OP 911 Clinical Operative Dentistry I Clinical participation in routine operative dentistry procedures. Special attention is given to diagnosis, treatment planning, and the relationship of restorative dentistry to other disciplines. *Drs. Ashayeri, Cataldo, McManama, and Yazdani.* 6 cr, 2nd sem.

SDM OP 913 Clinical Operative Dentistry II Clinical participation in all phases of operative dentistry procedures with special emphasis on esthetics and on patients with multidisciplinary needs. *Drs. Ashayeri, Cataldo, McManama, and Yazdani.* 20 cr, 3rd &4th sem.

SDM OP 919 Student Teaching Graduate students have the opportunity to synthesize their knowledge and experience during limited, supervised teaching assignments. During these assignments, graduate students act as teaching assistants in the School's predoctoral program. *Dr. Morgano and preceptors.* 1/2 cr, 3rd & 4th sem.

Postgraduate Prosthodontics

SDM PR 761 Occlusion Principles of occlusion. The analysis and management of occlusal problems as related to periodontology, restorative dentistry, and tooth movement. *Dr. Smukler.* 2 cr, 1st sem.

SDM PR 801 Fixed Partial Dentures Comprehensive discussions and presentations of all aspects of fixed prosthodontic principles and therapy. Specific clinical techniques to successfully accomplish complex fixed restorations are emphasized. *Drs. Morgano and Zebouni.* 2 cr, 1st sem.

SDM PR 803 Complete Denture Prosthodontics Historical evaluation of the techniques, articulators, and philosophies related to complete denture therapy. Emphasis given to the indications for various modalities and the handling of problem patients. *Dr. Morgano.* 2 cr, 1st & 2nd sem.

SDM PR 806 Removable Partial Dentures Treatment planning, design, indications for clasp, semiprecision, and precision attachment; retained-tooth and tissue-borne restorations. Emphasis on preservation of remaining structures. *Dr. Morgano.* 2 cr, 1st & 2nd sem.

SDM PR 807, 808 Case Presentation Seminar Series of seminars on diagnosis and treatment planning of prosthodontic reconstructions. Case presentations and patient management are analyzed to illustrate the pitfalls in therapy and their programmed avoidance. *Dr. Morgano.* 2 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PR 814 Removable Prosthodontics—Overlay Dentures Special course stressing minimal dental units in a removable prosthesis. Objectives, techniques, and rationale of the overlay denture in terms of providing a functionally viable modality of therapy. *Dr. Mark.* 1 cr, 2nd sem.

SDM PR 815 Basic Prosthodontic Techniques Laboratory course in which students participate in preclinical prosthodontic techniques and concepts, as well as advanced laboratory techniques. *Dr. Strating and staff.* 2 cr, 1st sem.

SDM PR 816 Implantology Comprehensive course covering the history of implants, tissue biocompatibility and biomechanics. Encompasses implants, tissue biology, patient selection, diagnosis, treatment planning, and literature review. Includes presentation of oral surgery and prosthodontic considerations utilizing different implant systems. *Dr. Jacobson and guest lecturers.* 1 cr, 1st & 2nd sem.

SDM PR 818 Principles of Gnathology Integration of the biological and mechanical aspects of the trigeminal system. Emphasis on its effect on mechanical concepts of occlusion. Engineering principles of mandibular motion to explain articulator design and illustrate the function of the system. *Drs. Zebouni, Lo, Yamamoto.* 1 cr, 2nd sem.

SDM PR 821, 822 Maxillofacial Prosthetics A comprehensive didactic program focusing on all aspects of the rehabilitation of patients with congenital and acquired maxillofacial defects. *Dr. Jackson and guest lecturers.* 1 cr, 2nd, 3rd, & 4th sem.

SDM PR 823 Prosthodontic Topics Series of clinical and laboratory procedures demonstrating classic and alternative techniques. *Dr. Morgano and faculty.* 2 cr, 1st, 2nd, 3rd, & 4th sem.

SDM PR 830 Advanced Biomaterials Two-semester course intended primarily for masters and doctor of science degree candidates. Lectures and seminars focus on topics in dental biomaterials including research methodology and update on the chemical, physical, and biological properties and clinical applications of ceramics, metals, composite, and other dental materials. *Drs. Nathanson, Chou, Giordano, and Pober.* 4 cr, 1st & 2nd sem.

SDM PR 825, 826 Postdoctoral Biomaterials In-depth discussion of all dental materials related to the practice of restorative dentistry. Reviews the latest polymer and ceramic chemistry as well as the metallurgy of precious and nonprecious metals. *Dr. Nathanson.* 2 cr, 1st, 2nd, 3rd & 4th sem.

SDM PR 832 Temporomandibular Disorders and Orofacial Pain A comprehensive review of the anatomy, physiology, and pathology of the temporomandibular articulation and muscles of mastication. Pathophysiology of pain along with methods of diagnosis and treatment of orofacial pain. Special emphasis on the multidisciplinary management of patients with head and neck pain. *Dr. Morgano and faculty.* 1 cr, 3rd sem.

SDM PR 901 Prosthodontic Literature Review Current and classical prosthodontic literature as a basis for substantive discussion of concepts in therapy and research. *Dr. Morgano.* 2 cr, 3rd & 4th sem.

SDM PR 911, 912, 913 Clinical Prosthodontics Advanced clinical participation in all phases of prosthodontics with extramural rotations constituting the third year. *Dr. Morgano and faculty.* 30 cr, 1st, 2nd, 3rd, 4th, 5th, & 6th sem.

SDM PR 914 Full-Mouth Reconstruction Comprehensive program outlining procedures involved in complicated prosthodontic treatment. *Dr. Barahan.* 1 cr, 2nd sem.

SDM PR 918 Student Teaching Graduate students have the opportunity to synthesize their knowledge and experience during limited, supervised teaching assignments. During these assignments, graduate students act as teaching assistants in the School's predoctoral program. *Dr. Morgano and preceptors.* 2 cr, 5th & 6th sem.

SDM PR 982 Research: Prosthodontics Approved investigative effort in prosthodontics and related fields. Partially fulfills requirements for the Certificate of Advanced Graduate Study. *Selected preceptor.* 2 cr, 3rd & 4th sem.

SDM PR 991 Research: Prosthodontics Approved investigative effort to satisfy requirement for the MSD degree. Research may involve preclinical and clinical subjects related to prosthodontics. *Selected preceptor.* 2 cr, 3rd & 4th sem.

Stephen C. DuLong

Director of Predoctoral Fixed Prosthodontics
Associate Professor of Restorative Sciences

Working backwards and asking "What areas can we improve?" are two of Dr. Stephen C. DuLong's trademarks. "I approach teaching by identifying attributes that a graduate should possess, and then reviewing the curriculum to ascertain that the student will acquire those skills and knowledge," he states.

DuLong brings 20 years of practicing and teaching experience to his students. "Consolidating the specialties of general dentistry, operative dentistry, and prosthodontics into one department of restorative dentistry reflects an actual dental practice. A patient may initially need an onlay and then progress to a crown. A practitioner would not break up the treatment of an individual patient. Those disciplines are all part of the continuum of restorative dentistry," he says.

As a member of the first predoctoral class to graduate from the School in 1975, DuLong has noted that the program has changed and the systems of teaching have evolved. The benefits of the program's include a larger and more diverse faculty and the APEX (Applied Professional Experience) program, neither of which a smaller school could offer. "Right now, we are developing a mentorship program to provide more continuityin our one-on-one teaching. As faculty, we need to be role models," he concluded, "not distant figures in a lecture hall. As mentors, we will be the voices and faces of Boston University."

Dr. Maria Kukuruzinska, associate professor of periodontology and oral biology, discusses her research with Kelly Lennon, a DSc student in the graduate oral biology program.

BOSTON UNIVERSITY
GOLDMAN SCHOOL OF DENTAL MEDICINE

GRADUATE AND POSTDOCTORAL PROGRAMS
APPLICATION

(Please complete in typewritten form.)

Name _____
Last First Middle

☐ Male ☐ Female Date of birth _____ Social Security number _____

Birthplace _____ Citizenship _____

Current mailing address _____
Street City

_____
State Zip code

Home telephone ( ) _____ Telephone where you can be reached to set up an appointment ( ) _____

Permanent address _____
Street City

_____ ( )
State Zip code Telephone

Application for _____ ( )
Month/Year Fax

If you wish to identify your racial or ethnic status, you may do so below.

- ☐ American Indian/Native American
- ☐ Black/African American
- ☐ Hispanic
- ☐ Oriental/Asian American
- ☐ White/Caucasian

Indicate the specialty and degree(s) in which you are interested:

- ☐ Endodontics
  - ☐ CAGS
  - ☐ MSD
  - ☐ DScD
- ☐ Advanced Operative Dentistry
  - ☐ CAGS
  - ☐ MSD
  - ☐ DScD
- ☐ Orthodontics
  - ☐ CAGS
  - ☐ MSD
  - ☐ DScD
- ☐ Nutritional Sciences
  - ☐ MS
  - ☐ DSc
- ☐ Periodontology
  - ☐ CAGS
  - ☐ MSD
  - ☐ DScD
- ☐ Prosthodontics
  - ☐ CAGS
  - ☐ MSD
  - ☐ DScD
- ☐ Pediatric Dentistry
  - ☐ CAGS
  - ☐ MSD
  - ☐ DScD
- ☐ Oral Biology
  - ☐ MSD
  - ☐ DSc
  - ☐ PhD
- ☐ Oral and Maxillofacial Surgery
  - ☐ CAGS
  - ☐ MSD
- ☐ Advanced Education in General Dentistry
  - ☐ CAGS
- ☐ Pediatric Dentistry and Dental Public Health
  - ☐ CAGS and MSD
- ☐ Periodontology and Dental Public Health
  - ☐ CAGS and MSD
- ☐ Dental Public Health
  - ☐ CAGS and MSD
  - ☐ DScD
- ☐ Dental Public Health
  - ☐ MS

References

Individuals asked to send letters of reference (the letters sent should be signed by the individuals listed).

Dental school dean _____

Department chairman _____

Faculty member (associate professor or higher) _____

Education

School	From	To	Degree

Professional Employment

Location	Type of Practice	Full-Time/ Part-Time	Name of Dentist

Professional Publications or Presentations **Organization or Journal**

_____

_____

_____

_____

Professional Memberships

Association	Responsibilities/Activities	Dates

Statement of Qualifications and Objectives

Please attach a handwritten statement of 200 words or less on an 8½" x 11" sheet of paper, describing your motivation for specialized training. Relate your interest to your formal education, current employment, and career aspirations. Doctoral applicants should include a description of research interests and a curriculum vitae. Photograph is optional.

Signature _____

Date _____

Boston University Goldman School of Dental Medicine
Recommendation

To the Applicant: This recommendation will become part of your Admissions file. It will not be disclosed to any unauthorized individual without your consent. If you matriculate at Boston University, you will be accorded access to its contents unless you voluntarily waive your right of access. Please check one of the boxes and sign the statement below.

I have read the information above and I hereby ☐ waive ☐ do not waive my right of access to this document should I matriculate at Boston University.

Degree(s) for which you are applying: _____

Applicant signature _____ Date _____

To the Assessor:

Name of Applicant _____
Last First Middle

The person whose name appears above has applied for admission to the Goldman School of Dental Medicine at Boston University. The Admissions Committee attaches great weight to an applicant's qualifications that are not adequately reflected in past academic records. Therefore, you can assist us in our evaluation of this applicant by responding frankly to the following questions.

Note: Under the 1974 Family Education Rights and Privacy Act, the applicant named above will have access to this recommendation unless he or she has waived the right.

How long have you known the applicant? _____

Under what circumstances have you known the applicant?

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What are the applicant's main strengths?

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What are the applicant's main liabilities?

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Please rate the applicant in comparison with others of his/her age and position whom you have known.

	Outstanding—Upper 5% of class	Excellent—Upper quarter but not upper 5%	Good—Upper half but not upper quarter	Below average—in lower half of class	No basis for judgment
Intellectual Ability					
Analytical Skills					
Scientific Aptitude					
Clinical Ability					
Initiative, Leadership					
Oral Communication					
Written Communication					

Please assess the applicant's capacity for graduate study and his/her potential for a responsible and successful career.

Summary Evaluation

- ☐ I do not recommend this applicant for admission.
- ☐ I feel that the applicant's qualifications are marginal, but if admitted he/she would greatly benefit from study in the program.
- ☐ I recommend this applicant for admission and feel his/her performance should be comparable to that of most graduate students.
- ☐ I strongly recommend this applicant for admission and feel that he/she has the capability to perform at a superior level.

Thank you for your cooperation and effort in providing this information.

Signature _____ Date _____

Name (please print clearly or type) _____ Position _____

Organization _____ Address _____

Please put this completed form in the envelope provided, sign your name *across the envelope seal,* and return it to the *applicant.*

Application Materials

Boston University
Goldman School of Dental Medicine
Office of Admissions and Student Affairs
100 East Newton Street, Room 305
Boston, Massachusetts 02118

Did you remember to include:

- ☐ Application
- ☐ Application fee
- ☐ Official transcripts from all colleges and/or universities attended
- ☐ Official letters of reference
- ☐ TOEFL score if applicable

Boston University

Goldman School of Dental Medicine
Office of Admissions and Student Affairs
100 East Newton Street, Room 305
Boston, Massachusetts 02118

applicant's name

applicant's address

Signature

☐ To the EVALUATOR: Please enclose your letter of evaluation in this envelope, seal the envelope, sign your name on the line provided, and return it to the applicant. The Goldman School of Dental Medicine will accept from the applicant only those letters of evaluation which are enclosed in sealed, signed envelopes, even in the case where the applicant has retained the right of access.

Boston University Goldman School of Dental Medicine
Recommendation

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Analytical Skills					
Scientific Aptitude					
Clinical Ability					
Initiative, Leadership					
Oral Communication					
Written Communication					

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Thank you for your cooperation and effort in providing this information.

Signature _____ Date _____

Name (please print clearly or type) _____ Position _____

Organization _____ Address _____

Please put this completed form in the envelope provided, sign your name *across the envelope seal,* and return it to the *applicant.*

Boston University Goldman School of Dental Medicine
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What are the applicant's main liabilities?

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Thank you for your cooperation and effort in providing this information.

Signature _____ Date _____

Name (please print clearly or type) _____ Position _____

Organization _____ Address _____

Please put this completed form in the envelope provided, sign your name *across the envelope seal,* and return it to the *applicant.*

The Educational Environment

CLINICAL ADVANTAGE

The Goldman School of Dental Medicine has a special commitment to its distinct mission of patient care. Our dedicated faculty clinicians work closely as mentors with students, both on a one-to-one basis and within Comprehensive Care Teams.

In the last three years, the School's clinical facilities have undergone major remodeling and updating. Clinical operatories, student laboratories, classrooms, and patient reception areas have been refurbished with new equipment, furniture, lighting, and delivery systems.

In 1991, the School opened two new dental health centers to serve members of the University's Employee Dental Health Plan, as well as community residents. One center is located on the School's seventh floor; the other, at an entirely new facility near the University's Charles River Campus.

Students are as likely to participate in the care of a professor of political science as that of a construction worker, a child care provider, a homemaker, or a retired senior citizen. Our patients are a diverse group whose very diversity ensures that our students will experience a full range of cases.

Boston University's Goldman School of Dental Medicine has the most advanced information technology system available, which enables it to schedule patients for the students and to monitor the progress of the treatment, allowing students to dedicate more time to enhancing the learning process.

RESEARCH ADVANTAGE

Over the past three decades, the Goldman School has established a position of international prominence in basic and applied research. Our faculty have excelled in the investigation of salivary proteins, developmental physiology, cancer etiology, learning behavior, dental materials, and many other topics related to dentistry. Any new knowledge, techniques, and equipment applications resulting from this research become part of the educational curriculum, assuring that students' classroom and clinical experiences are fully contemporary.

Using conventional liquid chromatography and high performance liquid chromatography, Dr. Frank Oppenheim, chairman of the Department of Periodontology and Oral Biology, conducts research on the isolation and characterization of salivary proteins. "Dental research is the use of scientific experimentation and observation to acquire new knowledge in the field of dental medicine. It is the exciting process of discovering facts and properties no one ever knew before. Through dental research, new treatments for oral diseases are found and new clinical techniques and materials are developed. Research is an important mission in dental education."

There are ongoing research projects in every department—endodontics, nutritional sciences, oral biology, biomaterials, dental public health, prosthodontics, operative dentistry, oral and maxillofacial surgery, orthodontics, pediatric dentistry, and periodontology. Interested DMD stu-

Dana Graves

DDS, Dr. Med Sc.
Professor of
Periodontology and Oral Biology

When you get beyond the bottles, test tubes, and multicolored liquids that greet you when you enter the laboratory of Dana Graves, you meet a man with an intrinsic sense of curiosity who enjoys research and the excitement of scientific discovery.

Dr. Graves, the recipient of a National Institutes of Health Research Career Development Award, and several other NIH grants, directs his own laboratory at the Goldman School.

"I suppose I had the inclination to pursue basic research, but I may not have taken this path without the enthusiastic encouragement of a thesis advisor," he recalls. Dr. Graves's particular area of expertise is the study of protein hormones that regulate cell behavior.

In addition to enjoying the challenge of carrying out new experiments, Dr. Graves welcomes the participation of students in his laboratory studies. Several students have had the opportunity to work with Dr. Graves and incorporate some of what they have learned about clinical care with their discoveries at the laboratory bench. Most recently, a graduate student has demonstrated that most of the inflammation of active experimental peridontal disease can be inhibited by antagonists to two cytokines, IL-1 and TNF.

Whether designing a new experiment, analyzing results, planning for the future, or supervising the many predoctoral, graduate, and postdoctoral students in his laboratory, doing first-class research is always the primary goal for Dr. Graves. "We have a fine group," he says proudly. "I hope that we can continue to build it."

dents have numerous opportunities to participate in research studies for academic credit. Students pursuing the Master or Doctor of Science in Dentistry, the Master or Doctor of Science in Nutritional Sciences, or the graduate degree in dental public health devote a portion of their studies to an original investigation. Projects, often oriented toward a problem with clinical significance, share the goal of contributing to dental or biological knowledge.

The School has recently launched its most ambitious research program ever: the Division of Oral Biology now occupies one floor of the Center for Advanced Biomedical Research on Albany Street. The 12,000 square feet allow the oral biology labs to expand to meet their growing space needs. Further, sharing the building with laboratories from the School of Medicine promotes greater collaboration and sharing of resources.

Recently acquired equipment that has facilitated clinical research, as well as patient services, includes two computer imaging machines, the CEREC system for designing and manufacturing ceramic restorations, digital radiography (which uses an x-ray machine that decreases patients' exposure to radiation by 90%), and an advanced electron microscope.

A Sampling of Current Research Grants

- Bone-Derived Cells Produce a Chemotactic Factor
- Autocrine Stimulation of Normal Bone Cells
- N-Glycosylation and Controls of ALG7 Expression
- Microbicidal Salivary Proteins in Dental Integuments
- Lysyl Oxidose Control in Drug-Induced Gingival Fibrosis
- Postdoctoral Training Grant in Oral Surgery
- Expression of the Salivary ΔLG7 Gene
- Anionic Salivary Proteins in Dental Instruments
- Secretory Salivary Protein-Specific Protein Kinases

COMMUNITY OUTREACH

Beyond providing a full range of dental services to patients from the Greater Boston area, the Goldman School of Dental Medicine has enjoyed an interactive relationship with the Boston community, reaching out with special programming for community

Predoctoral and postdoctoral students discuss their research.

groups, elementary schools, college students, the elderly and other underserved populations.

For example, in conjunction with the Home Medical Service of University Hospital, dental faculty and DMD students annually visit the homes of some 1,000 homebound senior citizens in Boston's neighborhoods. This program has served as a model in dental education for addressing the dental needs of geriatric patients. The Department of Pediatric Dentistry provides free services to children of migrant farmers and fishermen, homeless children, and developmentally disabled youngsters.

The School has recently established a national program that provides dental care to athletes participating in Special Olympics events. Special Athletes, Special Smiles brings dental screenings and education to thousands of people with developmental disabilities each year. Students have the opportunity to volunteer to help conduct the screenings.

Each year the School carries on the tradition of servicing the community by offering free dental screenings, bringing in school groups for educational programs, and working with local organizations, such as Boston's Museum of Science, to develop new and creative ways of bringing important information on oral health to children and adults. Every predoctoral, postdoctoral, or graduate student at the Goldman School of Dental Medicine has ample opportunity to work with the Boston community and make a significant contribution to its dental health.

Chelsea Partnership

The Goldman School has been involved with Boston University's management of the Chelsea Public School System since the inception of the partnership in 1991. A dental hygienist provides screening, education, and referral services to approximately 4,500 children from preschool through high school grades each year. The Goldman School has developed a strong and active network of community dentists who provide necessary care for those students referred for follow-up treatment. This program has been integrated with other health programs in the Chelsea school system.

CONTINUING EDUCATION

The Goldman School of Dental Medicine sponsors a large number of symposia, lectures, seminars, and clinical participation courses for the benefit of the dental community, alumni, faculty, and students. Programs address various topics and vary in length from one day to two weeks.

Predoctoral and postdoctoral students can register for continuing education courses with the permission of their program director. Last year the School offered more than 60 courses, including such topics as implantology, restorative techniques, endodontic therapy, radiology, and infection control; all taught by Goldman School faculty and/or prominent lecturers from the dental community. There are over 1,400 participants each year, including general dentists, specialists, and dental auxiliaries.

Sascha Schubert, a DMD graduate, at Commencement 1996.

CAREER RESOURCE CENTER

In response to a growing demand for a centralized source of career information, the Goldman School of Dental Medicine established the Career Resource Center in 1988. The center provides dental students with a range of support services designed to help plan their futures as professionals. In addition to workshops in résumé writing and interviewing, the center has a library containing career-related materials and assists and counsels students in career decision making.

The center also offers the Dental Placement Program, a cooperative venture with the Massachusetts Dental Society providing a computerized list of practice opportunities for students, alumni, and dental professionals nationwide. Now in its seventh year of operation, the placement program has generated over 800 opportunities and has provided career information to over 1,000 young professionals seeking dental jobs. The program provides a regularly updated source of information on available associateships, salaried positions, practices for sale, and dental hygiene openings.

STUDENT ACTIVITIES

In addition to academic opportunities, Boston University and the Goldman School offer many activities to meet students' interests.

The annual Clinic Day at the Goldman School brings in community members for a program of dental education and oral health screenings, and students plan a special presentation for third-graders from a local elementary school. Students also travel to local elementary schools in smaller groups during the year, giving interactive demonstrations of oral health care. The Yankee Dental Congress, the fourth largest dental conference in the United States, meets annually in Boston, and Goldman School students are lively participants.

Whether running for student government, planning a children's exhibit for the Museum of Science, hosting a formal dinner dance, playing in a "hoopathon" to raise money for a worthy cause, joining a 50-mile bike ride to raise money for juvenile leukemia, or sponsoring an international dinner, Boston University Goldman School students have traditionally brought a spirit of creativity and enthusiasm to their education, and contributing to the vitality and culture of Boston University and the Goldman School in particular.

Resources and Facilities

The Goldman School of Dental Medicine

The original building of the School, located at 100 East Newton Street in the Boston University Medical Center, houses the predoctoral, general dentistry, and specialty care centers. The School also operates a dental health center at 930 Commonwealth Avenue on the Charles River campus.

Center for Advanced Biomedical Research In addition to conducting research at 100 East Newton Street, faculty and students also use research facilities shared with the School of Medicine. The Center for Advanced Biomedical Research, opened in 1993, is a state-of-the-art facility. The School's Departments of Periodontology and Oral Biology and Pediatric Dentistry share the nine-story building, which houses the laboratories, offices, and laboratory animal facilities of the School of Medicine.

Center for Implantology Established in 1992, the center operates within the School primarily as an ambulatory care facility. It also serves as a teaching module where students are able to conduct research on implants through sponsored studies. Dental implants incorporate surgery and restorative dentistry to ideally replace teeth in patients who may not benefit from traditional dental care.

Educational Resource Center Located on the seventh floor of the School, this computer center provides students and faculty with easy access to electronic mail and web searching. In addition to communication support, the center offers the latest in software applications for word processing, creating spreadsheets, designing case presentations, and analyzing research data. Students can prepare for National Board exams using computerized self-study modules that allow them to monitor and evaluate their learning. The center also supports faculty in the design and development of innovative instructional materials.

Clinical Research Center This state-of-the-art facility, opened in 1996, is dedicated to all aspects of clinical research and trials including: biomaterials research, radiology, implantology, periodontal research, and product trials.

The Harold C. and Evalina M. Booth Ambulatory Surgery Unit was established by the Goldman School and University Hospital in October 1979 to provide surgical and dental care on a one-day admission basis.

Boston University Medical Center

The Boston University Medical Center, located in the South End of Boston, forms a semiautonomous but integral part of the University. It consolidates the resources and activities of the Goldman School of Dental Medicine, the School of Medicine, Boston Medical Center Hospitals, and units such as the Humphrey Cancer Research Center and the Cardiovascular Institute. More than 20 New England health institutions are affiliated with the center. Boston University Medical Center was established in the belief that, by combining resources and activities, the basic objectives of its constituent institutions—patient care, teaching, and research—could be met more effectively.

The School of Medicine offers a four-year program leading to the Doctor of Medicine (MD) degree. In cooperation with the College of Arts and Sciences, the School offers a seven-year liberal arts/medical education program and an eight-year Modular Medical Integrated Curriculum (MMEDIC) program, both of which lead to the BA and MD degrees.

MA and PhD programs in medical sciences are available through the Division of Graduate Medical and Dental Sciences. A combined MD/PhD program is also available. During the first year and a half of their education, predoctoral students at the Goldman School take basic science course offerings at the School of Medicine.

The School of Public Health, part of the School of Medicine, offers a program leading to the Master of Public Health (MPH), with concentrations in Health Law; Health Services and Environmental Health; Health Behavior, Health Promotion, and Disease Prevention; and Epidemiology and Biostatistics. Two combined programs are also available: the MD/MPH and the MA in economic policy and MPH.

Boston Medical Center is a private, nonprofit, full-service teaching hospital affiliated with Boston University School of Medicine and the Goldman School of Dental Medicine. A new entity formed by the merger of Boston City Hospital, Boston Specialty and Rehabilitation Hospital, and Boston University Medical Center Hospital, the center is committed to providing high-quality health care to all, regardless of ability to pay. All full-time physicians and dentists with admitting privileges are on the faculty of either the Goldman School or the School of Medicine. Boston Medical Center is a partner in the Boston HealthNet, which comprises 11 neighborhood health care providers and the Boston University School of Medicine. In addition to community-based care, Boston Medical Center offers specialized care for complex health problems and is a leading

research institution. It serves as an integral teaching facility for the School's predoctoral and postdoctoral programs. The hospital supports a general practice residency program in dentistry, an oral and maxillofacial surgery training prgram, and the School's pediatric dental clinic.

Affiliated Institutions

Boston Medical Center, adjacent to the Boston University medical center, provides inpatient and outpatient care to the poor and indigent as well as to the community at large. Predoctoral students provide dental care to patients in a hospital setting as part of their externship program.

The Boston and Bedford Veterans Administration Medical Centers provide a full range of inpatient and outpatient treatment for U.S. veterans. A vital partner of the School for many years, the VA serves as a primary extramural training site for predoctoral, advanced standing, and postdoctoral students. Predoctoral and advanced standing students gain comprehensive experience in restorative dentistry by providing dental care to VA patients who have a wide range of dental health conditions; residents of the oral and maxillofacial surgery program and residents of the prosthodontic program gain extensive oral and maxillofacial and maxillofacial prosthetic experience in their rotations.

Brookside Community Health Center is a nonprofit center located in an inner-city neighborhood in Jamaica Plain. The dental department integrates its activity with medical, mental health care, and social services. Externship students provide a full range of dental services to the community.

Codman Square Health Center is a nonprofit center licensed under the Boston Medical Center servicing the inner-city Boston neighborhoods of Dorchester and Mattapan. As an externship site for Goldman School students, it serves as an important resource for the dental, medical, social, and mental health of the Codman Square community.

Dimock Community Health Center, an extramural training site for the School's students, provides a wide range of health and social services to Boston's urban neighborhoods. The center's dental assistant training program, part of the career development program, brings Dimock students to the school's clinical care centers for training and internships. This cooperative approach enhances both the delivery of health care to patients and the education of dental students and auxilliaries.

Dorchester House Multi-Service Center is an extramural training site located in an inner-city neighborhood in Dorchester. Dental externship students have the opportunity to hone their diagnostic technical and professional skills while also applying themselves in the area of practice management in a largely underserved community.

East Boston Neighborhood Health Center is an outpatient clinic that provides comprehensive primary health care for the culturally diverse community it serves. The School operates a recently established pediatric dental clinic in conjunction with the center's Department of Pediatrics. At the center's dental clinic, pediatric dentistry residents under the direction of Goldman School faculty provide comprehensive and preventive dental care to the children of East Boston.

Franciscan Children's Hospital and Rehabilitation Center is a nonprofit, nonsectarian general pediatric hospital located at 30 Warren Street in Brighton, licensed for pediatrics and rehabilitation. The hospital treats patients with acute pediatric infirmities, runs total rehabilitation programs for children with orthopedic conditions or disorders of the nervous system, and treats children with such handicaps as speech impairment or hearing loss. The dental department provides comprehensive care, stressing preventive dentistry. All postdoctoral students in pediatric dentistry provide dental care under the guidance of hospital medical staff, both in outpatient departments and the operating room.

Geiger-Gibson Health Center in Dorchester enjoys a significant place in history as the nation's first community health center. The delivery of comprehensive community-based health services and programs that are responsive to the needs of individuals in the community continues to be the goal of the center. With a large pediatric base, externship students have the opportunity to experience general dentistry at all levels in a multicultural setting.

Jewish Memorial Hospital and Rehabilitation Center, a nonprofit institution, was founded in 1929 and established its affiliation with Boston University Medical Center in 1971. The hospital's mission is to provide acute inpatient and outpatient rehabilitation, acute medical services, and a variety of specialty medical programs for adults. A progressive teaching and research environment, the hospital became an extramural site for the Geriatric Dentistry Fellows and the Advanced Standing Program students in 1996. Under the guidance of staff dentists, the fellows and students provide both inpatient dental care for the population of the hospital and outpatient services for the community at large.

Barbara McInnis House is a shelter for women in Jamaica Plain operated by the Boston Health Care for the Homeless Program. Fourth-year Goldman School students may choose this location as an elective in Community Service.

Roxbury Comprehensive Health Center, located on Warren Street in Roxbury, is the largest provider of comprehensive health care and outpatient psychological care in Greater Boston's minority communities. Pre- and postdoctoral students deliver dental care at the center in the School's APEX and extramural programs.

South Boston Neighborhood Health Center has enjoyed a long history in the South Boston community since its inception in 1927 as a health unit for the city of Boston. Incorporated as a health center in 1972, it provides a full range of dental services as well as treating a large pediatric population that receives comprehensive and preventive care from dental interns under the direction of Goldman School faculty.

Uphams Corner Health Center services the communities of Roxbury and Dorchester with the commitment of providing high-quality, culturally sensitive, community-based health services. In a diverse multicultural setting, externship students have the opportunity to provide a wide range of dental services to the community.

Whittier Street Neighborhood Health Center is a nonprofit health center in Roxbury offering a wide range of integrated services for medical, dental, mental health, and social services. An emphasis is placed on the provision of personalized health services for acute and chronic illness, prevention of illness, and health maintenance. Externship students provide a wide range of general dentistry to a diverse community of all ages.

Libraries

Students in the Goldman School use the library in the instructional building of the Medical Center. This library houses more than 114,000 books, periodicals, and audiovisual materials. All the important indexing publications are available, and new monographs and journals are constantly added to the files. Microfilms, microcards, and photocopying equipment are available. An extensive interlibrary loan service is maintained, and a well-trained staff is on hand to assist anyone using the library facilities.

Students also have access to the University's major research library, the Mugar Memorial Library, located on the Charles River Campus. Mugar houses the main book collection.

Hubert H. Humphrey Cancer Research Center

The Humphrey Cancer Research Center was chartered by the president and the Board of Trustees of the University in 1974 to focus and organize the diverse and scattered cancer-related activities at the Medical Center and the Charles River Campus. The director, Dr. Herbert Wotiz, professor of biochemistry, has organized the center around three principal areas of interest: immunology, toxicology, and regulation of cell growth.

Services for International Students

The International Students and Scholars Office (ISSO) provides a variety of services to the more than 3,000 international students and 400 international faculty members and scholars at the University representing approximately 120 countries. The Office also informs students and staff about regulations concerning U.S. immigration, employment, and taxes. Its basic mission is to act as a resource for the entire international population at Boston University.

Center for English Language and Orientation Programs (CELOP) The center offers intensive, noncredit English as a Second Language courses for internationals who wish to improve their English proficiency for business, scientific, academic, or personal reasons. Twelve-week courses are offered in both September and January.

Financial Information

EXPENSES

Tuition and Fees

The following tuition and fees will be charged for academic year 1997/98. The costs for instruments and books are estimated.

Instruments and Book Costs

Students in the DMD program are required to purchase two instrument kits from the University during the program. Used instruments or instruments purchased outside the University are not acceptable. The total cost of these instruments is $7,988. The first kit, costing $4,328 and billed $2,164 each semester, is issued at the beginning of the first year and the second kit, costing $3,660 and billed $1,830 each semester, is issued at the beginning of the second year. These kits contain carefully selected items that are used most frequently during the course of study and that continue to be of value to students after they have completed the program.

Doctor of Dental Medicine Program

Tuition (1997/98)	$30,710	
Fees (preclinical and clinical)	$760	(first semester, first year)
	$890	(first semester, second year)
	$985	(first semester, third year)
	$950	(first semester, fourth year)
Instruments	$4,328	(first year)
	$3,660	(second year)
Graduate Program Fee	$105	(fall semester)

Postdoctoral Programs

Tuition (1997/98)	$29,700	
Instruments*	$6,704	(Endodontics)
	$3,098	(Operative Dentistry)
	$4,346	(Periodontology)
	$9,770	(Prosthodontics)
Research Fee	$3,800	

Graduate Programs

MS and DSc programs

Tuition (1997/98)	$21,970

*estimated.

Medical Insurance

Students are required to participate in a health insurance program. Students may elect to participate in the Boston University Medical Center, U.S. Healthcare Quality Point-of-Service Program or HMO health insurance program. Rates for 1997/98 are:

	QPOS	HMO
Individual:	$1,430.40	$1,286.40
Family:	$3,753.60	$3,378.00

These insurance rates are prorated according to the commencement of individual programs.

Board Examination Fees

National Board Dental Examination Fees
Fees are payable to the American Dental Association, Commission on Dental Examination, 211 East Chicago Avenue, Chicago, IL 60611.

Fees for 1997 were:

***Part I,** administered to second-year students in July: $115

***Part II,** administered to fourth-year students in December: $150

Retake of the Exam: $75 application fee; $10 for each subject retaken

***Northeast Regional Board of Dental Examiners** Fees are payable to the Northeast Regional Board of Dental Examiners, 4645 Burroughs Avenue, NE, Washington, D.C. 20019.

Fourth-year students take this examination in May: $875

FINANCIAL ASSISTANCE

Several representative sources of financial assistance available to dental students entering Boston University are listed below. A booklet, *Financial Assistance—Goldman School of Dental Medicine*, is available from the Boston University Medical Center, Office of Student Financial Management, 80 East Concord Street, Boston, MA 02118.

Funding of financial aid varies from year to year, but the School's Office of Student Financial Management attempts to keep every accepted student well informed about financial aid policies and procedures as well as sources of funding for dental education.

DMD Program

APEX Predoctoral students participate in the APEX Program, which enables them to help defray educational expenses through income earned in dental offices during the academic year.

Merit Scholarship A number of partial-tuition scholarships are available to entering first-year students. All applicants with an overall GPA of at least 3.4 are considered. The scholarship is available for all four years of the DMD program. Recipients must maintain a B average for continuation of the award.

Federal Direct William D. Ford Loan A graduate student may borrow up to $18,500 annually ($138,500 aggregate) through the Ford Federal Direct Loan Program. The interest on the first $8,500 will usually be subsidized while the student is in school and during other periods of deferment. The student is responsible for the interest on the unsubsidized portion, but payment may be deferred while the borrower is in school.

New borrowers pay a variable interest rate of T-Bill plus 3.1 percent capped at 8.25 percent for loans disbursed on or after July 1, 1994, and made for periods of enrollment that begin on or after that date. A loan origination fee of 4 percent will be deducted from all Direct Loans.

Spencer N. Frankl Student Revolving Loan Loans from this fund carry a simple interest rate of 2 percent while a student is in school and for one year after graduation. The interest rate during repayment is 9 percent and repayment extends to 10 years, with minimum payments of $50 per month. The fund is relatively new and resources are limited. Loans are based on need.

Health Professions Student (HPSL) Loan This loan comes from a revolving fund produced by appropriations from the federal government and matched by the Goldman School. Legislation dictates that a Health Professions Loan may be awarded only to a student demonstrating exceptional financial need; family resources toward the cost of education cannot exceed $6,500. The HPSL begins to accrue five-percent interest one year after the borrower's graduation and are payable for up to 10 years in monthly installments. There is a one-year grace period immediately following graduation, and it is possible for the borrower to secure deferment for time spent in advanced professional training, Peace Corps, VISTA, the armed forces, or the U.S. Public Health Service. No interest accrues during periods of grace or deferment.

Loans for Disadvantaged Students (LDS) This loan fund is made available by federal funding. Recipients are required to be from a disadvantaged background. However, the School is allowed some flexibility in determining disadvantaged status, and students may qualify on the basis of financial resources and/or environmental considerations. Loan requirements are similar to those of the HPSL.

Perkins Loans (formerly National Direct Student Loans) come from a revolving fund produced by appropriations from the federal government and held by Boston University. Limited amounts are available to students at the Goldman School. Loans accrue no interest until nine months after the borrower's graduation; they thereafter require 5 percent interest and are payable over a maximum of 10 years with minimum principal payments of $480 per year. Deferment is possible for service with the Peace Corps, VISTA, or the armed forces. Cancellation is possible for teaching handicapped children and for combat service for the United States.

Exceptional Financial Need Scholarship Partial scholarships made available through government funds may be awarded to students with exceptional need, i.e., those with personal and family resources of $5,000 or less. Recipients must commit to practicing general dentistry for at least five years.

Financial Assistance for Disadvantaged Health Professions Students (FADHPS) Section 787 of the Public Health Service (PHS) Act, as amended by Public Law 99–129, authorizes financial assistance for disadvantaged health professions students. Applicants must be of exceptional financial need and come from a disadvantaged background. All financial aid applicants are considered by the School, which is responsible for selecting recipients, making reasonable determinations of need, and determining the amount of each student's award. Recipients must commit to practicing general dentistry for at least five years.

Scholarships for Disadvantaged Students (SDS) Students from financially and/or environmentally disadvantaged backgrounds can receive these partial scholarships, which are provided by the federal government. All financial aid applicants are considered for eligibility.

Dental Scholarships for Undergraduate Disadvantaged Minority Students are also available. Information and applications are available from Oral Health America, Suite 1630, 211 East Chicago Avenue, Chicago, IL 60611.

State Assistance Several states provide financial assistance to resident students. Entering students should contact their state governments to determine if they might avail themselves of such opportunities to help provide for costs of their dental education.

State and Local Dental Societies provide loan and scholarship funds for dental students. Inquiries should be made at respective state and local dental societies to obtain information regarding availability of financial aid.

Smith-Holden Scholarships Four scholarships of $300 each are offered yearly for students who are residents of Connecticut, Rhode Island, New Hampshire, or Massachusetts. Qualifications are determined and scholarships administered by the individual state dental societies.

Other Loans Market-rate loans are available through such lending agencies as TERI, Knight, MEFA, and Access. Students who are interested in such options are encouraged to talk with a financial aid officer at L315, 80 East Concord Street.

Postdoctoral Programs

Goldman School postdoctoral students are eligible for the Stafford Student Loan program described above. The following programs are also available:

International Fellowships for Women of Countries Other Than the *United States* The American Association of University Women Education Foundation makes funds available for one-year advanced research grants for women from foreign countries. An applicant must express the intention to return to her native country to pursue her professional career. Satisfactory proficiency in English is required. The applicant must submit an up-to-date score on one of the following tests of English: Test of English as a Foreign Language (TOEFL); University of Michigan Examination for Proficiency in English; or the American Language Institute, Georgetown University (ALIGU). Stipends are approximately $15,000. Applications are available after July 15 each year (postmark deadline December 1) from either the Cultural Affairs Officer at any American Embassy or by writing to the AAUW Education Foundation, 2201 N. Dodge St., Iowa City, IA 52243-4030

American Academy of Periodontology The Academy offers financial assistance through a loan program to students enrolled in courses of postdoctoral periodontology. Students may apply after completion of four months of training. The maximum amount under this plan is $5,000. Interested persons should contact the Student Loan Program, American Academy of Periodontology, 737 N. Michigan Avenue, Suite 800, Chicago, IL 60611.

Boston University School of Dental Medicine Endodontic Alumni Association Scholarship Fund This fund provides scholarships based on need to second-year endodontics students. Application for scholarships should be made to Dr. Harold Levin, Department of Endodontics.

Hillenbrand Fellowship This program provides fellowships for recently graduated dentists interested in pursuing a career in dental administration. Fellowships consist of a stipend of $40,000 plus a reasonable budget for travel and a single medical benefit. Applications are available from Oral Health America, 211 East Chicago Avenue, Chicago, IL 60611.

Other Loans Market-rate loans are available through such lending agencies as TERI, Knight, and MEFA. Students who are interested in such options are encouraged to talk with a financial aid officer at L315, 80 East Concord Street.

Dental Public Health, Nutritional Sciences Students in the Dental Public Health and Nutritional Sciences programs are eligible for Federal Direct Student Loans, described above.

Admissions and Registration; Policies and Procedures

APPLYING TO THE DMD PROGRAM

Standards for Admission

The successful completion of at least three years in an accredited college or university is a requirement for admission to The Goldman School of Dental Medicine. The committee places primary emphasis on an applicant's undergraduate record. The committee also takes into account the student's score on the Dental Admissions Test and, where appropriate, such factors as marked improvement in undergraduate grades, as well as the quality and difficulty of the courses taken, demonstrated leadership ability, and motivation for the study of dentistry. Outstanding nonacademic achievement may also lead to a favorable consideration. Finally, letters of recommendation are important.

Personal interviews are part of the application process. Every effort will be made to arrange a meeting that is convenient for the candidate. In certain circumstances, regional interviews may be arranged.

All international students must obtain an F-1 or J Type Visa to fully participate in all aspects of the DMD Program.

Predental Study

The Admissions Committee recommends a program of study that includes the following courses or their equivalents as part of the preprofessional training.

Biology One-and-one-half years (12 semester hours). Courses in basic biology, genetics, embryology, and molecular biology are strongly recommended.

Chemistry Two years (16 semester hours). A sound understanding of the basic principles of inorganic and organic chemistry is required. It is recommended that the 16 semester hours be divided equally between the inorganic and organic areas.

Physics One year (8 semester hours). Students should know the general principles of physical laws and phenomena; courses in mechanics, light, heat, sound, electricity, and radiation are recommended.

English Two years or the equivalent at the college level are suggested, even if the student received advanced credit on entry into college.

Mathematics One year (6 semester hours). A basic understanding of calculus is required.

Social Sciences Three years (18 semester hours). The committee strongly recommends that the applicant's curriculum include courses in psychology, humanities, sociology or anthropology, and economics.

Application Instructions

1. **American Association of Dental Schools Application Service.** The DMD program of Boston University's Goldman School of Dental Medicine is a participant in the American Association of Dental Schools Application Service (AADSAS), through which all applications (with the exception of advanced standing) must be processed. Applicants must obtain copies of application materials prepared by the AADSAS and return them to that service; once their accuracy has been verified, all subsequent communications regarding admission are made directly with the individual dental schools.

AADSAS Applications may be obtained by contacting AADSAS by telephone at 202/667-1886, or in writing at 1625 Massachusetts Avenue, NW, Washington, DC 20036-2212.

Applications from AADSAS are available as early as June before the year of enrollment. AADSAS will forward application forms and descriptive material, **including the application procedures specific to Boston University.** All **additional** application materials (application fee of $50, DAT scores and recommendation letters) should be sent immediately to: Office of Admissions and Student Services, Boston University Goldman School of Dental Medicine, 100 East Newton Street, Suite 305, Boston, MA 02118. Telephone: 617/638-4787. Fax: 617/638-4798. The deadline for applications is March 1; it is strongly recommended, however, that applications be submitted as early as possible, since admissions decisions are made as early as Dec. 1.

2. **Application fee.** A fee in the amount of $50 must be sent to the Office of Admissions and Student Services at the same time or before sending the application to AADSAS. Checks should be made payable to Boston University. The check or money order must be in U.S. dollars, and the applicant's name and U.S. Social Security number must be clearly noted on it. The application fee is nonrefundable and is not credited toward any charges when an accepted applicant registers as a student.
3. **Letters of recommendation.** The Admissions Committee values letters from persons who are able to provide a thoughtful, thorough, and candid assess-

ment of an applicant's academic ability and potential for success in dental study. If the applicant's college or university has a premedical or predental advisory committee, its composite evaluation is required. In the absence of such a committee, the Admissions Committee requires three evaluations by senior faculty members, at least two of whom should be in a science department.

4. **Deposits after acceptance.** Applicants who are notified of acceptance on or after December 1, 1997, will be required to submit two nonrefundable initial tuition deposits. The first deposit is $2,000, the second $1,000. Fees must be paid in the form of a check or money order in U.S. dollars, payable to Boston University. The applicant's name and U.S. Social Security number must appear on the check or money order.

Advanced Standing Program for International Students

The Advanced Standing Program provides internationally trained dentists with the opportunity to pursue a Doctor of Dental Medicine degree in the United States at an accelerated pace. This two year program begins in mid-August.

Applicants should contact the Office of Admissions and Student Services for an application package. Applicants are required to complete the National Dental Board Examination, Part I. A personal interview and bench test is required of all applicants whose credentials are acceptable to the Admissions Committee. There is a $50 nonrefundable application fee and the deadline for applications is March 1. Fees must be paid in the form of a check or money order in U.S. dollars, payable to Boston University. The applicant's name and U.S. Social Security number must appear on the check or money order.

Every student whose native language is not English must take the Test of English as a Foreign Language (TOEFL). For information contact:

Test of English as a Foreign Language
P.O. Box 6151
Princeton, NJ 08541-6151
USA
609/951-1100

Transfer Students

Students of an accredited U.S. or Canadian dental school are eligible to apply for admission to the DMD degree program with advanced standing. Applicants are required to present transcripts from their previous dental school and three letters of recommendation. A personal interview is usually required. There is a $50 nonrefundable application fee. Fees must be paid in the form of a check or money order in U.S. dollars, payable to Boston University. The applicant's name and U.S. Social Security number must appear on the check or money order. Students whose credentials are acceptable to the Admissions Committee will be placed into the appropriate class. A minimum of two years of study at the Goldman School of Dental Medicine is usually required. Students transferring into the Goldman School for their third year of study must take the clinical bench test.

For applications and further information, write to the Office of Admissions and Student Services, Boston University Goldman School of Dental Medicine, 100 East Newton Street, Suite 305, Boston, MA 02118. Telephone: 617/638-4787. Fax: 617/638-4798.

APPLYING TO POSTDOCTORAL AND GRADUATE PROGRAMS

To be considered for admission to postdoctoral programs at Boston University Goldman School of Dental Medicine, an applicant must have a DMD or a DDS degree from an accredited college or university, or its international equivalent, or be enrolled in a course of study that will result in the award of such a degree before the commencement of the study of postdoctoral or graduate dentistry. The Master of Science programs in dental public health and nutritional sciences do not require a DMD or DDS degree.

Contact the Office of Admissions and Student Services, Boston University Goldman School of Dental Medicine, 100 East Newton Street, Suite 305, Boston, MA 02118. Telephone: 617/638-4708. Fax: 617/638-4798.

Timing of Applications

Postdoctoral and graduate students are enrolled only in the fall semester. In order to ensure full consideration, applications for 1998 entry should be submitted on or before the following dates (a * denotes programs that participate in the Match Program):

*Oral and Maxillofacial Surgery—September 15
Periodontology—September 1
*Prosthodontics—November 15
*Orthodontics—November 15
Endodontics—November 15
All other programs—December 15

A Complete Application

A complete application consists of the following items:

- application form
- $50 **nonrefundable** application fee made payable to Boston University in the form of a check drawn on a U.S. bank or a money order in U.S. dollars. The applicant's name must appear on the check or money order.
- National Board scores (U.S. applicants only)
- final official transcripts of both dental school and undergraduate school (applicants to the four-year Oral and Maxillofacial Surgery Program must submit proof of graduation from a dental school accredited by the Council on Dental Education of the American Dental Association)
- letters of recommendation: (a) one letter of recommendation from the dean at your degree-granting dental school (b) two letters of recommendation from faculty at your degree-granting dental school (at least one of those letters should come from someone who has taught you in a substantive course) (c) Additional letters may be submitted.

Interviews

Evaluative interviews are part of the application process required by most departments.

International Applicants

Citizens of countries other than the United States applying for admission to the School of Dental Medicine must submit a TOEFL score of 550 or above. Information about the TOEFL is available from:

Test of English as a Foreign Language
P.O. Box 6151
Princeton, NJ 08541-6151
USA

All international documents must be either in English or accompanied by an official English translation.

Application Instructions

All application materials must be sent together in the envelopes provided to:

Office of Admissions and Student Services
Goldman School of Dental Medicine
100 East Newton Street, Suite G-305
Boston, MA 02118

Telephone: 617/638-4783
Fax: 617/638-4798

Applicants are responsible for making sure their files are complete. The application fee must accompany the application. This fee is nonrefundable and is not credited toward any charges. The Office of Admissions and Student Services will inform you in writing of the decision reached on your application.

REGISTRATION POLICIES

Deposit

Upon acceptance, students must make a nonrefundable deposit toward the first semester tuition. All students must send this deposit to the Office of Admissions and Student Services. Postdoctoral students should include a letter indicating their intention to enroll at the School. In the event that the student does not enroll, the deposit will be retained by the University.

The deposits required for the various programs are as follows:

Predoctoral Program: $2,000—1st deposit, $1,000—2nd deposit.

Postdoctoral Program: $1,000.

Graduate Program: $1,000.

Payment Policies

Entering students with a program start date of July or August must complete payment by July 1, 1997. All tuition, fees, and any residence hall charges for continuing students must be paid in full by the semester deadline: August 12, 1997 for the fall semester and December 16, 1997 for the spring semester 1998. Late fees begin at $100 and increase substantially throughout the semester. Students in good standing will be registered and an invoice will be mailed to the permanent address on record. Students with delinquent balances from prior attendance must make payment in full before they can register for classes.

Payments should be directed to Student Accounting Services, 881 Commonwealth Avenue, Boston, MA 02215. Checks must be made payable to Boston University.

Any student who is indebted to the University will be required to settle his or her account before receiving diplomas, degrees, official transcripts, and other official recognitions of work done at the University. Such debts include, but are not limited to, amounts owed in satisfaction of tuition, loan agreements, fees and charges, food service, and monies owed for occupancy in University-owned or -operated residence facilities and apartments. No student may withdraw from the University in good standing or graduate from the University unless all current obligations are paid in full.

The University assumes no liability for failure to provide educational or related services arising out of or due to causes beyond the reasonable control of the University. The University will, however, exert reasonable efforts to provide comparable or substantially equivalent services, but its inability to do so shall not subject it to liability.

Withdrawals and Refunds

Students who withdraw before the beginning of classes are eligible to receive full credit for or refund of tuition, excluding nonrefundable deposits and fees. Students withdrawing during the first two weeks of classes are eligible to receive a refund or a credit of 80 percent of their tuition; during the third week, 60 percent; during the fourth week 40 percent; and during the fifth week, 20 percent. There will be no refund or credit after the fifth week of classes. Refunds are based on the School of Dental Medicine's calendar.

Deferred Payment

Boston University does not offer its own deferred payment plan. If you wish to finance your educational costs, monthly payment plans are available with the following agency: Academic Management Services, 50 Vision Boulevard, East Providence, RI 02914; 800/635-0120. All arrangements for deferred payment should be made well in advance of the time when payment is due.

Transcripts

To request an academic transcript of grades and coursework, submit a Transcript Request Form to the Office of Admissions and Student Services. Letter requests will be honored if they are signed and give complete information about attendance, including enrollment dates, college(s) of registration, and degree(s) earned. Official transcripts are mailed approximately ten working days after receipt of the request. Unofficial transcripts for students' use may be obtained from the Office of Admissions and Student Services by completing a request form.

DOCTOR OF DENTAL MEDICINE DEGREE PROGRAM ACADEMIC POLICIES AND PROCEDURES

The Goldman School reserves the right to modify at any time its courses and programs to incorporate scientific advancement in dental education and practice. The School is not obligated to conform to the curricula set forth within this bulletin. For complete details on academic policies and procedures, refer to the School's *Predoctoral Student Handbook*. The handbook is distributed at the beginning of a student's course of study and is available thereafter in the Office of the Associate Dean for Academic Affairs.

Evaluation of Academic Performance

For those students enrolled in the predoctoral (DMD) program, faculty committees on student promotion consider all matters related to promotion, recommendations for honors, and special achievements as well as recommendations related to academic probation, deceleration, suspension, dismissal, and requests for withdrawal or leave of absence.

Students receive a letter grade for each course. Grades are as follows:

Grade	Honor Points
A	4.0
A–	3.7
B+	3.3
B	3.0
B–	2.7
C+	2.3
C	2.0
C–	1.7
D	1.0
F	0.0
I	Incomplete
W	Withdrawn with permission

Any student receiving an incomplete (I) must complete the work within the same year; otherwise the deficiency will be recorded as a failure.

Student promotion requires satisfactory completion of all requirements, both clinical and didactic, and the maintenance of professional ethical standards. Deceleration is permissible only for matriculated students in academic difficulty, at the discretion of the academic dean, promotions committee, and Office of Admissions and Student Services. Third- and fourth-year promotions committees also consider the recommendations of the students' Comprehensive Patient Care Team leaders. Student performance shall be evaluated according to the conditions described in the School's *Clinic Manual* and *Predoctoral Student Handbook*.

Academic Honors

Students whose academic performance merits special recognition are identified in each class.

Dean's List Any student who has earned a 3.2 grade point average or above at the end of each academic year will receive a letter of commendation from the dean. A notation of this honor will be entered on the student's transcript.

Honors on Diplomas Students who have excelled academically over seven semesters will receive recognition on their diploma. *Summa cum laude* will be awarded to a student who has a cumulative GPA of 3.8 or above. *Magna cum laude* will be awarded to a student who has a cumulative GPA of 3.5 or above. *Cum laude* will be awarded to a student who has a cumulative GPA of 3.2 or above.

Transfer students are eligible for graduation awards if they have no grade lower than a B on their previous dental transcript and have maintained the appropriate GPA since transferring.

Withdrawal and/or Leave of Absence

Students who find it necessary to withdraw from their curriculum must file an official Withdrawal Form with the School's Office of Admissions and Student Services within five days of the withdrawal. Mere absence from classes does not reduce a student's financial obligation or guarantee that a final grade will not be recorded. Students who withdraw must petition the Admissions Committee for readmission.

A leave of absence for personal reasons is allowed for students in good academic standing. Students wishing to take a leave of absence should send a letter of request to the associate dean for academic affairs. The student should also schedule an appointment with the director of student services. A leave of absence will be approved for one or two terms after discussion in the appropriate Promotions Committee. A student on leave who wishes to return must inform the Office of Admissions and Student Services in writing at least six months before the beginning of the semester for which the student is returning.

POSTDOCTORAL AND GRADUATE ACADEMIC POLICIES AND PROCEDURES

The department chairman, with the concurrence of the Postdoctoral Curriculum Committee, may alter a candidate's program by the addition of courses as may be warranted. For complete details on academic policies and procedures for a specific academic program, refer to that department's *Postdoctoral Student Handbook*. This handbook is distributed at the beginning of a student's course of study and is available thereafter from the postdoctoral or graduate department.

Evaluation of Academic Performance

For those students enrolled in the postdoctoral programs, the department chairman and the Postdoctoral Curriculum Committee consider all matters related to promotion and recommendations related to academic probation, suspension, and dismissal.

Students receive a letter grade for each course.

Student promotion requires satisfactory completion of all requirements, both clinical and didactic, and the maintenance of professional ethical standards.

Withdrawal and/or Leave of Absence

A student wishing to obtain a leave of absence should first petition the department chairman and then obtain a Withdrawal form from the Office of Admissions and Student Services in advance of the leave. A student on leave who wishes to return must inform the Office of Admissions and Student Services and the chairman in writing at least six months before the beginning of the semester for which the student is returning. A student who wishes to shorten or extend the original period of a leave of absence must make a request in writing. A student desiring to withdraw from the School of Dental Medicine in good standing must request permission in writing from both the department chairman and the dean as well as submit an official withdrawal form to the Office of Admissions and Student Services. Students who withdraw must petition the Admissions Committee for readmission.

ADMINISTRATIVE POLICIES RELATING TO FEDERAL GUIDELINES

Veterans Information In cooperation with the Veterans Administration, the University participates in numerous veterans benefits programs, including educational assistance, Work-Study, rehabilitation, deferred payment, and tutorial programs.

Any student who is eligible for veterans benefits or would like more information

about VA rules and veterans programs should contact the Boston University Office of Veterans Affairs, 881 Commonwealth Avenue, Boston, MA 02215; 617/353-2390.

Family Educational Rights and Privacy Act The Family Educational Rights and Privacy Act ensures confidentiality of student educational records and restricts disclosure to or access by third parties, except as authorized by law. Those wishing to access their records need to complete an Access Records Form, available from the Office of Admissions and Student Services, Room G-305. Parents of dependent students, as defined in Section 152 of the Internal Revenue Code of 1954, are accorded full access by the University to their dependents' educational records, with certain exceptions, and they may receive copies of their dependents' grade reports each semester from the Office of the University Registrar. The University assumes that its undergraduate students are financially dependent unless a parent or the student informs the University Access Officer in the Office of the University Registrar that the student is financially independent. Students may provide this notification to the Access Officer via the Financially Independent Student form, a copy of which may be secured from the Access Officer in the Office of the University Registrar.

Students have the right to inspect their educational records, with certain exceptions. If they believe these records are inaccurate, they may request an amendment and, if denied, have the right to a hearing and to place a letter of disagreement in their file if the outcome of that hearing is negative. Students are eligible under the Act to file a complaint with the U.S. Department of Education Family Policy and Regulations Office, Federal Office Building Number 6, Room 3021, 400 Maryland Ave., S.W., Washington, DC 20202, if they believe Boston University failed to comply with the requirements of the Act.

The University's policies and procedures for implementation of this Act are enumerated in the *Compliance Manual*, and copies are available to students at the Office of the University Registrar, 881 Commonwealth Avenue, Second Floor, Boston, MA 02215.

The University does not release personally identifiable information contained in student educational records, except as authorized by law. Boston University has designated certain types of personally identifiable information as "directory information." It includes the student's name, local or dorm address and telephone number, College of registration, degree program and major and minor, dates of attendance, part- and full-time status, degrees, honors, and awards received, and hometown for press releases. Students may restrict release of this information if they wish, and this data will not be released by the University except as authorized by law.

The Student Activities Office (Assistant Director, GSU, 775 Commonwealth Avenue) and the Athletics Department (Director, 285 Babcock Street) may release or publish personally identifiable information on students who participate in officially recognized activities and sports. If students wish to restrict release and/or publication of this information, they should contact the Student Activities Office and the Athletics Department directly.

Students are informed of their rights under this law by the Office of Admissions and Student Services.

Equal Opportunity Policy Boston University prohibits discrimination against any individual on the basis of race, color, religion, sex, age, national origin, physical or mental disability, marital, parental, or veteran status. This policy extends to all rights, privileges, programs, and activities, including admissions, financial assistance, employment, housing, athletics, and educational programs. Boston University recognizes that nondiscrimination does not ensure that equal opportunity is a reality. Because of this, the University will continue to implement affirmative action initiatives that promote equal opportunity for all students, applicants, and employees. Inquiries regarding the application of this policy should be addressed to Executive Director, Personnel and Affirmative Action, 25 Buick Street, Boston, MA 02215; 617/353-4477.

Grievance Procedures in Cases of Alleged Discrimination University policy and federal law prohibit discrimination on the basis of race, color, creed, religion, ethnic origin, age, sex, or disability.

When a student believes that his or her rights have been denied by reason of discrimination on the basis of race, color, creed, religion, ethnic origin, age, sex, or disability, he or she may file a formal written grievance with the Vice President and Dean of Students. The grievance statement should be as specific as possible regarding the action(s) that precipitated the grievance: the date, place, and people involved; the efforts made to settle the matter informally; and the remedy sought.

The Vice President and Dean of Students will forward a copy of the grievance statement to the appropriate individuals within one week of receiving the statement. If a complaint raises an academic question, the statement will be forwarded to the dean of the appropriate School or College. If the complaint concerns a nonacademic unit, the grievance statement will be forwarded to the administrative head of the unit. If a student's grievance alleges discrimination on the basis of *disability*, the Director of the Office of Disability Services, who is the University's Compliance Officer for Section 504 of the Rehabilitation Act of 1973, will also be provided with a copy of the grievance and will be involved in resolution of the grievance as appropriate.

The dean or administrative head will investigate the matters set forth in the written grievance. In conducting an investigation, the dean or administrative head may forward a copy of the grievance statement to the persons whose actions (or inactions) are the subject of the grievance, as well as request a written response to the grievance from appropriate individuals within the University. The dean or administrative head may also choose to interview witnesses, meet with concerned parties, receive oral or written presentations, and make other appropriate independent inquiry. Within forty-five (45) days of the filing of the grievance, the dean or administrative head will make a decision as to the merit of the student's grievance and the appropriate resolution of the situation. If resolution is not possible within forty-five (45) days, the dean or administrative head will inform the student of the reasons for delay.

Copies of the dean or administrative head's decision will be sent to the student, the Vice President and Dean of Students, the Director of Disability Services where appropriate, and the University Provost. A copy may also be sent to the department and/or the persons whose actions are the subject of the grievance, as appropriate. In the event that the student is not satisfied with the resolution of the grievance, he or she may appeal to the Vice President and Dean of Students, and from there to the Provost.

A record of all formal grievances will be kept on file in the Office of the Vice President and Dean of Students. A record of all grievances alleging disability discrimination will also be kept on file in the Office of Disability Services.

Student Retention Information Statistics for the student retention rate at Boston University are available on request from Analytical Services, 25 Buick Street, in accordance with the Education Amendments of 1976, Section 493A.

Faculty

Clinical faculty are faculty appointed to supervise the clinical, didactic, or field experiences of students; they may also teach in courses dealing with those areas.

Mark J. Alexander Assistant Professor of Pharmacology and Experimental Therapeutics. School of Medicine. BS, Iowa State University; PhD, University of Washington

Karen N. Allen Assistant Professor of Physiology, School of Medicine. BS, Tufts University; PhD, Brandeis University

Myron Allukian Lecturer in Diagnostic Sciences and Patient Services. BS, Tufts University; DDS, University of Pennsylvania; MPH, Cert., Harvard University

Justin L. Altshuler Clinical Professor of Diagnostic Sciences and Patient Services. BS, University of Massachusetts; DMD, Tufts University

Salomon Amar Associate Professor of Periodontology and Oral Biology. BS, Aquiba School (France); MS, DDS, PhD, Université Louis Pasteur (France)

Gaspar Anastasi Clinical Professor of Surgery (Plastic), School of Medicine. BS, St. John's University; MD, University of Ottawa (Canada)

Joseph Areias Clinical Instructor of Periodontology and Oral Biology. BS, Stonehill College; DMD, CAGS, Boston University

Steven A. Arena Assistant Clinical Professor of Orthodontics. BA, University of Massachusetts; DMD, Cert., MScD, Boston University; JD, Suffolk Law School

Thomas Armstrong Associate Clinical Professor of Restorative Sciences. BS, DDS, Howard University

Nargess Ashayeri *Clinical Director of Esthetic Restorative Dentistry;* Associate Clinical Professor of Restorative Sciences. DMD, CAGS, MSD, Boston University

Fayez Badlissi Clinical Instructor of Periodontology and Oral Biology. DDS, Damascus University (Syria); DMD, Boston University; CAGS, Tufts University

George T. Bain Assistant Research Professor of Psychiatry, School of Medicine. BA, Northeastern University; PhD, Boston University

Jonathan Bamel Clinical Instructor of Restorative Sciences. BS, Union College; DMD, Boston University

David J. Baraban Professor Emeritus of Restorative Sciences. DMD, Harvard University; FACD, FICD

Jeffrey Becker Clinical Instructor of Orthodontics. BA, Hofstra University; DMD, University of Pennsylvania; CAGS, Boston University

John R. Bednar Assistant Clinical Professor of Orthodontics. BA, St. Anselm's College; DMD, New Jersey College of Medicine and Dentistry; Cert., MScD, Boston University

Morris Berdichevsky Assistant Professor of Periodontology and Oral Biology. BS, CD, Universidad Nacional Autónoma de México; DDS, Universidad Nacional de México Escuela Dental; Cert., MScD, Boston University

John L. Berk Assistant Professor of Medicine, School of Medicine. BA, Wesleyan University; MD, Case Western Reserve University

Leonard D. Berman Professor of Pathology. BA, Hobart College; MD, New York University; DCP, University of London (England)

Herbert F. Bernstein Associate Clinical Professor of Oral and Maxillofacial Surgery. AB, DDS, New York University; Cert., University of Pennsylvania

Leonard Bernstein Clinical Professor of Orthodontics. BA, DMD, Tufts University; Cert., Boston University

Robert Betz Clinical Instructor of Periodontology and Oral Biology. DDS, CAGS, University of Missouri

Paul H. Black Professor of Microbiology and Medicine; Research Professor of Surgery, School of Medicine. AB, Dartmouth College; MD, Columbia University

Peter Blanchard Clinical Instructor of Diagnostic Sciences and Patient Services. BS, Northeastern University; DDS, Georgetown University

Rita A. Blanchard Associate Clinical Professor of Medicine, School of Medicine. AB, MS, Vassar College; MD, Cornell University

Ramiro Blanco Assistant Professor of Periodontology and Oral Biology. DDS, Universidad del Zulia (Venezuela); DMD, CAGS, MSD, Boston University

Michael Blau Associate Clinical Professor of Orthodontics. BSc, DDS, McGill University (Canada); MPH, Cert., Harvard University

C. Michael Bliss Associate Professor of Medicine, School of Medicine. BA, Amherst College; MD, Boston University

Joseph Boffa *Director of Dental Health Insurance Plan;* Associate Professor of Diagnostic Sciences and Patient Services. BA, DDS, State University of New York at Buffalo; MPH, Harvard University

Steven A. Bogen Assistant Professor of Pathology and Laboratory Medicine, School of Medicine. BS, University of Illinois; PhD, Weizmann Institute of Science (Israel); MD, University of Chicago Pritzker School of Medicine

Donald F. Booth *Associate Dean for Hospital Affairs; Chairman, Department of Oral and Maxillofacial Surgery;* Professor of Oral and Maxillofacial Surgery. BA, Middlebury College; DMD, Harvard University; Cert., Tufts University

Jacques E.F. Bori Adjunct Associate Clinical Professor of Periodontology and Oral Biology. BS, Université Paris (France); DMD, Tufts University; Cert., MScD, Boston University

William B. Bornstein Clinical Instructor of Restorative Sciences. BA, Boston University; DDS, Columbia University

Nancy Bouchard Clinical Instructor of Diagnostic Sciences and Patient Services. BA, Boston College; MHP, Northeastern University; RDH, Forsyth School for Dental Hygienists

Mahdi Bouhmadouche Assistant Clinical Professor of Diagnostic Sciences and Patient Services. DMD, MSD, DScD, Boston University; MD, Algiers University (Algeria)

William Bourassa *Director of Predoctoral Pediatric Dentistry*; Professor of Pediatric Dentistry and Oral Biology. BS, University of Notre Dame; DMD, University of Louisville; Cert., MScD, PhD, Boston University

Fred Bourgeois Assistant Clinical Professor of Diagnostic Sciences and Patient Services. DMD, Boston University

Norman D. Boyd Associate Professor of Pharmacology and Experimental Therapeutics, School of Medicine. BSc, University of Glasgow (Scotland); PhD, University of Chicago

Miklos Breuer Adjunct Associate Research Professor of Biomaterials. MSc, Hebrew University; PhD, Weizmann Institute (Israel)

Selwyn A. Broitman Professor of Microbiology and Pathology and Laboratory Medicine, School of Medicine. BS, MS, University of Massachusetts; PhD, Michigan State University

Louis Brown Assistant Professor of Restorative Sciences. BA, Brandeis University; DMD, CAGS, Boston University

Thomas R. Browne, III Professor of Neurology; Associate Professor of Pharmacology, School of Medicine. AB, Princeton University; MD, University of Rochester

Melanie Brunt Assistant Professor of Medicine, School of Medicine. BA, Hampshire College; MD, University of Massachusetts; MPH, Harvard University

Bohdana Fialova Burke Assistant Professor of Pathology and Laboratory Medicine, School of Medicine. MD, Universita Jana Ev. Purkyně (Czech Republic)

Joseph Calabrese Assistant Professor of Restorative Sciences. BA, Manhattan College; DMD, CAGS, Boston University

Richard Carr Assistant Clinical Professor of Pediatric Dentistry. BS, Lincoln University; MS, University of Missouri; DDS, Meharry Medical College; Cert., MScD, Boston University

Sonia Carter Clinical Instructor of Restorative Dentistry. BS, DMD, University of Puerto Rico

Timothy Carter Clinical Instructor of Endodontics. BS, DDS, State University of New York, Buffalo; CAGS, Boston University

Carlo Castellucci Assistant Clinical Professor of Endodontics. BChD, University of Pretoria (South Africa); DMD, CAGS, MScD, Boston University

Giovanni Castellucci Adjunct Assistant Professor of Periodontology and Oral Biology. BChD, University of Pretoria (South Africa); DMD, Cert., MSD, Boston University

Gennaro Cataldo Professor of Restorative Sciences. BS, Tufts University; MS, Harvard University; DMD, Tufts University; FICD

Santo S. Cataudella Associate Professor of Oral and Maxillofacial Surgery. BS, College of the Holy Cross; DMD, Tufts University; CAGS, Boston University; MS, Boston College

Frederic Chacker Adjunct Professor of Periodontology and Oral Biology. BA, Temple University; DDS, Cert., University of Pennsylvania; Cert., Boston University

Catherine Champagne Assistant Research Professor of Periodontology and Oral Biology. BS, Université Paul Sabatier (France); PhD Université des Sciences et Techniques (France)

Pelly Chang Assistant Clinical Professor of Restorative Sciences. DMD, Boston University; BDS, Chung-Shen Medical and Dental School (China)

Wendy Cheney Assistant Clinical Professor of Pediatric Dentistry. BDSc, University of Melbourne (Australia); CAGS, Louisiana State University

Marianne Chingbingyong Clinical Instructor of Pediatric Dentistry. DMD, University of the Philippines; MSD, DScD, Boston University

Laisheng Chou Associate Professor of Biomaterials; Associate Professor, Diagnostic Sciences and Patient Services. DMD, Shanghai No. 2 Medical University (China); Cert., MS, University of California, San Francisco; PhD, University of British Columbia (Canada)

Simon Chow Clinical Instructor of Restorative Sciences. BA, California Lutheran University; DMD, Boston University

Thomas G. Christensen Associate Professor of Pathology, School of Medicine. BS, Rutgers University; PhD, University of Vermont

Stephen Colchamiro Clinical Instructor of Restorative Sciences. BS, Brooklyn College; DMD, Harvard University

Theodore Colton Professor of Sociomedical Sciences and Community Medicine and Public Health (Epidemiology and Biostatistics), School of Medicine. AB, Brooklyn College; MS, University of North Carolina; ScD, Johns Hopkins University

Timothy Colton Assistant Clinical Professor of Oral and Maxillofacial Surgery. BA, Middlebury College; DDS, University of Minnesota; CAGS, Tufts University

David Cormier Clinical Instructor of Diagnostic Sciences and Patient Services. BA, Earlham College; DDS, Georgetown University

Melvin C. Cornwall Professor of Physiology, School of Medicine. BS, MD, University of Utah

Douglas Cotanche Associate Professor of Anatomy and Neurobiology, School of Medicine. BA, University of New Hampshire; PhD, University of North Carolina

Donald Cote Clinical Instructor of Restorative Sciences. BS, College of the Holy Cross; DMD, Tufts University

David Cottrell Assistant Professor of Oral and Maxillofacial Surgery. BA, Bucknell University; DMD, University of Pennsylvania; CAGS, Tufts University

Miguel Cruz Clinical Instructor of Restorative Sciences. BS, DMD, University of Puerto Rico

Hugo D'Ambrosio Assistant Professor of Pediatric Dentistry. BA, College of the Holy Cross; DDS, New York University; Cert., MScD, Boston University; Cert., Allegheny General Hospital

Nicholas Darzenta Professor of Diagnostic Sciences and Patient Services. DDS, Athens National and Capodistria University (Greece); DMD, Tufts University

Theresa A. Davies Assistant Research Professor of Biochemistry, School of Medicine. BS, University of Virginia; PhD, Boston University

Edward D'Eramo Associate Clinical Professor of Diagnostic Sciences and Patient Services. BS, Boston College; DMD, Tufts University; CAGS, University of California

Hendrik de Waal Clinical Lecturer in Periodontology and Oral Biology. BChD, Pretoria University (South Africa); CAGS, MScD, Boston University

Serge Dibart Assistant Professor of Periodontology and Oral Biology. DMD, Boston University; CAGS, Tufts University; DDS, Université d'Aix-Marseille (France)

Victor S. Dietz Associate Professor of Orthodontics. BS, Franklin and Marshall College; DMD, University of Pennsylvania; Cert., MScD, Boston University

Liliana DiFabio Clinical Instructor of Restorative Sciences. BS, University of Massachusetts; DMD, Boston University

Kenneth Drizen Associate Clinical Professor of Orthodontics. MS, Northwestern University; DDS, Temple University

Stephen C. DuLong *Director, Restorative Dentistry*; Associate Professor of Restorative Sciences. BA, DMD, Cert., Boston University

Jean S. Emerling *Director, Predoctoral Removable Prosthodontics;* Professor of Restorative Sciences. BA, DDS, State University of New York at Buffalo

Robert Enders Clinical Instructor of Restorative Sciences. DDS, Loma Linda University

Theodore Engel, Jr. Clinical Instructor of Restorative Sciences. DMD, Tufts University

Armond Enos Clinical Instructor of Diagnostic Sciences and Patient Servies. BA, Dartmouth College; DDS, Meharry Medical College

J. Worth Estes Professor of Pharmacology and Experimental Therapeutics; Associate Professor of Socio-Medical Sciences and Community Medicine, School of Medicine. AB, Harvard College; MA, MD, Boston University

Victor Evdokimoff Assistant Clinical Professor of Diagnostic Sciences and Patient Services. BA, Boston University; ScM, Johns Hopkins University

Aristides Exarchos Clinical Instructor of Restorative Sciences. DMD, Boston University

Edward Fagouri Clinical Instructor of Restorative Sciences. BS, Gannon University; DDS, Georgetown University

Paul Farsai Assistant Professor of Restorative Sciences. DMD, CAGS, MPH, Boston University.

David Federick Adjunct Assistant Clinical Professor of Restorative Sciences. BS, University of Notre Dame; DMD, Rutgers University; MScD, Boston University; CAGS, University of Alabama

Cary Feuerman Adjunct Clinical Instructor of Periodontology and Oral Biology. BS, Union College; CAGS, DMD, Boston University

Alan Filzer Clinical Instructor of Pediatric Dentistry. BS, Brooklyn College; DDS, New York University; Cert., MScD, Boston University

Michael Fine Associate Clinical Professor of Endodontics. BA, Catawba College; DDS, University of Maryland; CAGS, Boston University

Susan H. Fisher Associate Professor of Microbiology, School of Medicine. BA, MA, Washington University; PhD, Tufts University

David Fix Clinical Instructor of Restorative Sciences. BS, Bowling Green State University; DDS, Ohio State University

Neal Fleisher Assistant Clinical Professor of Periodontology and Oral Biology. BA, Hofstra University; DMD, Cert., Boston University

Dr. Thomas Armstrong, Associate Clinical Professor of Operative Dentistry, demonstrates a procedure.

Karen Flynn Assistant Professor of Health Policy and Health Services Research. BA, DDS, MS, State University of New York at Buffalo

Deborah Fournier Assistant Professor of Diagnostic Sciences and Patient Services. BS, University of Maryland; MS, PhD, Syracuse University

Catherine S. Frankl Assistant Professor of Health Policy and Health Services Research. BA, MBA, JD, Boston University

Spencer N. Frankl *Dean;* Professor of Pediatric Dentistry. DDS, Temple University; MSD, Tufts University; FACD, FICD

Carl Franzblau *Chairman, Department of Biochemistry; Director of Dental Research;* Professor of Biochemistry. BS, University of Michigan; PhD, Yeshiva University

Paula K. Friedman *Associate Dean for Administration;* Professor of Diagnostic Sciences and Patient Services. BS, University of Massachusetts—Amherst; DDS, Columbia University; Cert., Beth Israel Medical Center, New York; MSD, Boston University

Leonardo Frydman Assistant Clinical Professor of Restorative Sciences. DMD, CAGS, Boston University; DDS, Universidad Intercontinental de México

Jacqueline Fulop Assistant Professor of Orthodontics. BA, State University of New York, Stony Brook; DMD, CAGS, Boston University

David Gabelman Clinical Instructor of Restorative Sciences. BS, City College of New York; DDS, Temple University

John Gagnon Clinical Instructor of Restorative Sciences. BA, College of Holy Cross; DMD, Boston University

Raul I. Garcia *Chairman, Department of Health Policy and Health Services Research;* Professor of Health Policy and Health Services Research. AB, DMD, CAGS, MMedSc, Harvard University

Jesus Fernando Garcia-Diaz Associate Professor of Physiology, School of Medicine. BS, Universidad de Zaragoza (Spain); MS, Indiana University; PhD, Universidad de Málaga (Spain)

Irene M. Gavras Clinical Professor of Medicine, School of Medicine. MD, Athens University (Greece)

Anthony A. Gianelly *Chairman, Department of Orthodontics;* Professor of Orthodontics. AB, DMD, Cert., Harvard University; PhD, MD, Boston University

George Gildea Clinical Professor of Orthodontics. BA, Boston College; DMD, Cert., Tufts University

Russell A. Giordano II Assistant Professor of Biomaterials. BS, Boston College; DMD, DMSc, Harvard University

Ronald E. Goldstein Adjunct Clinical Professor of Restorative Sciences. DDS, Emory University

Wayne A. Gonnerman Assistant Professor of Biochemistry and Periodontology and Oral Biology, School of Medicine. PhD, University of Missouri

William Gordon Clinical Instructor of Orthodontics. BA, DMD, CAGS, Boston University

Leonard S. Gottlieb *Chairman, Department of Pathology and Laboratory Medicine, School of Medicine;* Professor of Pathology and Laboratory Medicine, School of Medicine. AB, Bowdoin College; MD, Tufts University

Dana Graves Professor of Periodontology and Oral Biology. BA, State University of New York, Binghamton; DDS, Columbia University; Cert., Dr.Med.Sc., Harvard University

Gary Greenberg Clinical Instructor of Restorative Sciences. BA, Brandeis University; DMD, Boston University

Charles Greene Adjunct Professor of Restorative Sciences. BS, University of Chicago; DDS, University of Illinois

John Guarente Assistant Clinical Professor of Diagnostic Sciences and Patient Services. BA, Merrimack College; DMD, Boston University

Frederick O'Donnell Hains Clinical Instructor of Restorative Sciences. BA, Washington and Jefferson College; MS, Long Island University; BCDS, University of Maryland, Baltimore; DDS, Baltimore College of Dental Surgery

Melvyn H. Harris Associate Clinical Professor of Oral and Maxillofacial Surgery. AB, Harvard College; DMD, Tufts University; Cert., University of Pennsylvania

Jeffrey Harrison Clinical Instructor of Diagnostic Science and Patient Services. BS, University of Rhode Island; DMD, Tufts University; CAGS, Harvard School of Dental Medicine

Andre Hashem Assistant Clinical Professor of Restorative Sciences. DMD, CAGS, Boston University; DDS, Damascus University (Syria)

Thomas K. Hawley Assistant Clinical Professor of Restorative Sciences. BA, Boston University; DMD, Tufts University

John A. Hayes Professor of Pathology and Laboratory Medicine, School of Medicine. MBChB, University of Bristol (England); University of London (England)

Kristy Hendricks Assistant Professor of Periodontology and Oral Biology. BS, University of Nebraska; ScD, MS, Boston University

Michelle Henshaw Assistant Professor of Diagnostic Sciences and Patient Services. BA, Columbia University; BS, DDS, University of California, San Francisco; MPH, Boston University

Lawrence Herman Assistant Clinical Professor of Oral and Maxillofacial Surgery. BS, McGill University (Canada); DMD, University of Pennsylvania; CAGS, Albert Einstein College of Medicine

Neil Hornung Assistant Clinical Professor of Oral and Maxillofacial Surgery. AB, Brown University; DMD, Boston University

Edward Horowitz Clinical Instructor of Diagnostic Sciences and Patient Services. BS, Long Island University; DMD, Tufts University

Dr. Ronni Schnell, Assistant Clinical Professor of Prosthodontics, celebrates a good checkup with an athlete during the Massachusetts Special Olympics summer games. Volunteers from the School screen more than 700 participants each year.

Wayne Hotzakorgian Lecturer in Endodontics. BA, Fresno State University; DDS, University of California; CAGS, MScD, Boston University

Manuel Hoyo Assistant Clinical Professor of Endodontics. DMD, University of Puerto Rico; CAGS, MSD, Boston University

Christopher V. Hughes *Chairman, Department of Pediatric Dentistry;* Associate Professor of Pediatric Dentistry. BA, Colby College; DMD, University of Pennsylvania; CAGS, Case Western Reserve University. PhD, Georgetown University

Michael Hunter Assistant Professor of Oral and Maxillofacial Surgery. BA, DMD, CAGS, Boston University

Robert Ibsen Clinical Lecturer in Restorative Sciences. DDS, University of Southern California; DO, California College of Optometry

John Ictech-Cassis *Director of Advanced Education in General Dentistry Program (AEGD);* Assistant Clinical Professor of Restorative Sciences. DDS, Universidad Tecnológica de México; Cert., DMD, Boston University

Abraham Ingber Adjunct Assistant Clinical Professor of Restorative Sciences. DDS, University of Maryland; CAGS, Boston University

Gerald A. Isenberg Clinical Professor of Periodontology and Oral Biology. BA, Syracuse University; DDS, New York University; Cert., MScD, Boston University

Sheldon Itzkowitz Clinical Instructor of Periodontology and Oral Biology. BS, Concordia University (Canada); DDS, McGill University (Canada); CAGS, Boston University

Matthew J. Jackson Assistant Clinical Professor of Restorative Sciences. BS, Rutgers University; DMD, Fairleigh Dickinson University; Cert., MScD, Boston University

David Jacobs Clinical Instructor of Diagnostic Sciences and Patient Services. BS, University of Massachusetts; DMD, Tufts University; MBS, University of Massachusetts

Zhimon Jacobson *Director, Center for Implantology;* Clinical Professor of Restorative Sciences. DDS, National University of Iran; Cert., Michael Reese Hospital; Cert., DMD, MScD, Boston University

Barry Jaye Assistant Clinical Professor of Endodontics. BA, University of Bridgeport; DMD, University of Puerto Rico; CAGS, Boston University

Yanling Jiang Assistant Research Professor in Endodontics. DDS, Beijing Medical Univetsity (China); DSc, Boston University

Judith Jones Adjunct Assistant Professor of Periodontology and Oral Biology. DDS, University of North Carolina; MPH, University of North Carolina

M. Marianne Jurasic Clinical Instructor of Restorative Sciences. BS, University of Western Ontario (Canada); DMD, Boston University

Benjamin Kaminer *Chairman and Professor, Department of Physiology, School of Medicine.* MBBCh, University of Witwatersrand (South Africa)

Konstantin Kandror Assistant Research Professor of Biochemistry, School of Medicine. BS, Moscow State University (Russia); PhD, USSR Academy of Sciences

Jon T. Kapala Professor of Pediatric Dentistry. BS, DMD, Tufts University; Cert., MScD, Boston University

Spyros Karatzas Assistant Professor of Periodontology and Oral Biology. DDS, University of Athens (Greece); CAGS, Eastman Dental Center; MS, University of Rochester

Eva R. Kashket Professor of Microbiology, School of Medicine. BSc, MSc, McGill University (Canada); PhD, Boston University

Martin Katz Clinical Instructor of Diagnostic Sciences and Patient Services. BA, Brandeis University; DMD, CAGS, Tufts University

Paul Kaufman Associate Professor of Psychiatry, School of Medicine. MD, Boston University

Howard Kay Assistant Clinical Professor of Restorative Sciences. AA, University of Florida; DDS Emory University; CAGS, Boston University

Herbert L. Kayne Associate Professor of Physiology, Public Health, and Socio-Medical Sciences and Community Medicine, School of Medicine. BS, MS, PhD, University of Illinois

George L. Keleher Associate Clinical Professor of Restorative Sciences. BS, Boston College; DDS, Northwestern University

Sidney Kibrick Emeritus Professor of Pediatrics and Microbiology, School of Medicine. AB, Harvard College, PhD, Massachusetts Institute of Technology; MD, Boston University School of Medicine

Thomas B. Kilgore *Associate Dean for Academic Affairs;* Professor of Oral and Maxillofacial Surgery. BA, University of Rochester; DMD, University of Pennsylvania; Cert., Harvard University FACD

Janet Kirby Clinical Instructor of Diagnostic Sciences and Patient Services. BA, University of Massachusetts; DMD, Boston University

Naum Kitzes Clinical Instructor of Diagnostic Sciences and Patient Services. DMD, Tufts University

Michael Koidin Assistant Clinical Professor of Pediatric Dentistry. BA, University of Michigan; DDS, University of Illinois; MScD, CAGS, Boston University

Celeste Kong Associate Professor of Restorative Sciences. BS, DMD, University of the Philippines; CAGS, DMD, Boston University

Elizabeth Krall Associate Professor of Health Policy and Health Services Research. BS, Pennsylvania State University; MPH, University of Pittsburgh; PhD, University of Pittsburgh

Sandra M. Kranz *Director, Extramural Programs;* Assistant Professor of Diagnostic Sciences and Patient Services. AS, RDH, New York Community College; MS, Boston University

Vasken Kroshian Assistant Professor of Medicine, School of Medicine. BS, MD, American University of Beirut (Lebanon)

Maria Kukuruzinska Associate Professor of Periodontology and Oral Biology. BA, Bryn Mawr College; PhD, Johns Hopkins University

Gilbert Kunken Clinical Instructor of Restorative Sciences. BA, DDS, Temple University; MPH, Columbia University

Herbert Z. Kupchik Professor of Microbiology and Pathology, School of Medicine. BS, Bethany College; MS, PhD, Wayne State University

Mark Lamkin Assistant Research Professor of Periodontology and Oral Biology. BS, MS, California Institute of Technology; PhD, Boston University

Kaare Langeland Adjunct Professor of Endodontics. DDS, Norwegian State Dental School; PhD, Universitetet i Oslo (Norway)

John Lapidus Clinical Instructor of Diagnostic Sciences and Patient Services. BS, DMD, Tufts University

Jose Laracuente Clinical Instructor of Restorative Sciences. BS, University of Puerto Rico; DMD, University of Puerto Rico

Gilbert Larson III Clinical Instructor of Restorative Sciences. BS, Wake Forest University; DDS, Marquette University

Robin Lawrence Lecturer in Diagnostic Sciences and Patient Services. AB, DDS, Columbia University; MPH, University of Michigan

William J. Lehman Professor of Physiology, School of Medicine. BS, State University of New York at Stony Brook; PhD, Princeton University

Robert Lerman Assistant Professor of Periodontology and Oral Biology. BS, Stevens Institute of Technology; MD, Jefferson Medical College; PhD, Massachusetts Institute of Technology

Harold J. Levin Professor of Endodontics. BA, Cert., Boston University; DMD, Tufts University

Burton Levine Assistant Clinical Professor of Oral and Maxillofacial Surgery. BS, Middlesex University; DDS, St. Louis University School of Dentistry; DPH, Harvard School of Dental Medicine

Roy A. Levine Assitant Research Professor of Biochemistry, School of Medicine. BA, Brandeis University; MS, Ohio State University; PhD, Indiana University

Stuart M. Levitz Associate Professor of Medicine; Associate Professor of Microbiology, School of Medicine. BA, MD, New York University

Elinor M. Levy Associate Professor of Microbiology. MA, Brandeis University; PhD, Emory University

Simon Levy Associate Professor of Physiology, School of Medicine. BS, Ecole d'Ingénieurs de Genève (Switzerland); MA, University of Geneva (Switzerland); PhD, Boston University

Robert Lincoln Assistant Clinical Professor of Oral and Maxillofacial Surgery. BA, Brown University; DMD, Tufts University

Weldon Lloyd *Associate Director of Predoctoral Admissions and Student Services;* Associate Research Professor of Periodontology and Oral Biology. BA, DSc, Boston University; MS, Northeastern University

Christine Lo Assistant Clinical Professor of Restorative Sciences. DMD, CAGS, Boston University

Susan Lo *Director, East Boston Neighborhood Health Center;* Clinical Instructor of Pediatric Dentistry.

Warner Lund *Associate Director, Extramural Programs;* Adjunct Clinical Instructor of Diagnostic Sciences and Patient Services. BS, Tufts University; DDS, University of Pennsylvania

George Lundstedt Clinical Instructor of Orthodontics. BA, Yale University; DMD, Tufts University; MScD, Boston University

John McCahan Associate Professor of Medicine, Sociomedical Sciences, and Community Medicine, School of Medicine. AB, MD, University of Pennsylvania

John C. McManama Professor of Restorative Sciences. BS, Boston College; DDS, Loyola University

Philip L. Maloney Professor of Oral and Maxillofacial Surgery. BA, Boston College; DMD, Tufts University

Dr. Timothy Martinez, director of dental services at Geiger Gibson Community Health Center and a clinical instructor of diagnostic sciences and patient services, explains a procedure to two predoctoral students on their APEX rotation.

Madalyn Mann *Director, APEX Program;* Associate Professor of Diagnostic Sciences and Patient Services. RDH, BS, Northeastern University, Forsyth Dental Center; MS, Boston University

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Dr. Paula Friedman, Associate Dean for Administration (center), and dental students make home visits to individuals around the city to assess their dental needs as part of the Home Medical Service of the Boston University Medical Center Hospital.

The University

Boston University, the third-largest independent university in the United States, is a hub of intellectual, scientific, and cultural activity. With more than 2,500 faculty members and more than 29,000 students, it pursues the ideal of a research university — that knowledge is best acquired in the pursuit of new knowledge, and that both undergraduate and graduate students benefit by learning from individuals who are actively engaged in original research.

The Goldman School is part of the Boston Medical Center, located in Boston's South End. Boston University's Charles River Campus extends over 71 acres from the historic Back Bay section of Boston westward along the south bank of the Charles River.

Within the University, 15 Schools and Colleges offer a total of more than 250 degree programs. Academic departments and research institutes serve as small communities for students and scholars, who also participate fully in the excitement and variety of the larger University community.

Founded by a group of Methodist lay leaders, Boston University has always been strongly committed to equality in opportunity, without regard to race, color, creed, sex, or national origin. It was the first institution of higher education in Massachusetts to grant degrees to women, and it graduated the first African American woman MD and the first woman PhD. It stood nearly alone in its early years when it opened its doors to African Americans and international students from all continents. The University's commitment to the recruitment of minorities and women continues today within the student body and the faculty.

The University is a progressive, recognized innovator in health care, science, engineering, communications, management, education, and other areas. The two-year College of General Studies introduced the first college program in the country organized around a team method of instruction. The University initiated accelerated programs in liberal arts/medical education, liberal arts/dental education, and liberal arts/law education. Numerous interdisciplinary programs offer broad possibilities for combining career goals and personal interests.

Boston University is accredited by the New England Association of Schools and Colleges, Inc.; is a member of the Association of Urban Universities, and the Council of Graduate Schools in the United States; and is recognized by the State University of New York.

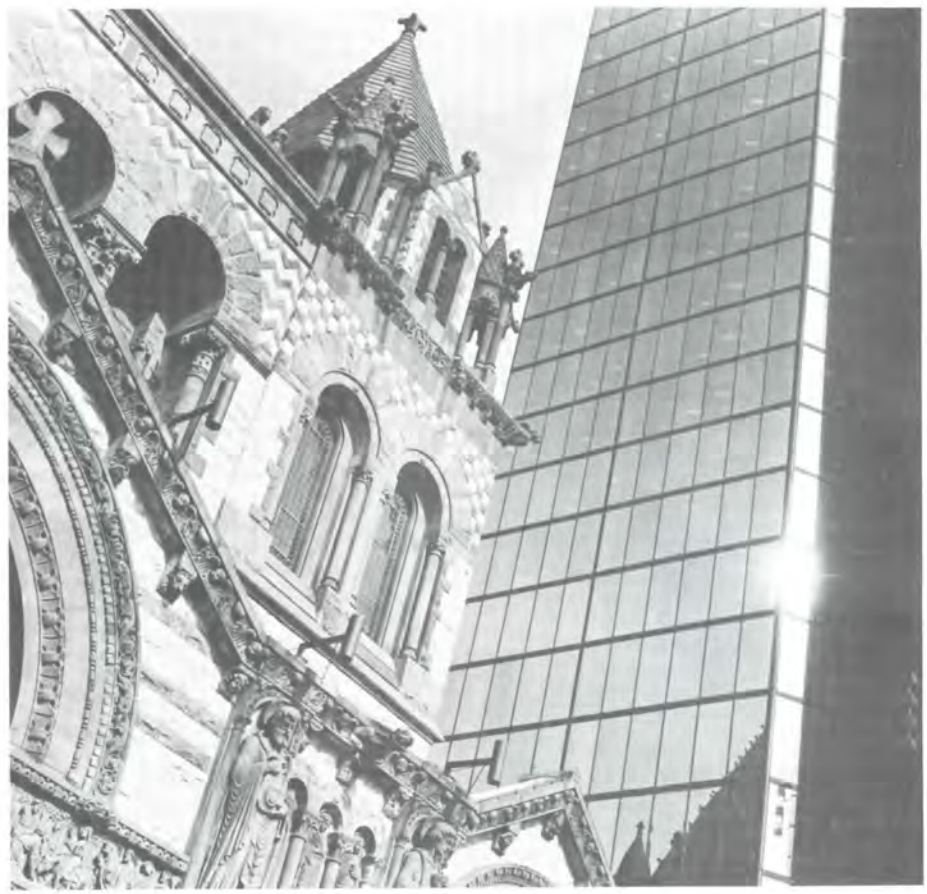
An urban institution from its inception, Boston University has always recognized that its future is linked with the future of its city. Convinced, too, that its students must appraise and take responsibility for the problems of the modern world, the University fosters programs to promote the well-being of Boston's citizens and improve its environment, and to contribute to major undertakings such as the Chelsea Schools initiative.

The City of Boston

Boston is rich in history, old-world charm, and modern vitality. Home to more than 60 colleges and universities, it is an intellectual and cultural center diverse in its people and stimulating in its opportunities, yet relaxed and accessible.

Boston is the largest city in New England and the site of many significant events in early American Colonial and Revolutionary history. Much of that early flavor remains today in its cobbled streets, in its historic landmarks that bring alive Paul Revere's ride and the Boston Tea Party, and in the Federalist row houses on Beacon Hill. A historic seaport that grew to prominence in the days of the China trade and the whaling industry, the city maintains a thriving and picturesque waterfront. The New England Aquarium, one of the foremost in the world, shares the harborside with sightseeing cruise ships, traditional New England fishermen unloading their catches, international cargo traffic, and the U.S.S. *Constitution*, "Old Ironsides." Here, historic treasures intermingle with contemporary skyscrapers, evidence of the city's thriving business and financial community and its leading role in research and technology.

Boston University is perfectly situated to enjoy both the charm and beauty of the city and its cultural and recreational attractions. The campus stretches along the banks of the Charles River, bringing boating and canoeing, as well as jogging and sunning, to its doorstep; yet it is only minutes from the downtown theatre, shopping, government, and financial districts. A short ride on the streetcar brings one to the elegant shops of Copley Square, the sporting events at the Fleet Center, or the endless diversions of the restored Faneuil Hall Market Place. The city's rich cultural and ethnic mix is evident in its varied neighborhoods. The North End boasts superb Italian cuisine, Chinatown has a wealth of restaurants, and smaller enclaves offer Portuguese, Indian, Thai, Vietnamese, Middle Eastern, Jewish, and soul food. This is in addition, of course, to world-class pizza, tacos, and other fast foods necessary to student survival.



Boston is the home of the world-famous Boston Symphony Orchestra, the Boston Pops, and a wealth of music from opera to rock, jazz, and reggae. Many dance and theatre groups perform regularly, and students can take special advantage of the many annual performances at the Boston University School for the Arts and the highly acclaimed resident Huntington Theatre Company. Dozens of museums include the world-renowned Museum of Fine Arts, the Isabella Stewart Gardner Museum, and the Institute of Contemporary Art. Galleries intermingle with elegant boutiques on Newbury Street, and visitors participate in a variety of interactive exhibits at the Museum of Science.

Famously enthusiastic about its professional sports teams, Boston supports the Red Sox, the New England Patriots, the Celtics, and the Bruins. Each April, the Boston Marathon passes through the Boston University campus. Beaches to the north and south, including the famous shores of Cape Cod, are within easy reach by car or bus. For the hiker or skier, the mountains of New Hampshire and Vermont are but a few hours away by car, as are the picturesque shores of Maine.

A splendid place to study, work, or just relax, Boston is consistently voted one of the most desirable U.S. cities in which to live. Few cities in the world can offer so much to every individual.

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Bulletins are available for:
School for the Arts
Graduate Program in Banking Law Studies
College of Communication
School of Education
College of Engineering
College of General Studies
Goldman School of Dental Medicine
Graduate Medical Sciences, School of Medicine
Graduate School of Arts and Sciences
Graduate Tax Program
School of Law
School of Management
School of Medicine
Metropolitan College
School of Public Health
Sargent College of Health and Rehabilitation Sciences
School of Social Work
Summer Term
School of Theology
Undergraduate Programs

Degree and Certificate Programs
Boston University has fifteen Schools and Colleges and one independent program and offers the degree and certificate programs listed below.

College of General Studies
A two-year general education program, with preparation for continuation in the undergraduate programs listed below.

College of Arts and Sciences
BA

School for the Arts
BFA, BFAT, MusB, MFA, MFAT, MusM, MusAD, Artist Diploma, Certificate of Opera Performance, Certificate in Theatre Crafts and Technical Production

College of Communication
BS, MS

Goldman School of Dental Medicine
MS, DMD, CAGS, MSD, DSc

School of Education
BS, MAT, EdM, CAGS, EdD

College of Engineering
BS, MS, PhD

Graduate School of Arts and Sciences
MA, PhD

School of Law
JD, LLM

School of Management
BSBA, MBA, MSMIS, DBA

School of Medicine
MA, MPH, MS, MD, DSc, PhD

School of Public Health
See the School of Medicine

Metropolitan College
AS, BLS, BS, MCJ, MCP, MLA, MS, MSM, MUA

Sargent College of Health and Rehabilitation Sciences
BS, MS, MSOT, MSPT, CAGS, ScD

School of Social Work
MSW

School of Theology
MDiv, MSM, MTS, STM, DMin, ThD

The University Professors
BA, MA, PhD

Boston University also offers a number of dual degree programs. Please refer to individual School and College bulletins for information.

Calendar 1997/98

Semester 1

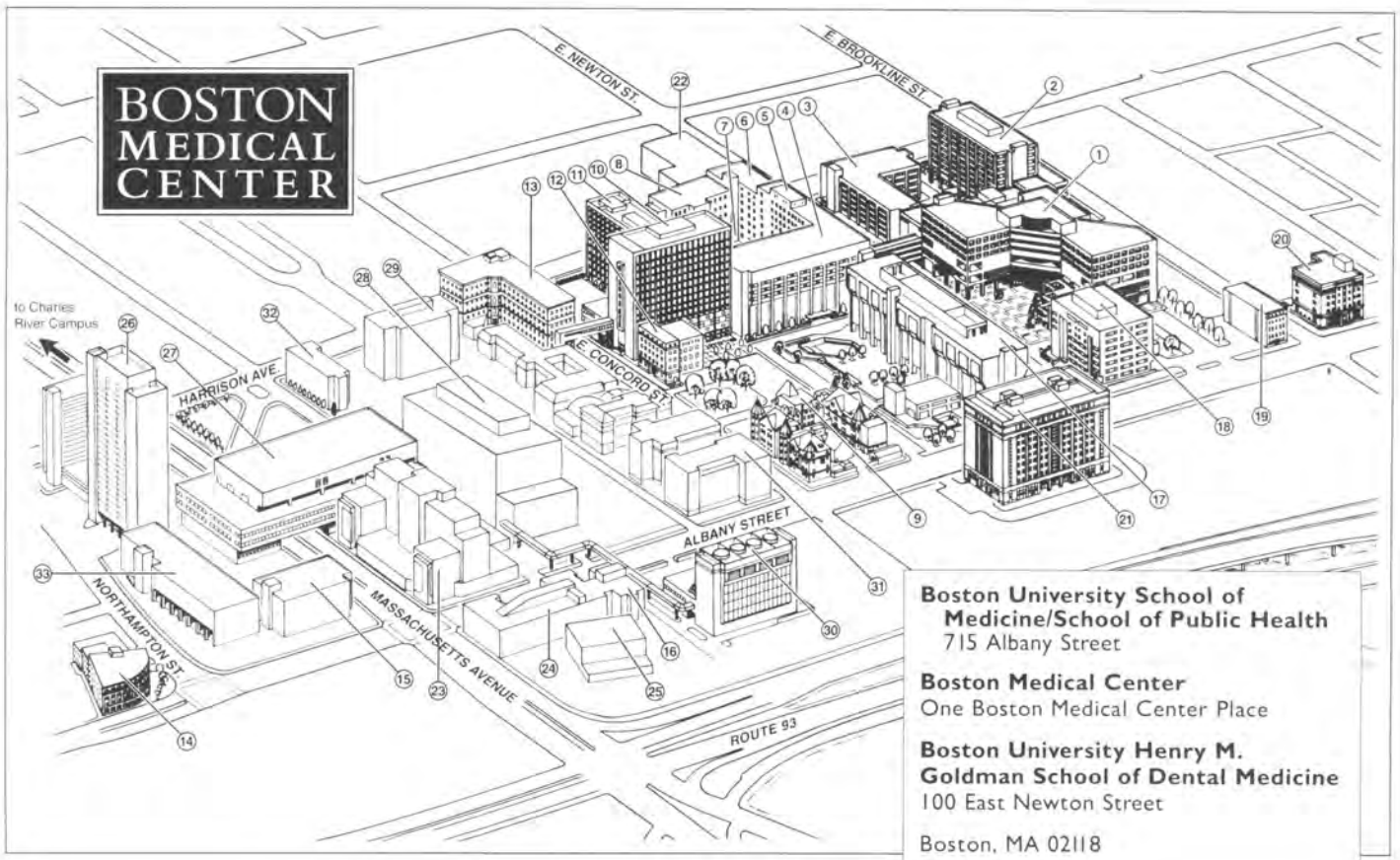
Orientation for Oral and Maxillofacial Surgery students	Friday, June 27, 1997
Orientation for Advanced Education in General Dentistry (AEGD) Prosthodontic and Pediatric Dentistry students	Tuesday, July 1, 1997
Holiday: Independence Day	Friday, July 4, 1997
Orientation for first-year predoctoral students	Monday, August 4, 1997
Classes/Clinics begin for advanced standing students	Wednesday, August 6, 1997
Classes/Clinics begin for third-year students	Monday, August 11, 1997
Classes/Clinics begin for second-year students	Monday, August 11, 1997
Orientation for Orthodontic students	Thursday, August 14, 1997
Holiday: Labor Day	Monday, September 1, 1997
Orientation for first-year postdoctoral and graduate students	Tuesday, September 2, 1997
Classes/Clinics begin for fourth-year students	Tuesday, September 2, 1997
Holiday: Columbus Day	Monday, October 13, 1997
Holiday: Veterans Day	Tuesday, November 11, 1997
Thanksgiving recess begins at noon	Wednesday, November 26, 1997
Classes resume	Monday, December 1, 1997
First semester ends for all students at 5 p.m.	Friday, December 19, 1997

Semester 2

Second semester begins	Monday, January 5, 1998
Holiday: Martin Luther King Day	Monday, January 19, 1998
Holiday: Presidents Day	Monday, February 16, 1998
Holiday: Patriots Day	Monday, April 20, 1998
Classes and clinics end for graduating students	Friday, May 15, 1998
University Commencement	Sunday, May 17, 1998
Holiday: Memorial Day	Monday, May 25, 1998
Classes and clinics end for graduating AEGD, Orthodontic, Oral Surgery, Prosthodontic, Periodontic, Endodontic, and Operative Dentistry students	Tuesday, June 30, 1998

Students observing religious holidays on which classes are scheduled will be given ample opportunity to make up their work; faculty members who wish to observe religious holidays will arrange for another faculty member to meet with their classes or for canceled classes to be rescheduled.

The academic calendar is subject to change without notice.



Boston University School of Medicine/School of Public Health
715 Albany Street

Boston Medical Center
One Boston Medical Center Place

Boston University Henry M. Goldman School of Dental Medicine
100 East Newton Street

Boston, MA 02118

Legend

1 Inpatient Atrium Pavilion Boston Medical Center (East Newton Street Campus main entrance)
2 Doctors Office Building
3 Preston Family Building
4 Evans Building
5 Old Evans Building
6 Collamore
7 Vose Hall
8 Robinson Building
9 Talbot Building
10 Instructional Building (School of Medicine main entrance)
11 Housman Medical Research Center
12 School of Public Health
13 Silvio O. Conte Medical Research Center
14 801 Albany Street
15 Nurses Education Building
16 Maxwell Finland Laboratory
17 Solomon Carter Fuller Mental Health Center (Commonwealth of Massachusetts)
18 Goldman School of Dental Medicine (Goldman School main entrance)
19 Naval Blood Research Center
20 609 Albany Street
21 Center for Advanced Biomedical Research (CABR)
22 Harrison Court
23 Dowling Building
24 Mallory Institute of Pathology
25 Woods Mullen Shelter
26 South Block High-Rise Development
27 Ambulatory Care Center (ACC)
28 New Inpatient Facility (NIF) Boston Medical Center (Harrison Avenue Campus main entrance)
29 Administration Building
30 Power Plant
31 Maternity Building
32 FGH Building
33 South Block Garage

Dining Facilities

Cafeteria, *Atrium Pavilion, second floor*
Cafe, *Doctors Office Building, first floor*
Cafeteria, *Instructional Building, basement*
Cafeteria, *Goldman School, first floor*
Food Court, *ACC, first floor*
Cafeteria, *NIF, second floor*

Public Parking

Doctors Office Building
New Inpatient Facility (NIF)
Parking Lot A
South Block Garage

Major Conference Rooms

C/D Conference Room, *Atrium Pavilion, second floor*
Function Rooms A, B and C, *Atrium Pavilion, second floor*
Preston Conference Room, *Preston Building, first floor*
Keefer Auditorium, *Evans Building, first floor*
Wilkins Board Room, *Evans Building, first floor*
Whitelaw Conference Room, *Old Evans Building, fifth floor*
L-110, L-112, *Instructional Building, first floor*
Bakst Auditorium, *School of Public Health, first floor*
Goldman Auditorium, *Goldman School of Dental Medicine, third floor*
Auditorium/Audiovisual Center, *Goldman School of Dental Medicine, seventh floor*
Dowling Amphitheater, *Dowling Building, first floor*
Conference Rooms A, B and C, *NIF, second floor*

DIRECTIONS TO BOSTON MEDICAL CENTER

The Medical Area is located parallel to the expressway.

FROM THE NORTH:

1. Follow Route 1 (Via Mystic/Tobin Bridge) to I-93 Southeast Expressway
2. Take Exit 18 (Mass Ave./Albany Street)
3. At end of ramp turn right onto Massachusetts Ave.

For directions to your destination, please see below.

FROM LOGAN AIRPORT:

1. Go through the Sumner Tunnel (Route 1A South) to Expressway South
2. Take Exit 18 (Mass Ave./Albany Street)
3. At end of ramp turn right onto Massachusetts Ave.

For directions to your destination, please see below.

FROM THE SOUTH:

1. Take Expressway (Route 3) North
2. Take Exit 18 (Mass Ave./Albany Street)
3. At end of ramp turn right onto Massachusetts Ave.

For directions to your destination, please see below.

FROM THE WEST:

1. Take the Massachusetts Turnpike (Route 90) East to end
2. Take Expressway (Route 3) South
3. Take left Exit 18 (Mass Ave./Albany Street); at end of ramp turn right onto Massachusetts Ave.

For directions to your destination, please see below.

DESTINATIONS:

For Boston Medical Center/Harrison Ave. Campus:

After steps 1, 2, 3:

Take second right onto Harrison Ave.

Boston Medical Center/Harrison Ave. Campus is the first driveway on your right

Visitor parking is on the left at the end of driveway.

For Boston Medical Center/East Newton St. Campus and the BU School of Dental Medicine:

After steps 1, 2, 3:

Take first right onto Albany Street

Take second left onto East Newton Street

BU School of Dental Medicine is on the right side at 100 East Newton Street

Boston Medical Center is also on the right, in the middle of the block at 88 East Newton Street

Paid parking is available on Albany St. opposite East Brookline St. and at the Doctors Office Building on 720 Harrison Ave.

For the BU Schools of Medicine and Public Health:

After steps 1, 2, 3:

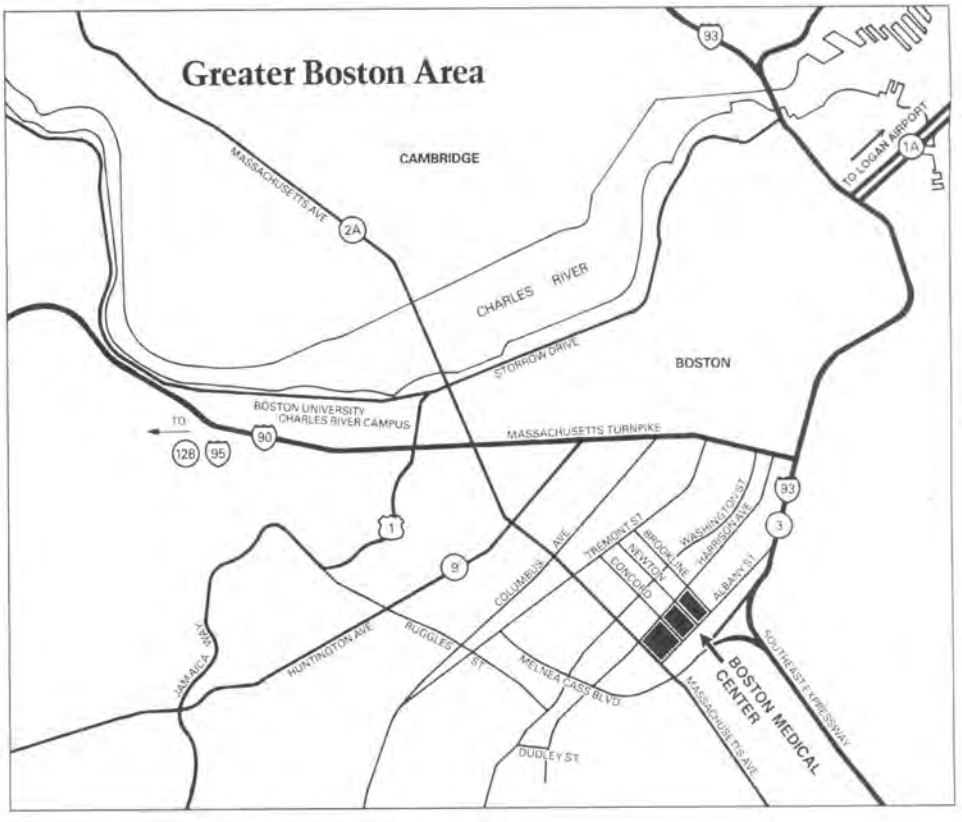
Take second right onto Harrison Ave.

Take first right off Harrison Ave., which is East Concord Street

Halfway down block on left side is 80 East Concord Street

Follow foot path to Schools of Medicine and Public Health

Paid parking is available on Albany St. opposite East Brookline St. and at the Doctors Office Building on 720 Harrison Ave.



Transportation to the Medical Center

Boston Medical Campus and Boston Medical Center form the Interinstitutional Transportation Management Association (ITMA). ITMA works to bring more frequent and accessible public transportation to the Medical Center community and provides information on transportation services. *For transportation information and/or personal commuter assistance, call the Office of Transportation Services at 638-7473.*

Public Transportation

The MBTA provides the following bus services to Boston Medical Center, servicing the Boston University Schools of Medicine, Public Health, and Dental Medicine, and the Boston Medical Center.

Bus 1: Travels from Harvard Square (Red Line) to Dudley Square, via Mass Ave. connecting Central Square (Red Line), Hynes/ICA (Green Line), Symphony (Green Line), and Mass Ave. Station (Orange Line) with the Boston Medical Center. Buses travel along Mass Ave. as far as Albany St., then continue to Dudley Square Bus Station. Service is provided every 10 minutes. An abbreviated schedule is available on weekends and holidays. *Note:* A free bus transfer is available at Mass Ave. Station. A subway pass is valid between Dudley and Mass Ave. Stations only.

Bus 8: Travels from the University of Massachusetts, Harbor Point Campus, connecting with JFK/UMass (Red Line) to Kenmore Square (Green Line) via BMC. It connects the Medical Center with the Orange Line at Ruggles Station. Buses generally run every 15 minutes during peak hours. An abbreviated schedule is available on weekends and holidays.

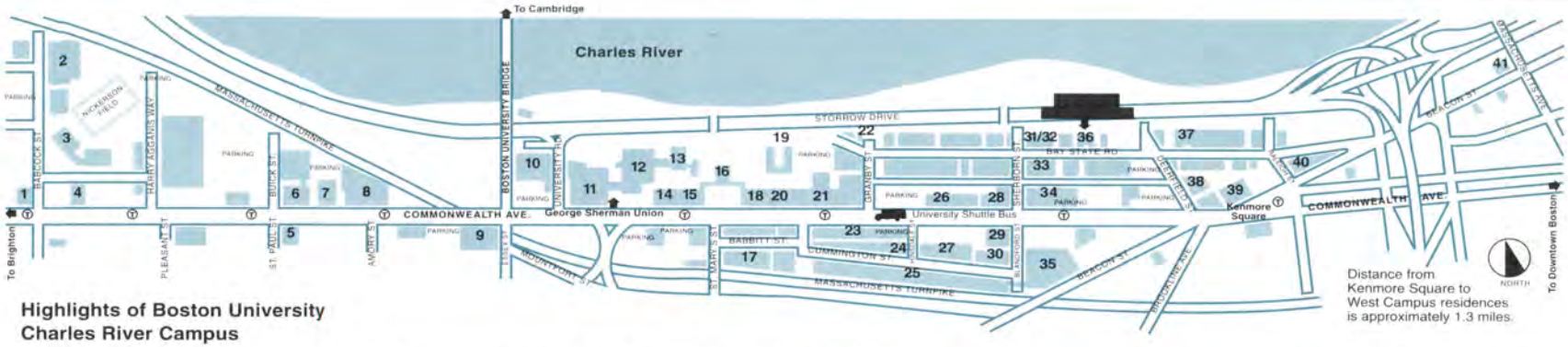
Bus 10: Travels from Copley Square (Green Line) to City Point in South Boston, connecting Back Bay Station (Orange Line) and Andrew station (Red Line) with BMC. Buses provide service every 20 minutes during peak hours. An abbreviated schedule is available on weekends and holidays.

Bus 47: Service from Broadway Station (Red Line) to Central Square, Cambridge (Red Line). This bus travels on Albany St. and connects with Dudley Bus Station, Ruggles Station (Orange Line), Fenway Station (Green Line) and the Longwood Medical Area. Buses generally run every 20 minutes during peak hours. There is an abbreviated schedule with *no service to Broadway Station* on weekends and holidays.

Crosstown Bus/CT1: Operates every 15 minutes during peak hours from 6:30 am to 6:30 pm, Monday through Friday *ONLY.* It travels along Mass Ave. from Central Square in Cambridge (Red Line) with stops including Hynes/ICA (Green Line), Symphony Station (Green Line), Mass Ave. Station (Orange Line), BMC/Harrison Ave. and BMC/East Newton St. *Note:* Subway passes are accepted on this bus.

Crosstown Bus/CT3: Operates approximately every 20 minutes during peak hours from 6:30 am to 6:30 pm, Monday through Friday ONLY. This bus travels from Andrew Station (Red Line) to the Longwood Medical Area, connecting with the Orange Line at Ruggles Station. After 6:30 pm, there are additional runs from BMC to Longwood Medical at 6:38 pm and 7:43 pm, and from BMC to Andrew Station (Red Line) at 6:52 pm, 7:22 pm and 8:22 pm. *Note:* Subway passes are accepted on this bus.

Bus 49: Service on Washington Street runs directly from Dudley Square to Downtown Crossing (close to New England Medical Center and Chinatown stations [Orange Line] and Downtown Crossing [Red Line]) providing service approximately every 10 minutes during peak hours. Service is available seven days a week. *Note:* Subway passes are accepted and a free transfer is available from the New England Medical Center outbound towards Dudley Square. An abbreviated schedule is available on weekends and holidays.



Highlights of Boston University Charles River Campus

SCHOOLS AND COLLEGES

School for the Arts, 855 Comm. Ave. **8**

College of Arts and Sciences, 725 Comm. Ave. **18**

College of Communication, 640 Comm. Ave. **27**

School of Education, 605 Comm. Ave. **28**

College of Engineering, 44 Cummington St. **25**

College of General Studies, 871 Comm. Ave. **7**

Henry M. Goldman School of Dental Medicine, 100 E. Newton St. (not on map)

Graduate School of Arts and Sciences, 705 Comm. Ave. **20**

School of Hospitality Administration, 808 Comm. Ave. **9**

School of Law, 765 Comm. Ave. **13**

School of Management, 595 Comm. Ave. **34**

School of Medicine, 80 E. Concord St. (not on map)

Metropolitan College, 755 Comm. Ave. **14**
Science and Engineering Program, 808 Comm. Ave. **9**

Sargent College of Health and Rehabilitation Sciences, 635 Comm. Ave. **26**

School of Social Work, 264 Bay State Rd. **19**

School of Theology, 745 Comm. Ave. **15**

The University Professors, 745 Comm. Ave. **15**

MAJOR RESIDENCES

Danielsen Hall, 512 Beacon St. **41**

Hamilton House, 1110 Commonwealth Ave. (not on map)

Myles Standish Hall, 610 Beacon St. **40**

Shelton Hall, 91 Bay State Rd. **37**

South Campus (not on map)

The Towers, 140 Bay State Rd. **33**

Warren Towers, 700 Comm. Ave. **23**

West Campus, 273–277 Babcock St. **3**

1019 Commonwealth Avenue 1

UNIVERSITY FACILITIES

Academy, Boston University, 1 University Rd. **10**

Admissions Reception Center, 121 Bay State Rd. **36**

Art Gallery, University, 855 Comm. Ave. **8**

Barnes & Noble at Boston University, 660 Beacon St. **39**

Biological and Physics Research Buildings, 3–5 Cummington St. **30**

Case Athletic Center, 285 Babcock St. **2**

The Castle, 225 Bay State Rd. **22**

Center for English Language and Orientation Programs, 890 Comm. Ave. **5**

Chancellor's Office, 147 Bay State Rd. **31**

Comptroller, 881 Comm. Ave. **6**

Concert Hall, 855 Comm. Ave. **8**

Development and Alumni Relations, 19 Deerfield St. **38**

Financial Assistance, 881 Comm. Ave. **6**

George Sherman Union, 775 Comm. Ave. **11**

Housing Office, 985 Comm. Ave. **4**

Information Technology, 111 Cummington St. **24**

International Students and Scholars Office, 19 Deerfield St. **38**

Marsh Chapel, 735 Comm. Ave. **16**

Martin Luther King Jr. Center, 19 Deerfield St. **38**

Metcalf Science Center, 590 Comm. Ave. **35**

Morse Auditorium, 602 Comm. Ave. **29**

Mugar Memorial Library, 771 Comm. Ave. **12**

Photonics Research, Center for, 22 Babbitt St. **17**

President's Office, 145 Bay State Rd. **32**

Registrar, 881 Comm. Ave. **6**

Student Health Services, 881 Comm. Ave. (West) **6**

Students, Dean of, 775 Comm. Ave. **11**

Summer Term, 755 Comm. Ave. **14**

Theatre, 264 Huntington Ave. (not on map)

The Tsai Performance Center, 685 Comm. Ave. **21**

University Information Center, 771 Comm. Ave. **12**

● **MBTA Stops**

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Accreditation

The University as a whole is accredited by the New England Association of Colleges and Secondary Schools, is recognized by the State University of New York, and is a member of the following agencies: the American Council on Education, the Association of American Colleges, the Association of Urban Universities, and the Council of Graduate Schools in the United States.

The Goldman School is accredited by the Commission on Dental Accreditation of the American Dental Association.

Second-class postage paid
at Boston, MA and at additional
mailing offices.

To provide superior education to dental professionals throughout their careers.

To pursue advanced, basic, and clinical research in oral medicine.

To offer outstanding health care services to the community within a respectful and supportive environment.

BOSTON
UNIVERSITY

Boston University
(USPS 061-540)
Henry M. Goldman School of
Dental Medicine Bulletin
100 East Newton Street
Boston, Massachusetts 02118