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Boston University School of Medicine: 1999-2001

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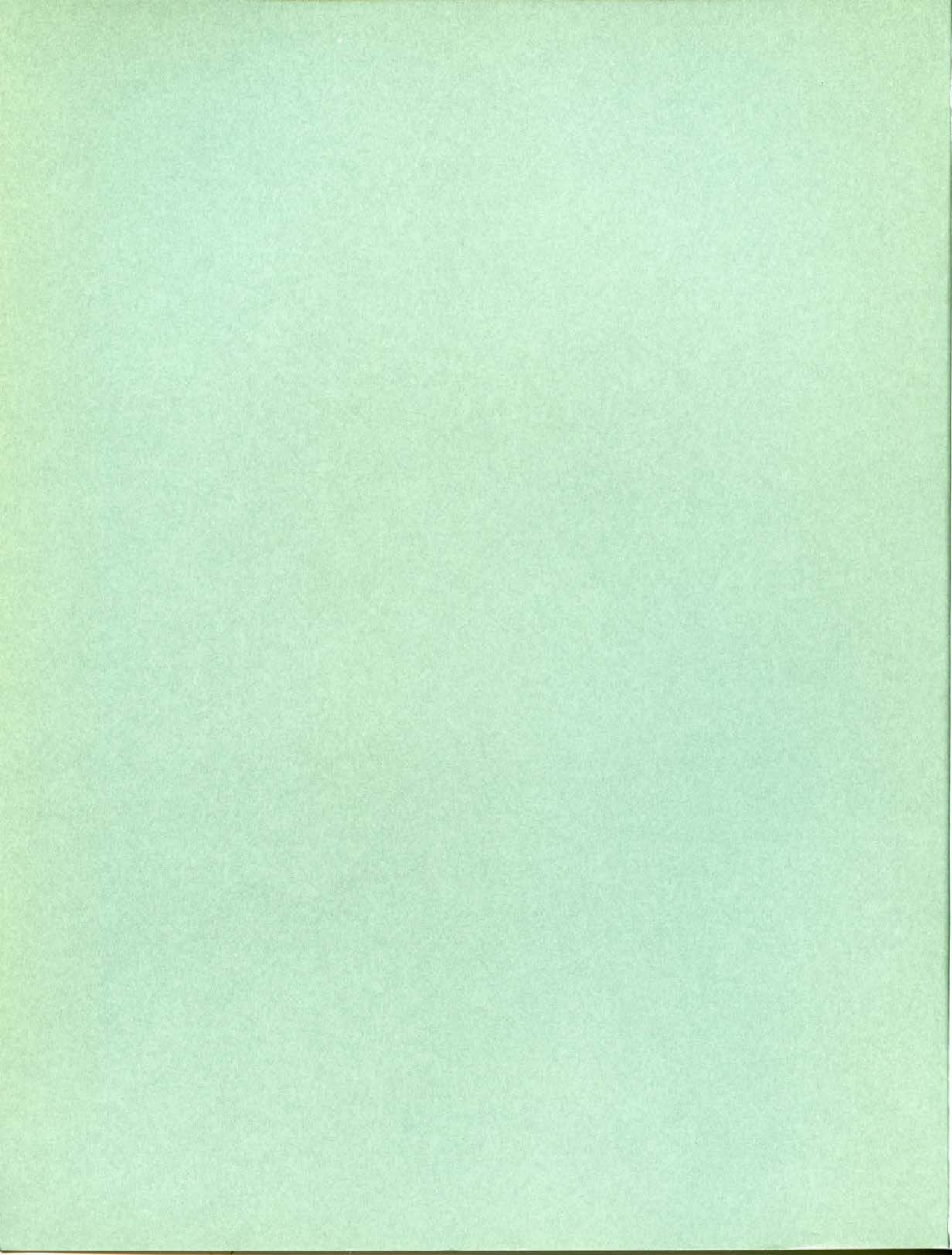
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BOSTON UNIVERSITY
SCHOOL OF
MEDICINE

1999/2001

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BOSTON MEDICAL



BOSTON UNIVERSITY
SCHOOL OF
MEDICINE



1999/2001

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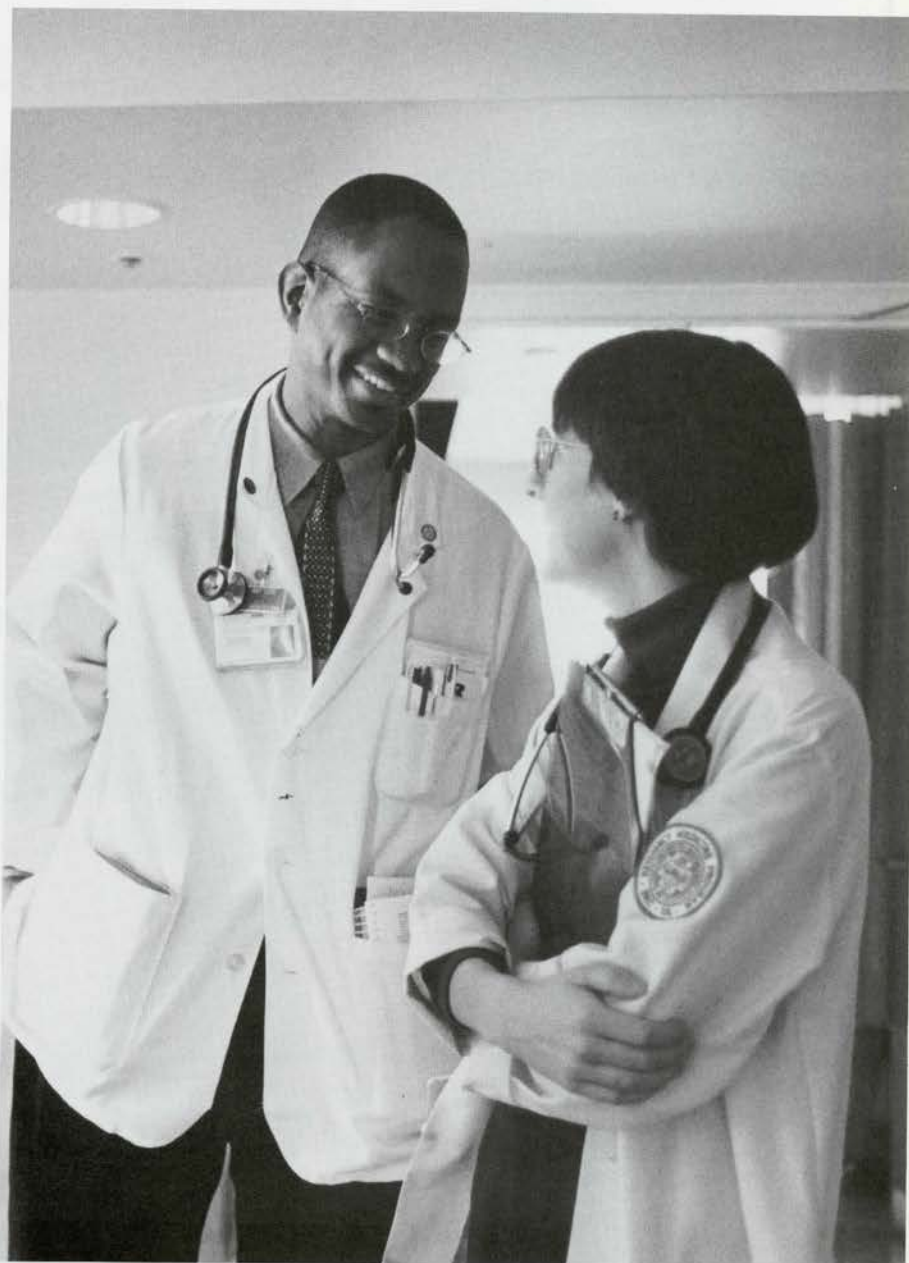
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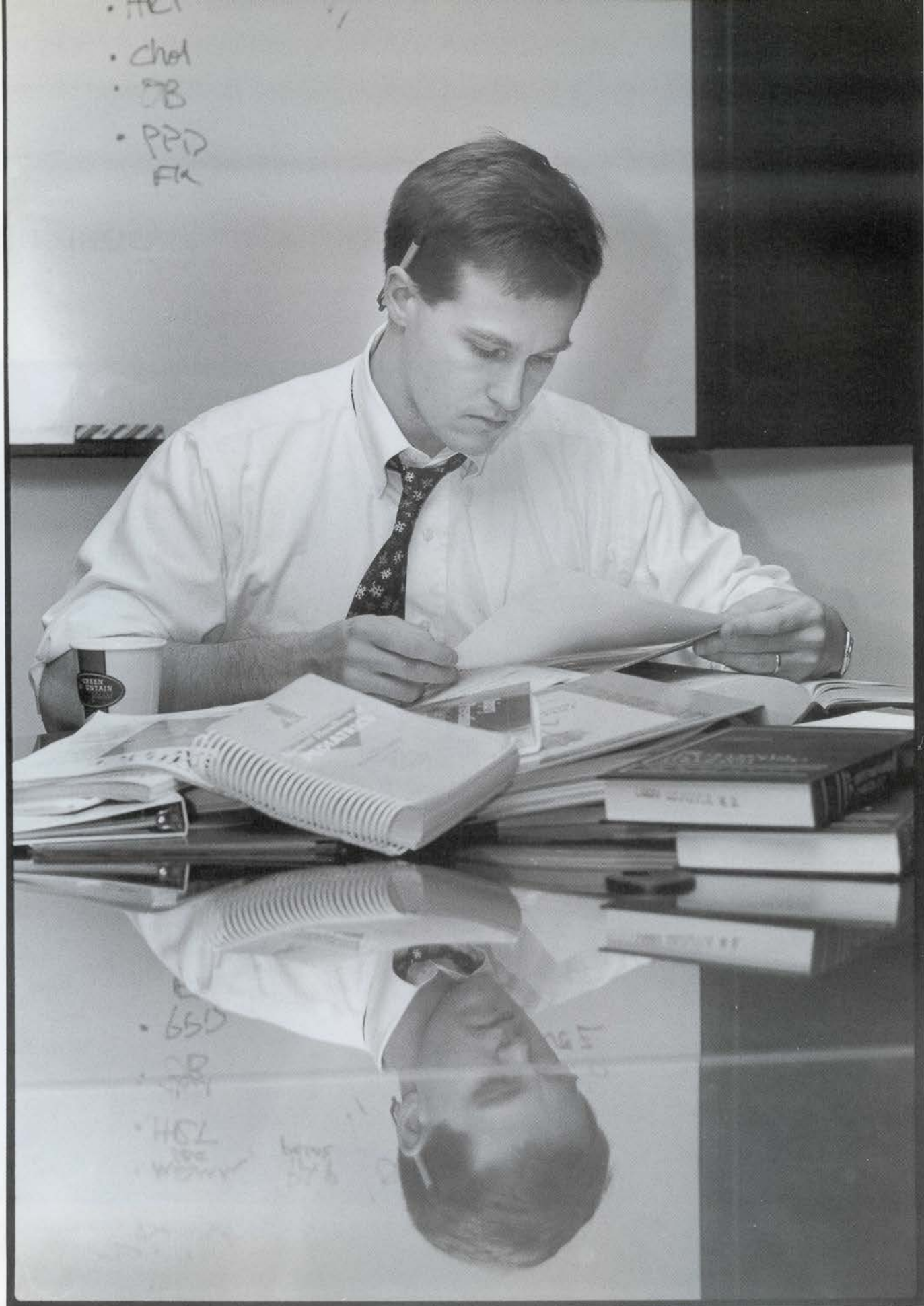
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Almer Ray Love II, '00, checks with his intern, Mindy Bard, MD, as part of the Obstetrics/Gynecology Clerkship.



James Christian, '00, prepares for an exam.

Boston University School of Medicine

The Vision: *to become the model for the urban health center of the 21st century.*

Now, more than ever before, the focus of basic medical research at the School of Medicine targets the molecular and cellular aspects of urban diseases while clinical care links innovations in the lab to clinicians practicing in a network of neighborhood health centers and community hospitals.

Since 1848, *this institution has practiced community-oriented patient care.*

The first classes of instruction at the Boston Female Medical College, soon after named the New England Female Medical College, began in November 1848. Over the next 25 years this institution, the first medical college for women in the world, produced 98 graduates among whom was the first African-American female physician, Rebecca Lee, MD.

Beset by problems in 1872, the Female Medical College merged with Boston University in 1873. The School, integrated since 1864 and coeducational since 1873, won recognition from the Flexner Report for its excellent laboratories. Since the first decade of the century the faculty has consistently ranked among those on the frontiers of scientific and medical knowledge.

A good neighbor in the South End, the School's Home Medical Service has provided home visits for Boston citizens for more than 125 years. In 1995, the School of Medicine won the Association of American Medical College's Outstanding Community Service Award.

Today, Boston University School of Medicine sits at the hub of a modern urban academic health center which includes Boston Medical Center, two VA hospitals, two graduate schools, BioSquare, and a growing number of biotechnology firms. With its clear leadership in clinical medical research the School steadfastly pursues its mission to continue as a model urban medical center.

First Year

Guiding students to an understanding of normal structure and function of the human body—Gross Anatomy, Histology, Biochemistry, Physiology, Endocrinology, Neurosciences, Immunology, Genetics

... And across a spectrum of human development and social organization—Psychiatry, Essentials of Public Health

Year I

AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY
Vacation	Orientation	Anatomy			Vacation	Neurosciences	Biochemistry	Biochemistry			Vacation
		Histology					Physiology	Physiology	Endocrinology		
		Psychiatry					Essentials of Public Health	Essentials of Public Health	Immunology		
		Integrated Problems (IP)					IP	IP	Genetics		
		Intro.—Clinical Medicine (ICM)					ICM	ICM			

Integrated Problems

—small-group, problem-based learning focused on real-life problems

Introduction to Clinical Medicine

Patient contact from the first week of school teaches students how to isolate and define the province of Medicine.

"They must define the social factors—issues of gender, age, violence, family, and substance abuse—and consider how they influence the clinical encounter. This examination of social factors helps define the physician's responsibility."
Phillip S. Freeman, MD

"Students feel as though they are meeting people, not just cases," says Lorraine Stanfield, MD, a clinician who serves as a course facilitator at Dorchester House, a nearby multiservice neighborhood health center. "In one case, students meet a fictitious Theodore Wright who presents certain symptoms. The students feel this is a person with a job, a home, and a family. After brainstorming together, students go back to lecture and listen a lot harder to what the professor is saying about digoxin because they've "met" a patient who was on that medication.

From Cassandra Lee's, '01, notes:

Savannah Star, hospitalized for three days post-partum has decreasing blood pressure, increasing heart rate, and other signs all pointing to internal bleeding of some sort. What are the learning issues? What are the complications of c-sections? Did the physicians wait long enough to perform the c-section (it was her first birth, a few cm. dilated and only eight hours along)? I'll take the "complications of" and look up on MEDLINE and also check in Harrison's.

Second Year

First Semester: Microbiology and Infectious Diseases, Pharmacology, Pathology, Psychiatry

Year 2

AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	
Vacation	Microbiology & Infectious Diseases				Vacation	Biology of Disease I		Vacation	Biology of Disease II		Vacation	
	General Pathology											
	Pharmacology					Psych			Reading	USMLE Step I		
	Integrated Problems (IP)					IP						IP
	Intro.—Clinical Medicine (ICM)					ICM						ICM

Second Semester: Biology of Disease—a systems-based pathophysiology course to integrate basic science with clinical practice

“Halfway through the second year, students feel a lot of stress: a few weeks away are Part I of the United States Medical Licensure exam, and the transition to third year. This course helps make the transition from the basic sciences to the world of clinical medicine. The exciting aspect is that they begin to hear medicine in the clinical idiom and all of a sudden the knowledge becomes immediate and applicable.”

John McCahan, MD
Professor of Family Medicine
Associate Dean for Academic Affairs
Course Manager, Biology of Disease



“Biology of Disease integrates everything we’ve done. We’re presented with a case and after we examine the socio-economic aspects of the patient’s case, we look at the anatomy, physiology, endocrinology, neurology, and pathology. We then arrive at a diagnosis, an idea of what’s wrong with the patient, and how treatment could improve or worsen the condition.”
Dorette Noorhasan, '02

For the MD/PhD candidate, two or three years of lab research precede the clinical years. Mark Kraus, MD, PhD, '98, completed his research in the laboratory of Conan Kornetsky, PhD, professor of psychiatry and experimental therapeutics, studying mechanisms involved in the rewarding effects of abused substances.

Third Year

Direct-supervised clinical work in multiple settings:

Boston Medical Center
Community and VA Hospitals
15 Neighborhood Health Centers—Boston HealthNet
Physicians' Offices

Year 3 (in various combinations)

JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Medicine		Surgery		Pediatrics		Obstetrics	Psychiatry	Family Medicine	Vacation		
11 weeks		11 weeks		6 weeks		6 weeks	6 weeks	6 weeks	4 weeks		

Caring for Patients in their Communities

Patricia Zub, '96

"I like outpatient care. It provides the opportunity to follow patients over the course of time, and to see how the doctor-patient relationship develops. This level of involvement with the East Boston Neighborhood Health Center has shown all of us how physicians become part of a community and have an effect on people's health and well-being."



6:15 a.m. Kit Leaning, '99

Pediatrics Ward—I prepare to present my patients at 7 a.m. rounds. First, I check my notes on baby Boy M—a 7-day-old infant with possible in utero exposure to syphilis and HIV, and a brother who died of HIV-complications at the age of 3—to make sure I know the plan for the day. While his mother won't consent to HIV testing, she will consent to treatment for him, so he receives AZT. As I watch him sleep for a moment, I think what a chunky, beautiful baby he is.

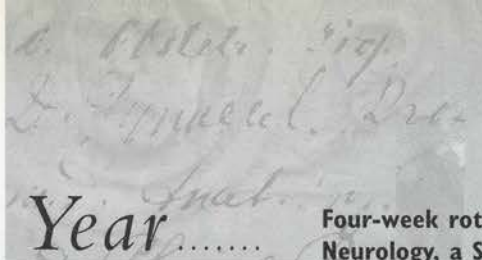


I then check on another of my patients—an 18-year-old woman with active pulmonary tuberculosis. She's awake, full of questions and wants a cigarette. I examine her and talk to her through my blue particulate mask.

For Daniel Riskin, '99, reading is part of pediatric care.



Fourth Year



Four-week rotations in Radiology, Neurology, a Sub-Internship, and the Geriatric Home Service...and up to 20 weeks of electives.

Year 4 (in various combinations)

JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
Radiology	Geriatrics	Sub-Internship	Neurology	Electives—20 weeks Vacation—12 weeks						
4 weeks	4 weeks	4 weeks	4 weeks							

The Geriatric Home Service

Boston University School of Medicine students have been making housecalls in the South End since 1875 as part of the oldest medical school-based home visitation program in the United States.



More than half the class has "outside" electives at academic health centers, rural clinics and military installations.

20% of seniors participate in International Electives

20% of seniors engage in research electives

...and then, on the 3rd Thursday in March, Match Day.

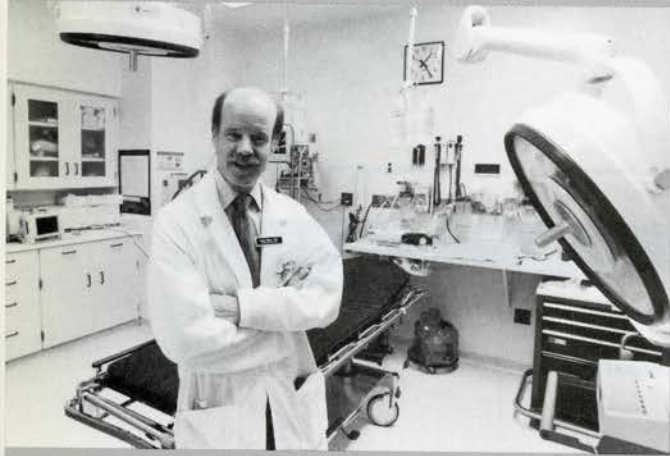
Two New Departments

Emergency Medicine

Peter Moyer, MD

Chairman of the Department and Professor of Emergency Medicine

"Emergency Medicine is a very service-oriented field, operating twenty-four hours a day, seven days a week. For medical students it is a wonderful learning environment because it provides first contact with undifferentiated illness of all types—psychiatric to trauma—in all ages. It offers a window into the community's state of health. Because Emergency Medicine is problem-based, it is a perfect match for the Integrated Problems course in which several Emergency Medicine faculty teach. Emergency medicine teaches the significance of teamwork—working with nurses, EMTs, social workers and clerks—in the provision of health care. In addition, faculty and residents have conducted research in areas pertinent to their patients: chest pain, substance abuse, asthma, and ectopic pregnancies."



Family Medicine

Larry Culpepper, MD, MPH

Chairman of the Department and Professor of Family Medicine

"We get students involved in real, day-to-day doctoring early in medical school and progressively build their skills. In addition to running the clinical clerkship, our faculty participate in Introduction to Clinical Medicine I and II and we place students with practicing doctors to watch, listen, and learn. The tertiary care available in Boston is unsurpassed in the world, and that provides a wonderful environment for educating medical students and residents, and providing care to special populations. Now, the Department of Family Medicine is helping to bring that same level of excellence to meeting the day-to-day health care needs of people in the community."



Opportunities for Research



Deborah J. Cotton, MD, MPH
Professor of Medicine and Epidemiology and Biostatistics
Assistant Provost
Director, Office of Clinical Research



"Clinical Research makes an academic health center unique — here at BUMC we are committed to state-of-the-art clinical research in an environment that reflects a historic commitment to the dignity of our patients."

"Students can be involved in every aspect of clinical investigation from participating in the design of clinical trials to following patients in outcome studies and learning techniques to evaluate the cost effectiveness of new therapies."

Core Facilities

- state-of-the-art laboratory animal facility equipped with a BL3 biocontainment and surgical suites
- transgenic facility
- confocal laser scanning microscope
- cryo-electron microscope facility
- NMR spectroscopy core
- mass spectrometry resource
- DNA/protein core
- macromolecular X-ray crystallography core
- computation for structural biology core

National Centers of Excellence

Allergy, Asthma and Immunology Diseases Clinic/Research Center
Alzheimer's Disease Center
Clinical Research Unit for Alcoholism Treatment
Multipurpose Arthritis and Musculoskeletal Diseases Center
Specialized Center of Research in Coronary Heart Disease in Blacks
Boston Environmental Hazards Center
Specialized Center of Research in Hypertension
National Mass Spectrometry Center
National Center for Post-Traumatic Stress Disorder
Specialized Center of Research in Pulmonary Fibrosis
Center for Sexually Transmitted Diseases
National Center of Excellence in Women's Health

A robust research environment provides opportunities for electives in research and combined degree programs

Taking a Year off For Basic Research In a Clinical Department

Cassandra Lee, '01

"We're looking at the molecular triggers in bone healing," reports Cassandra. "I am working on two projects: in one, we're studying distraction osteogenesis in the rat model to better understand the effects of weight bearing on bone healing. The other is a closed fracture model with transgenic mice, looking at various inflammatory factors and initiation of bone healing. The research experience is teaching me to examine how I approach problems and eventually will help me understand more of what the patient is experiencing."

Cassandra's advisor, Timothy Foster, MD, (class of '86, an assistant professor of orthopedic surgery) was also her preceptor in the Introduction to Clinical Medicine course in years I and II. Aware of her interest in research, he told her about the new Musculoskeletal Research Lab in the Department of Orthopedic Surgery. She was offered an opportunity in the lab and decided to take a break after the National Board exams at the end of the second year to take a year off for research. She now earns a modest stipend as a research assistant and will enter the clinical clerkships in the spring with the class of '01.

Overview and Facilities

715 Albany Street
Boston, MA 02118

Administration

John R. Silber, BA, MA, PhD, LLD, LHD,
Chancellor of the University
Jon Westling, BA, LLD, *President of the University*
Aram V. Chobanian, MD, *Dean, School of Medicine; Provost, Medical Campus*
Norman G. Levinsky, MD, *Associate Provost*
Deborah J. Cotton, MD, MPH, *Assistant Provost*
Marcelle Willock, MD, *Assistant Provost*
Robert F. Meenan, MD, MPH, MBA, *Dean for Public Health*
John F. McCahan, MD, *Associate Dean for Academic Affairs*
Barry M. Manuel, MD, *Associate Dean for Continuing Medical Education*
Arthur J. Culbert, PhD, *Associate Dean for Student Affairs and Educational Programs*
John B. Chessare, MD, MPH, *Associate Dean for Clinical Affairs*
Kenneth C. Edelin, MD, *Associate Dean for Students and Minority Affairs*
Carl Franzblau, PhD, *Associate Dean for Graduate Medical Sciences*
John F. O'Connor, MD, *Associate Dean for Admissions*
Charles Terrell, MA, *Associate Dean for Student Financial Affairs*
Selwyn A. Broitman, PhD, *Assistant Dean for Admissions*
Elaine J. Alpert, MD, *Assistant Dean for Student Affairs*
Suzanne Sarfaty, MD, MPH, *Assistant Dean for Student Affairs*
Elaine Ullian, MPH, *Chief Executive Officer, Boston Medical Center*
Richard J. Towle, BA, MA, *Senior Vice President for Administrative Affairs*
William J. Gasper, CPA, MBA, *Associate Vice President for Business Affairs/Medical Campus*
Michael J. Donovan, JD, *Assistant Vice President, Administrative Services*

Elizabeth B. Stengel, BA, *Director of Government Relations*
David S. Ginn, MLS, PhD, *Librarian*
Rachael H. Paquette, MEd, *Registrar and Coordinator for Advanced Standing Admissions*
Peter Reich, MPH, *Assistant to the Dean*
Ronald Vickers, BS, BA, *Director, Plant Services*

Boston University School of Medicine celebrated its sesquicentennial in 1998. Boston University established the School of Medicine in 1873 by merging with the New England Female Medical College, which had been founded in 1848 as the first medical college for women in the world. The School of Medicine became a constituent member of the Boston University Medical Center in 1962. It is situated in the South End of Boston adjacent to Boston Medical Center, a major teaching hospital.

The School of Medicine offers multiple pathways leading to the MD degree, including a four-year program. A seven-year program, begun in 1960, leads to the BA and MD degrees; students also have the option of completing this program in six years. The Modular Medical Integrated Curriculum (MMEDIC), a non-accelerated, eight-year program leading to the BA and MD degrees, began in 1977. A similar program, Early Medical School Selection Program, has been developed to increase the minority physician population. In addition, the School of Medicine provides an alternative curriculum which allows students the option of completing the first year of medical school in two academic years. The School of Medicine and the Division of Graduate Medical Sciences offer combined programs leading to an MD/PhD degree. Programs leading to both the MD/MPH and MD/DSc degrees are offered through the School of Medicine and the School of Public Health.

Prospective candidates are attracted by the dual advantages of comparatively small classes that afford opportunity for consider-

able personal contact with members of the faculty, and the benefits of study in a great medical center where there are diverse settings for clinical instruction as well as externships in affiliated and neighboring hospitals and neighborhood health centers. In the fall of 1992, on-campus housing became available to medical students in Harrison Court, a completely renovated elegant nineteenth-century structure on Harrison Avenue.

The entering class in 1968 was the first class to start its medical education in the Instructional Building. This fourteen-story structure includes space for student activities, administrative offices, two auditoriums, home-base multidisciplinary teaching laboratories, faculty offices, research laboratories, and a three-floor library. The Instructional Building is adjacent to and connects with the ten-story Housman Research Building and the Silvio O. Conte Medical Research Center. The first floor of the Housman Building was renovated and introduced in 1995 as the McNary Learning Center, featuring several new seminar rooms, conference rooms, and a computer room.

The many intensive research projects that are being conducted offer numerous opportunities to students with investigative talents.

The Boston University School of Medicine is known for the outstanding interrelationship between the student body and members of the faculty. Its purpose is the advancement of the knowledge and practice of medicine through increased wisdom, improved skill, and a broader appreciation and understanding of humanity.

Accreditation

Boston University is accredited by pertinent agencies in the educational fields which it serves.

The University as a whole is accredited by the New England Association of Schools and Colleges and is a member of the following: American Association of University



The figure of Aesculapius has graced the Medical School entrance for more than a century.

Women, American Council on Education, Association of American Colleges, Association of Urban Universities, Council of Graduate Schools in the United States, EDUCOM Interuniversity Communications Council, Institute of International Education, and National Association of Schools and Colleges of the United Methodist Church.

Boston University School of Medicine is accredited by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the Council on Medical Education of the American Medical Association.

Residency programs at the School of Medicine are accredited by the Accreditation Council for Graduate Medical Education of the American Medical Association.

The School of Public Health is accredited by the Council on Education for Public Health.

The School of Medicine's continuing medical education programs are accredited by the Accreditation Council for Continuing Medical Education.

Clinical Facilities

Boston Medical Center is a private, not-for-profit, 547-bed academic medical center emphasizing community-based care. Its mission is to provide consistently excellent and accessible health services to all, regardless of status or ability to pay. This new hospi-

tal, created in 1996, represents the country's first full-asset merger of two city hospitals with a private academic medical center.

In addition, Boston Medical Center serves as a leading regional referral facility, offering specialized tertiary medical services for complex health problems, and is a preeminent research institution.

Boston Medical Center, the principal teaching hospital of the Boston University School of Medicine, offers a full spectrum of pediatric and adult care services, including primary and advanced specialty care, as well as outreach programs, particularly for the city's homeless population. Nationally recognized services include programs in cardiovascular medicine, cancer, trauma, Parkinson's disease, arthritis, infectious diseases including AIDS, and spinal cord injuries. In addition, the hospital operates the nation's first home medical program, which began in 1875.

Focusing strongly on urban health, Boston Medical Center is a founder of the Boston HealthNet, a partnership of the hospital, Boston University School of Medicine, and 13 neighborhood health centers located throughout Boston. HealthNet members provide outreach, prevention, primary care, and dental services during nearly one million patient visits per year.

The hospital annually serves more than 420,000 outpatient visits and 85,000 emergency department visits to the city's only cer-

tified Level-One trauma center. It has more than 3,700 employees, 1,000 physicians, and an annual operating budget of \$450 million.

The hospital is approved for internship and residency training by the Accreditation Council for Graduate Medical Education of the American Medical Association.

Research A comprehensive research program, including basic and applied projects, is carried on by the Evans Memorial Department of Clinical Research, by the Smithwick Foundation for surgical research, and by the various divisions and departments of the School of Medicine. Extensive investigations are underway in the fields of arthritis, cancer, cardiovascular disease, dermatology, endocrinology, epidemiology, gastroenterology, general medicine, geriatrics, hematology, immunology, infectious disease, metabolism, nephrology, nutrition, pulmonary disease, radioactive isotopes, and radiology.

The Centers for Advancement in Health and Medicine, completed in 1983, is a 75,000 gross square-foot research building that houses the Hubert H. Humphrey Cancer Research Center, the Arthritis Center, the Pulmonary Center, and the Departments of Biochemistry and Dermatology.

The Center for Advanced Biomedical Research (CABR) provides 160,000 square feet of research space and numerous new core facilities and technologies to scientists at the medical campus. Core research units include a computing center for studies in structural biology, drug design, and gene mapping; BL-3 containment facilities for studies using HIV and other viruses; X-ray diffraction laboratory; nuclear magnetic resonance spectroscopy center; DNA and protein analytic center; digital X-ray angiographic laboratory; cryo-electron microscopy facility; and mass spectroscopy center. In addition, the CABR has a state-of-the-art, fully accredited animal care center which is available to all scientists at the medical campus. A second building is slated to open late in 1999.

Veterans Administration Medical Center The Boston Veterans Administration Medical Center, located in Jamaica Plain, is a well-equipped 535-bed general hospital. Its training program and medical staff appointments are under the direction of a Deans' Committee chaired by the Dean of Boston University School of Medicine. Instruction of Boston University students is carried out in the Medicine, Surgery, Psychiatry, Neurology,

Ophthalmology, Orthopedic Surgery, Otolaryngology, Radiology, Rehabilitation Medicine, and Urology units.

Under terms of a reorganization plan formulated by the Department of Veterans Affairs in 1999, all inpatient care will be consolidated at the West Roxbury VA Medical Center over a two- or three-year period. In addition, major ambulatory procedures will be performed at the Boston VA Medical Center. The faculties of Boston University and Harvard Medical School will share both facilities, and medical students will be assigned to both.

Libraries

School of Medicine Library The Alumni Medical Library is located on the 11th, 12th, and 13th floors of the Instructional Building and serves the Boston University Schools of Medicine, Dental Medicine, and Public Health as well as Boston Medical Center.

Holdings include approximately 122,000 monograph volumes and 1,250 current periodicals and serial publications. In-house and remote access to the library's BUMC MEDLINE Plus search system is available to BUMC faculty, staff, and students. The full text of a number of journals, including images, illustrations, and references, is now available through BUMC MEDLINE Plus.

The Learning Resources Center on the 11th floor houses computer hardware and general applications software, CAI programs, and full Internet capabilities. Other library services include reference assistance, bibliographic instruction, and classes on the use of MEDLINE and other databases. Photocopy cards are available for use in photocopiers located on all floors of the library.

Materials not owned by the Alumni Medical Library may be obtained through the interlibrary loan network, which links Boston University to the National Library of Medicine and to medical libraries around the country. The library also participates in a cooperative agreement with a number of local university and medical center libraries as part of the Boston Library Consortium.

The library is open 106.5 hours a week during the academic year. Hours are Monday–Thursday, 7:30 a.m.–midnight; Friday, 7:30 a.m.–10 p.m.; hours are posted at the library entrance.

Mugar Memorial Library The Mugar Memorial Library, located on the Charles River Campus, provides central library service to

all students and faculty of Boston University. Visitors to the Mugar Library must show Boston University identification at the entrance. The main book collections are on open shelves. The library maintains an audio-listening area, a music library, an African studies library, and an excellent Department of Special Collections containing rare books and manuscripts.

Exhibits from Special Collections are regularly displayed throughout Mugar Library drawing from the Collection's Twentieth-Century Archives, which contain the personal papers of over 1,200 public figures in literature, journalism, theatre, film, music, politics, and diplomacy, and from its collections on Lincoln, Pascal, Franz Liszt, colonial America, military history, nursing, and Spanish literature.

The Mugar Memorial Library is open 8 a.m. to midnight, Monday through Thursday, 8 a.m. to 11 p.m. Friday and Saturday, and 10 a.m. to midnight on Sunday. Special and holiday hours are posted at the library entrance.

Alumni Association

The Alumni Association of Boston University School of Medicine, incorporated August 5, 1902, was formed for the purpose of supporting the needs of the School and promoting social and friendly relations among alumni, as well as cooperating with the faculty in maintaining a high standard of medical education. In accordance with the bylaws adopted at the annual meeting in 1902, and as amended, "All graduates as doctors of medicine at Boston University School of Medicine shall become members of this Association." Starting with the Class of 1994, all graduates as doctors of philosophy in graduate medical sciences program at Boston University School of Medicine are members of the Alumni Association. Also, all members of the faculty who are not alumni are honorary members.

The business of the Alumni Association is directed by the dean, the elected officers, and the executive committee, and carried out by the executive director. Executive Committee meetings are held at stated intervals during the school year. The election of officers takes place each year at the Annual Meeting and Banquet, held in May. All alumni are welcome to participate actively in the affairs of the association and assist the officers in the furtherance of its objectives, including support of the annual fund campaign. The

annual fund, based on a fiscal year of July 1 to June 30, raises money to further various projects of major importance to the School of Medicine and its students, including student financial assistance programs, the Alumni Medical Library, and student activities and publications.

Inquiries regarding School of Medicine alumni activities, changes of address, and items of interest should be forwarded to Boston University School of Medicine Alumni Association, 715 Albany St., Boston, MA 02118; 617/638-5150; Fax: 617/638-4492; E-mail: alumbusm@bu.edu.

Executive Committee

Barry M. Manuel '58 *Executive Director*

Officers

Mary Kraft '75 *President*

M. Douglass Poirier '76 *First Vice President*

Robert A. Witzburg '79 *Second Vice*

President

Bernard L. Huang '62 *Secretary*

Robert O. Valerio '70 *Assistant Secretary*

Barry M. Manuel '58 *Treasurer*

Ronald F. Backer '70 *Assistant Treasurer*

Carl A. Olsson '63 *Annual Fund Chairman*

Donald J. Grande '73 *Phonathon Director*

Directors

Gerald B. Healy '67

Russell Zide '94

M. Cornelia Cremens '88

A.V. Mariano '59

Leon G. Josephs '84

Carol Sprague Savage '92

Hospital Affiliations

Baystate Medical Center Springfield, MA 01199	Orthopedics	Graduate
Beverly Hospital Beverly, MA 01915	Family Medicine	Limited
Boston Medical Center Boston, MA 02118	All Services	Major
Brockton Hospital Brockton, MA 02402	Surgery, Radiology, Medicine	Major
Cape Cod Hospital Hyannis, MA 02601	Surgery	Limited
Carney Hospital Dorchester, MA 02124	Psychiatry, Pediatrics	Limited
Central Maine Medical Center Lewiston, MA 04240	Primary Care	Limited
Children's Hospital Boston, MA 02115	Radiology, ENT, Emergency Medicine, Ophthalmology	Graduate
Columbia MetroWest Medical Center Framingham Union Campus Framingham, MA 01702	Pediatrics, OB/GYN	Limited
Deaconess Waltham Hospital Waltham, MA 02254	Psychiatry, Radiology	Limited
Edith Nourse Rogers Memorial Veterans Administration Hospital Bedford, MA 01730	Psychiatry, Medicine, Neurology	Limited
Emerson Hospital Concord, MA 01742	Pediatrics	Limited
Franciscan Children's Hospital and Rehabilitation Center Brighton, MA 02135	Pediatrics	Limited
Human Resource Institute Brookline, MA 02146	Psychiatry	Limited
Jewish Memorial Hospital Boston, MA 02119	Geriatrics	Graduate
Lahey Clinic Medical Center Burlington, MA 01805	Emergency Medicine, ENT, Neurology, OB/GYN, Orthopedics	Graduate
New England Medical Center Boston, MA 02111	Dermatology, Neurology	Graduate
Norwood Hospital Norwood, MA 02062	Pediatrics	Limited
Rogers Williams Hospital Providence, RI 02908	All Services	Major
Shriners Hospital for Crippled Children Springfield, MA 01104	Orthopedics	Graduate

Solomon Carter Fuller Mental Health Boston, MA 02118	Psychiatry	Graduate
Veterans Administration Hospital Boston, MA 02130	All Services	Major
Veterans Administration Outpatient Clinic Lowell, MA 01852	Medicine	Limited
Westwood Lodge Hospital Westwood, MA 02090	Psychiatry	Limited

Major—Major affiliation signifies that the hospital is an important part of the teaching program of the Medical School.

Limited—Limited affiliation signifies that the hospital is used in the Medical School teaching program to a limited extent.



In the Boston HealthNet, a network of 15 neighborhood health centers provides the care link to communities and families for medical education in primary care settings.

Student Organizations

Alpha Omega Alpha The only national honor medical society in the world, Alpha Omega Alpha, recognizes and perpetuates excellence in the medical profession. It is organized for the promotion of scholarship and research in medical schools, the encouragement of a high standard of character and conduct among medical students and graduates, and the recognition of high attainment in medical science, practice, and related fields.

Each year, one-sixth of the expected number of graduates is elected to membership. Of that number, one-quarter may be elected in the year before graduation. Scholastic achievement is the primary, but not exclusive, basis for election.

Asian American Medical Association (AAMA)

The Asian American Medical Association (AAMA) at Boston University School of Medicine is the local chapter of the national Asian Pacific American Medical Students Association (APAMSA). It is dedicated to the following goals and ideals:

- Promoting awareness of issues specifically related to Asian-Americans as providers and recipients of health care
- Exploring and identifying the unique challenges, obstacles, and responsibilities specific to Asian-American medical students and physicians
- Providing academic and social support for Asian-American medical students at Boston University School of Medicine
- Raising awareness concerning Asian-American culture, as it pertains to students, physicians, and patients
- Creating a network of Asian-Americans in health care on an institutional, regional, and national level.

The AAMA welcomes all members from the BUSM community. Membership is free and open to all.

Association of American Medical Colleges—Organization of Student Representatives (AAMC-OSR)

The AAMC is composed of and represents undergraduate and graduate medical education in the United States. Membership includes the Council of Deans (COD), Council of Academic Societies (CAS), Council of Teaching Hospitals (COTH), Organization of Resident Representatives (ORR), and Organization of Student Representatives (OSR).

The OSR is composed of representatives from each of the 124 allopathic medical schools in the United States. The OSR is charged with the representation of the undergraduate medical student body to the academic medicine community. Unlike other student organizations who represent their membership, the OSR's constituency comprises all medical students. The concerns of the OSR lie exclusively within academic medicine and medical education.

As an OSR representative, your role is two-fold. First, you must communicate the opinions of your student body to the national officers so that the OSR can effectively represent medical students on a national level. Recently, this has been of importance on issues of medical student harassment, student financial aid, Electronic Residency Applications (ERAs), career counseling, and computerized USMLEs. Secondly, you can take priorities and objectives from your colleagues on the national level and implement them at your own school. National issues include minority and majority student relations, National Primary Care Day, Project 3000 X 2000, and curriculum reform.

The OSR fulfills a unique role among medical student organizations. As part of the AAMC, it provides all United States allopathic medical students with voting representation to the nation's largest association dedicated solely to the advancement of academic medicine. The OSR provides medical students with an active role in achieving

AAMC's mission to improve the nation's health through the advancement of academic medicine. Additionally, the OSR seeks to assure that the students actively participate in directing their education, preserve their rights, and delineate their professional responsibilities. To this end, the OSR provides medical students with a voice in academic medicine at a national level and strives to foster student involvement and awareness in this arena at a local level.

Association of Latino Medical Students (ALMS)

The Association of Latino Medical Students continues to play an active part of Boston University School of Medicine. ALMS recognizes that by the year 2010, a time when many current medical students will be practicing physicians, Latinos will represent the largest minority group in the country with over 39 million people. Because of this, ALMS serves a central role in educating the Boston University Medical Center Community about Latino health issues and culture. This past year ALMS hosted several lectures covering topics such as "Access Barriers to Health Care in the Latino Pediatric Population" and "Understanding the Latino Patient."

Moreover, ALMS remains committed to reaching out to the underserved and minority populations around Boston. ALMS members are active participants of "Children Across Boston," a day of active learning and creativity for Boston's underserved children. In addition, ALMS medical students periodically address high school students in lectures and panels on "How to Get into Medical School." ALMS believes we have a responsibility to help the underserved and we welcome any medical students willing to join us in our commitment.

Currently planned projects include a high school student mentor program and a "Science for Kids" program. Favorite ALMS activities include participation in the annual BUSM "Culturefest" and our Cinco de

Mayo Celebration. ALMS is affiliated with the National Boricua Latino Health Organization and the National Network of Latin American Students.

American Medical Student Association

(AMSA) The American Medical Student Association (AMSA) is an organization dedicated to providing for the needs of medical students. On a national level, AMSA lobbies for medical student interests, while at the local level, AMSA serves as a channel towards community service and outreach, educational initiatives, and student affairs.

AMSA is the largest organization of medical students in the United States and has national standing committees addressing the issues of advocacy, community and public health, health policy, and medical education. These committees have allowed medical student members to explore their specific interests and be involved in areas of personal concern. Issues addressed within these standing committees are medical research, care of the elderly, domestic violence, international health, managed care, lesbian/gay/bisexuals in medicine, and women in medicine. Members specifically interested in a certain area are encouraged to propose task forces to the national organization of AMSA.

Our local AMSA chapter here at BUSM is one of the largest student organizations on campus. AMSA serves many functions. We offer social events such as our annual Culturefest which celebrates cultural diversity with food and entertainment from all over the world. We also are a resource to students by sponsoring a used book sale, offering exam packets containing exams from the previous years to students, and arranging a practice anatomy lab practical for first-year students to help prepare them for the first exam.

AMSA is the only organization that offers both a practice anatomy practical and exam packet to first-year students. AMSA is also a resource on legal issues in Washington D.C. and the state of Massachusetts.

American Medical Women's Association

(AMWA) The American Medical Women's Association, established in 1915, is an organization of over 13,000 women physicians and medical students dedicated to improving women's health and promoting equal opportunity for women physicians. AMWA provides an open forum for medical students,

residents, and physicians to address the issues of importance in women's health, research, and legislative policy. The organization also serves to bring students and physicians together with both mentoring and networking programs to aid in the development of one's medical career and accompanying professional responsibilities. AMWA coordinates educational programs which highlight a broad range of medical and ethical issues as the practice environment of the medical profession continues to evolve.

From the headquarters in the nation's capital, AMWA also serves as an effective advocate for relevant state and federal legislation impacting your patients, your practice, and your profession. Through its legislative program and citizen action, AMWA represents an influential constituency on medical issues like the ERA, reproductive rights, improved family health, child care, medical education, and more.

Also, with its involvement on the national, regional, and local levels, AMWA is able to provide access to a national directory of women medical students, residents, and physicians. Other benefits of membership include a subscription to the *Journal of the American Medical Women's Association* (JAMWA) which features articles on women's health research as well as information on new books and commentaries on the lives of women physicians. "What's Happening in AMWA" updates members on association activities and current legislation and provides special reports from students and residents. Membership in AMWA also provides access to low-cost life and health insurance, group MasterCard, and scholarships for medical students. AMWA activities include workshops and speakers addressing many common concerns about relationships, child raising, and managing professional pressures. For more information, please visit the American Medical Women's Association Web site at: www.amwa-doc.org/index.html.

Armed Forces Medical Society (ARMS) During the 1998/1999 school year, the Armed Forces Medical Society (ARMS) will begin its second year as an official student organization at Boston University School of Medicine. About 10% of the BUSM class of 1999 has a Health Professions Scholarship Program (HPSP) scholarship, many other BUSM students, past and present, have served as a member of the Armed Forces.

Our primary goal as a student organization is to provide the HPSP students information, advice, and a perspective on their transition from medical student to a physician of the United States Armed Forces. In addition to providing peer support, we hold meetings to assist students in preparing for 3rd year Active Duty Tours (ADTs), applying for the First Year Graduate Medical Education (FYGME), interviewing tips, and much more.

Our second goal is to provide the general BUMC community information about medical opportunities in the Armed Forces. As jobs in the civilian sector become more competitive, serving as a member of the Armed Forces remains a high quality alternative and ARMS will be there to provide information about these tremendous opportunities.

Christian and Medical Dental Society (CMDS)

CMDS is a student organization supporting Christian principles and beliefs in the practice of medicine and dentistry as well as in the everyday lives of its members. The group seeks to offer spiritual support while providing a forum to explore the role of Christianity in the medical and dental professions. CMDS participates in a variety of activities including sponsoring various speakers (physicians, overseas missionary surgeons, and local ministers), meeting with other CMDS chapters, and participating in community service activities.

Our aim is to provide an opportunity for friendship, encouragement, and reaffirmation of our role in medicine and dentistry both within and outside of school. We welcome all interested students in the class of 2002 to our weekly meetings. Please join us and feel free to contact us at any time.

Community Outreach Health Information System (COHIS)

COHIS is a rapidly growing organization gaining much attention at BUSM, around Boston, and worldwide due to the presence of the health information system on the Internet linking BUSM onto an international axis. COHIS was formed to bring health promotion and disease prevention information to the underserved communities via the Internet, and to provide access and training to these communities.

Around Boston, several community centers, health centers, libraries, and schools have become part of this project. COHIS is an innovative way to become involved in

providing health information and to help the community from a medicinal perspective, all the while practicing preventive medicine! There are many ways to involve yourself with COHIS and there are excellent opportunities for everyone, including those who have computer skills, those interested in learning how to maneuver on the web, and those who may not be comfortable with computers but are interested in helping and interacting with the community.

COHIS is not just about meetings, announcements, and elections, it's about being an active member on the web, in the community, and in the medical world. With the support of the deans, faculty, and the physicians from various departments, COHIS has expanded to several areas, including those in which you can gain some firsthand clinical and patient care experience.

Creative Arts Society (CAS) The Medical School community is a haven of tremendous talent both academic and creative. The Creative Arts Society was started in 1995 to recognize, support, and develop the creativity that so many demonstrate. We are open to all members of the Boston Medical Center community and count students, faculty, staff, physicians, and administrators among our members. There are no dues and yet we produce some of the largest events at the Medical School on a yearly basis.

The Creative Arts Society from its inception has provided a forum for both budding and seasoned artists to build their portfolios and show their work to a large community of enthusiastic patrons. It brings artists of different media together to experiment and discuss and it provides avenues to expand into the greater Boston artist community. Connections to art galleries and our web page give many artists the springboard to jump to arenas they may not have reached before.

Our yearly folio, WHORL is a collection of exceptional work that is distributed throughout the Medical Center free of charge thanks to the generous financial support of the BUSM Alumni Association. The Kick-Back Kafe and Arts Day are our largest events of the year. The Kafe presents visual arts in a coffee-house setting while musicians play and poets read for typically very large audiences. Arts Day is a two-day event where artists show their work in a gallery at the Medical School. Other events brought by the Creative Arts Society have included writing workshops, photography talks, caroling in the hospital, and free-for-all literary discussions.



Arts Days, held in April, provide an opportunity for students, faculty, and staff to appreciate manifestations of the muse.

Domestic Violence Awareness Project (DVAP)

The Domestic Violence Awareness Project is an organization devoted to promoting the awareness and prevention of domestic violence. As future physicians, it is important for us to recognize the warning signs of domestic violence in our patients and to know what we can do to help them. Accordingly, DVAP seeks to educate the BUSM community about issues surrounding domestic violence, and it reaches out to serve the Greater Boston community in this area of need.

We volunteer at local battered women's shelters, become involved in high school outreach programs, and participate in the Jane Doe Walk. We also sponsor various speakers to come and speak with us about how we can effect change in the lives of victims of domestic violence. We welcome and encourage every members of the student body to join us in supporting these projects and events.

Family Medicine Interest Group (FMIG) The FMIG (Family Medicine Interest Group) was created with the purpose of increasing awareness and interest in Family Medicine, as well as helping anyone interested in pursuing a career in Family Medicine. Toward this end, we will be organizing residency fairs, informational meetings and events designed to help all students learn what being a family physician is all about. One such event is the national AAFP (American Association of Family Physicians) Conference. We help

provide interested students with funding, as well as information regarding the event itself. We will endeavor to provide information about educational opportunities not offered through the medical school curriculum, and provide assistance to students seeking residencies in Family Medicine.

International Health Organization (IHO)

IHO is a newly formed network of students committed to educating the Boston University Medical Community about the interrelationship between the health of populations in the United States and around; informing the Boston University Medical Community of global health issues through guest speakers, an information board, and membership in the International Health Medical Education Consortium; encouraging the consideration of health within socioeconomic, cultural, religious, and political contexts; promoting the provision of health care services to underprivileged communities in the U.S. and abroad; maintaining a database of international health organizations, contacts abroad, and projects dedicated to serving immigrant communities in the U.S. and underserved populations abroad, and providing medical students with guidance and financial support to conduct international and domestic projects that reflect the organization's mission.

Lesbian, Gay and Bisexual People in Medicine (LGBPM) The stresses of being a lesbian or gay medical student can be enormous. The primary goal of LGBPM is to provide a safe, supportive environment at BUSM where lesbian, gay, and bisexual students and faculty at the medical campus can get together, socialize, and network. An increasingly important goal has been to organize around the education and sensitization of our heterosexual classmates and faculty to gay and lesbian issues.

We are affiliated with the LGBPM task force of AMSA (American Medical Student Association). This is a politically active task force with local chapters across the country. If you join LGBPM through AMSA you will receive their national newsletter with informative articles about gay issues in medicine and at medical schools across the country. In addition, AMSA provides its task force members with a list of contacts and gay-friendly residency programs in the United States. The American Association of Physicians for Human Rights is a national organization for gay and lesbian physicians and medical students. If you are interested in becoming a member, they may be reached at 415/255-4547.

Maimonides Society The Maimonides Society is a national organization for Jewish medical students. The Society is named after the famous twelfth century Spanish physician, theologian, and philosopher who had a major influence upon biomedical ethics. In this spirit, the Society promotes education, fellowship, and benevolence. Several years ago a chapter was established at BUSM in association with the Boston University Hillel House.

The Society strives to provide a forum for medical students to become actively involved in the social and educational aspects of Jewish tradition and culture. We sponsor bi-weekly lunchtime seminars, led by the Hillel House Rabbi, on issues pertaining to Jewish history and Jewish law and their relation to medical ethics and to the practice of modern medicine. The Society represents the gamut of Jewish religious observance. We highly encourage participation from students from diverse backgrounds. Our activities are open to everyone and we welcome your suggestions.

Massachusetts Medical Society (MMS) The Massachusetts Medical Society is the oldest operating state medical society in the U.S. Members may serve as representatives on state committees, on the student governing council, and in the local offices. The objectives of the Student Section are to provide a forum for student members of the MMS, to promote the science and art of medical practice, to honor the academic tradition of medicine in New England, to affirm the sound ethical responsibilities of the medical profession, and to unite in purpose and in deed with the Resident Physician Section and members of the MMS. The MMS is a member organization of the AMA.

Membership benefits to the Massachusetts Medical Society include:

- Free subscription to the prestigious *New England Journal of Medicine*
- Free internet access
- Access to the Francis A. Countway Library of Medicine
- Scholarships and low-interest loans

The BUSM MMS chapter elects a representative from each class to a state governing council made up of students from the four Massachusetts medical schools. The council sponsors educational, social, and cultural events. BUSM also sends two delegates to represent BUSM students at the biannual MMS meetings. Students are encouraged to submit resolutions affecting health care or public health which, if approved by the MMS, will become policy. (i.e. current ban of smoking on domestic airline flights.) Student members have many opportunities to interact with physicians, including serving on one of 30 physician committees of the MMS. In addition, BUSM students also elect a Delegate and Alternate to attend biannual AMA meetings where medical students can meet in a national forum to share ideas and influence AMA policy.

Operation Smile Operation Smile is a national, not-for-profit organization founded in 1982 that provides surgery and continuing care for children and young adults with financial need or lack of health insurance to cover the costs of reconstructive procedures. Concentrating primarily on facial deformities, Operation Smile's mission is to "achieve long-term medical self-sufficiency for third world countries." The new Boston University chapter hopes to spread

awareness of Operation Smile and begin to set up a framework for providing surgeries for local children in need. Operation Smile members also are involved in education and public service.

Outreach Van Project (OVP) The BUSM Outreach Van Project is a very new project on the Boston University Medical Center Campus, started in January 1997 by a number of medical students and students of public health. The project has received a great amount of support from the School administration and the students here at Boston University, as well as from organizations around the city of Boston who see the project fulfilling an unmet need—bringing health care and access to services to medically underserved populations (the homeless, migrant workers, immigrants, and others) in the Greater Boston area.

The BUMC Outreach Van is staffed by medical students, students of public health, social work students from the Boston University Main Campus, and a supervising physician from BUMC. Passengers on the van (no more than 6 per night) will be involved with talking to people on the streets, performing outreach work.

The BUSM Outreach Van Project provides an opportunity to work directly with medically underserved patients while learning outreach skills that may not be taught in the classroom.

Pediatric Education and Development Society (PEDS) Enthusiastic medical students interested in pediatrics or those who just want to know what pediatrics is all about can gain access to the pediatric emergency room, chances to volunteer with children, opportunity to help with citywide immunization projects, attend monthly pediatric seminars, and more. PEDS is an organization dedicated to enhancing the education of medical students by providing broad opportunities to obtain exposure to pediatric medicine. It encourages participation in pediatric activities, development of awareness in pediatric issues, and promotion of pediatric community service projects.

Membership benefits include:

- Opportunity to attend the American Academy of Pediatrics (AAP) National Conference
- Newsletters by PEDS
- Yearly T-shirts



"The envelope please!" It all culminates on Match Day, the third Thursday in March when fourth-year students receive results of the National Residency Match Program.

- Paid externships for the summer
- Membership with Massachusetts Chapter of AAP.

Phi Delta Epsilon Medical Fraternity (Phi D E)

The Phi Delta Epsilon Medical Fraternity (Phi DE) is a national organization consisting of over 25,000 students, practicing physicians, and distinguished emeritus members. At BUSM Phi Delta Epsilon serves as a conduit for students to organize both community and social events. Over the past few years Phi Delta Epsilon has sponsored events such as the Phi D E Scavenger Hunt during orientation week to benefit the Kids Fund, golf outings, and trips to see the Red Sox. Phi Delta Epsilon works to promote a spirit of community within each class and the School as a whole, by sponsoring social and academic events which provide the opportunity for students to meet faculty, distinguished professionals, and other students in medicine.

On the national level, the fraternity offers placements with physicians for internships and externships, low interest student loans, and a vast network of both physicians and medical students. All members receive Phi D E, a quarterly update which includes news

about the fraternity as well as scientific news. In addition, members are given the opportunity to attend the Annual Convention, which includes scientific lectures and fraternity social events. Our annual convention was held in San Diego, California this year.

Primary Care Society (PCS) The Primary Care Society is a student run organization that seeks to supplement the traditional medical school curriculum with information and experiences relevant to those considering a career in one of the primary care specialties. In addition, the Primary Care Society seeks to get its members involved in a variety of community service projects. Annual events include a celebration of National Primary Care Day each year. Activities include lunchtime presentations by pediatricians, family practitioners, residency directors, internal medicine practitioners, and primary care researchers; interactive workshops demonstrating various techniques; and a dinner featuring a prominent leader in primary care from the Boston area.

The Primary Care Society also organizes a Residency Fair for all students from the Massachusetts medical schools. Also, in the fall

semester, to help students acquire skills and practice them in the community, the Primary Care Society works with the Massachusetts Department of Public Health and a team of nurses, teaching medical students how to give injections and coordinating student trips to various sites in the Boston area to immunize the homeless, elderly populations, and others who are at risk. Other Primary Care Society Programs include ER shadowing at the Boston Medical Center, the Reach Out and Read program, a series of talks and activities coordinated by the Family Medicine Interest Group, and a series of lunchtime and afternoon talks with primary care physicians.

South Asian Medical Students Association (SAMS)

This organization was founded in 1994-95 to represent medical students of South Asian origin and to enhance awareness of South Asian culture. Boston University prides itself in being one of the most diverse institutions in the nation and its students and faculty members herald from all corners of the world, each one contributing to its excellence. SAMS aims at expressing the goals and aspirations of students of Indian,

Pakistani, Sri Lankan, Bangladeshi and Nepalese origin.

SAMSA invites you to help raise awareness of South Asian culture and to promote unity amongst our community. We will provide academic and social support for South Asian-American medical students and cultivate skills which will enable our members to play an active role as future leaders in this multi-cultural society. SAMSA has established affiliations with national organizations of South Asian physicians and with South Asian medical students at other institutions.

Student Committee on Medical School Affairs

(SCOMSA) SCOMSA is the student government at BUSM and serves as the official means of communication between the student body and the administration/faculty of the Medical School. We are composed of seven elected representatives from each class: six MD students; and one MD/PhD. Student representatives who sit on the Curriculum Committee, Admissions Committee, and the Executive Committee are elected through our organization. Together, through a unified student voice, we serve as an advocate for students. With student input and cooperation we attempt to institute changes within BUSM to better our medical school experience, both academically and socially.

One of our most important and fundamental goals as the main student organization at the Medical School is to create a community here—to promote unity and support amongst us all. To do this SCOMSA organizes and sponsors annual social events which bring all of us "Docs-To-Be" together, including BBQs, Skit-Nite, and the popular Winter Semi-Formal.

Student National Medical Association (SNMA)

The Student National Medical Association is the nation's oldest and largest organization focused on the needs and concerns of minority medical students. The organization was established in 1964 by Howard University and Meharry Medical School students along with members of the National Medical Association (NMA). SNMA has committed over thirty years of service to underserved minority communities, and continues to advocate for improvement of health care services and education to meet the needs of minorities and underserved populations.

The organization strives to create an atmosphere wherein professional excellence and moral principles can find fullest expression; to disseminate information relative to minority problems within the field of medical education; to take the necessary and proper steps to eradicate prejudicial practices in the field of medical education and related areas, as these practices appear to be based on race, creed, color, sex or national origin; to develop workable programs for the implementation of better urban and rural health care; to provide national leadership in the promulgation of legislative policies for the provision of better health care; to sponsor programs for minority youth and encourage their entrance into the health professions; and to raise the levels of minority school recruitment, admissions, and retention in schools training health care professionals.

The Boston University Chapter of SNMA is dedicated to upholding the goals of the organization by implementing and assisting with programs at BUSM as well as the greater Boston area. This year, SNMA held many different events at the school and community such as delivering Thanksgiving baskets to several needy minority families.

Surgical Society The Surgical Society is a student organization which evolved from its predecessor, the highly acclaimed Surgical Breakfast Club. Originally, the Breakfast Club was designed to facilitate the interaction of medical students with faculty from the Department of Surgery.

The mission of the Surgical Society is two-fold: education and exposure. Education continues not only in the form of the Surgical Breakfast Club, but also through the initiation of several other programs. Workshops on Operating Room Etiquette, How to Scrub In, and Suturing Techniques are all being planned. Furthermore, the Society is compiling a database of surgeons who are amenable to having medical students shadow them, summer research opportunities for medical students, and potential sources of funding for summer research. Additionally, announcements for the Department of Surgery's Grand Rounds will be posted around the Medical School and any interested students are welcome to attend. One of our goals is to introduce medical students to surgery in the Boston area—in terms of aca-

demics, research, private and group practice. By virtue of our commitment to education, the Surgical Society hopes also to give students exposure to surgery in all of its forms and disciplines.

The Wellness Committee The Wellness Committee was established within the Office of Student Affairs. Arthur Culbert, PhD, Associate Dean for Student Affairs, and Verna Lacey, MEd, Director of Student Support Services, coordinate the activities of the Committee which consists of four basic science faculty members and students from the first and second years who have met on a monthly basis. The Committee's objectives are: to help students find ways to attend to their psychological, physiological, and spiritual well-being while in the midst of a tremendously stressful training period; to provide students with information and easy access to materials, events, activities that can contribute to their well-being.

In the past, Carol Wells-Federman from the Mind Body Institute at Deaconess Hospital has provided a relaxation training class for first and second year students who met six times during the year, and there have been plans for Blue Hills walks/hikes and other activities, depending on student interest.

Administrative Policies

Four-Year Program (MD)

Admission Requirements Candidates for admission to the Boston University School of Medicine should apply to the American Medical College Application Service, 2501 M Street NW, Lobby-26, Washington, D.C. 20037-1300. Candidates may apply between June 1 and November 15, but early application is strongly recommended.

Applicants are required to have a bachelor's degree from an approved college of arts and sciences or engineering. Occasionally a candidate of unusual ability is accepted after attendance for three academic years in an undergraduate school if he or she has satisfactorily completed the minimum entrance requirement of 90 semester credits. The following courses are required.

English Composition or Literature (1 year)
Humanities (1 year)
General Chemistry (1 year) with Lab
Organic Chemistry (1 year) with Lab
Physics (1 year)
Biology (1 year) with Lab

English language proficiency is required, and no special accommodations concerning English as a second language will be made.

A knowledge of quantitation in chemistry is recommended; usually these methods are taught in general chemistry or organic chemistry. A course in calculus is recommended but not required. The biology and chemistry courses must include laboratory exercises. High school courses do not fulfill these requirements. If an applicant has been excused from a required college-level course, another course at the same or higher level must be substituted. Applicants currently enrolled in a professional or graduate school must be in the terminal year of the degree program to be considered for admission to the first-year class.

Applicants are urged to acquire a broad experience in the humanities, behavioral sciences, and social sciences in their college years, but they should follow their own

interests whether in the arts or in the sciences. It is not recommended that applicants try to anticipate subjects that will be required in medical school.

Throughout a student's four years at Boston University School of Medicine, beginning with the Introduction to Clinical Medicine and followed by various clerkships, personal transportation will be required. While some of the sites are within the areas served by public transportation, others are not. The student will be responsible for providing his or her own transportation, although cooperative ventures are sometimes possible.

The faculty of Boston University School of Medicine wish all applicants to be aware that they will be expected to participate in the clinical care of patients from all walks of life, with many difficult and life-threatening conditions such as AIDS and Hepatitis B.

Boston University School of Medicine has established an Office of Minority Affairs that has developed programs and resources to attract students to the School from groups insufficiently represented in the physician population in the United States. These resources include financial aid to the extent made possible by the financial resources of the School.

All students must take the Medical College Admission Test (MCAT) and should communicate directly with the American College Testing Program, P.O. Box 4056, Iowa City, IA 52243-4056, for information concerning these examinations. Applicants are strongly urged to take the MCAT in the spring of the year of application. Applicants who have not taken the MCAT by the fall of the application year will not be considered.

Early Decision Plan Some applicants may wish to apply under the Early Decision Plan. This plan is intended for applicants whose credentials are outstanding in every respect. Under this plan, applicants must file applications between June 1 and August 1. Applicants may apply only to Boston University

School of Medicine and, if accepted, neither apply to, nor attend, any other medical school. All such applicants will be notified that they are accepted, deferred, or rejected on or before October 1, at which time, if not accepted, they will be free to apply to other schools.

Selection Factors The Committee on Admissions chooses applicants who seem best qualified not only by scholastic record, college recommendations and involvement in college and community activities, but also by less tangible qualities of personality, character, and maturity. A personal interview is an integral part of the admissions process. Applicants who have not otherwise heard from us by March 1 and wish to be considered for an interview should contact the Admissions Office. There is no age requirement.

Boston University School of Medicine received 10,065 applications for the 1998 entering class of 150. Since 47 students entered the class from various combined Boston University Liberal Arts/Medical School programs, the 10,065 applicants were, in effect, applying for 103 places.

Students in the 1998 entering class had the following characteristics: the GPA was 3.5, and the average MCAT score was approximately 9.69 in each subtest.

Students in Post-Baccalaureate or Graduate Programs Many students apply to medical school after post-graduate study or the completion of premedical requirements in a post-baccalaureate program. Students who are enrolled in graduate programs may apply in the terminal year of the graduate program for which they were originally accepted into graduate school. Students matriculating in Boston University Graduate School of Arts and Sciences must complete all graduate requirements before receiving admissions to the Medical School. Students will be required to submit at least one letter from a thesis advisor or an equivalent which has been countersigned by the chairman of the

department in which they are concentrating. Students in post-baccalaureate programs are urged to request a letter of recommendation from the Premedical Advisory Committee of the undergraduate college, or, if inappropriate, from the college or university where they are pursuing the post-baccalaureate program. A final transcript or other evidence of completion of degree requirements will be required by August 15. The transcript should be sent to the Admissions Office, Attention: Mrs. Catherine Wilder, Admissions Officer.

Students from Other Countries and U.S. Students at Foreign Medical Schools Students from other countries or American students at foreign schools are not considered eligible for admission to the first-year class unless they have satisfactorily completed at least two years of study in a college of arts and sciences accredited by an American agency.

Degree Requirements Every candidate for the degree of Doctor of Medicine at Boston University must be at least twenty-one years of age and of good moral character. He or she must have fulfilled all the requirements for admission to the School; give evidence of having been enrolled in an accredited medical school for at least four full academic years, two of which must have been spent in the regular third- and fourth-year courses at Boston University School of Medicine; and have discharged all financial obligations to Boston University.

The degree of Doctor of Medicine is awarded on recommendation of the faculty and may be granted *cum laude*, *magna cum laude*, or *summa cum laude* in recognition of outstanding academic achievement.

Guidelines for Students with Disabilities

Boston University School of Medicine has a long history of maintaining high standards while actively supporting and accommodating students with disabilities. The following define the policies and procedures for admission, matriculation and continuation leading to the degree of Doctor of Medicine at BUSM.

Admission The Committee on Admissions chooses applicants who seem best qualified based not only on scholastic record, college recommendations, interview, and involvement in college and community activities, but also on the less tangible qualities of personality, character, and maturity. All students must possess the physical and emotional capabilities required to undertake the full

curriculum and achieve the level of competence required by the faculty. It is expected that the student will act independently. Students with disabilities applying to medical school will be expected to meet all admission standards, with accommodations if necessary. Graduates of medical schools must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. Boston University takes very seriously its obligation to comply with Section 504 of the Rehabilitation Act of 1973 and Amendments of 1992 and the Americans with Disabilities Act of 1990. At the same time, the University and the School of Medicine recognize that prospective candidates must be capable of meeting certain minimum technical standards. Students who have been accepted by the Committee on Admissions are required to sign a document indicating that they understand the technical standards as well as whether they request specific reasonable accommodations to complete the curriculum. Requests for accommodation are evaluated on an individual basis. Technological compensation may be available to assist individuals with a variety of disabilities and may be permitted; but the use of human intermediaries, who may interject their powers of selection and observation in place of the student's, will ordinarily not be permitted.

Technical Standards A candidate for the MD degree must have abilities and skills in the areas of observation; communication; sensory and motor coordination and function; intellectual-conceptual, integrative, and quantitative abilities; and behavioral and social attributes as described below.

Observation Candidates and students must be able to observe demonstrations and participate in experiments in the basic sciences determined essential by the faculty. They must be able to observe a patient accurately both at a distance and close at hand, noting nonverbal as well as verbal signals. Observation necessitates the functional use of the sense of vision and other sensory modalities.

Communication Candidates and students should be able to speak intelligibly, hear sufficiently, and observe patients closely to elicit and transmit information; describe changes in mood, activity, and posture; and perceive nonverbal communication. They must be able to communicate effectively and sensitively with patients and with all members of the health care team. Communication includes not only speech, but also reading and writing; students and candidates must be

able to communicate effectively and efficiently in both oral and written English, as well as possess reading skills at a level sufficient to accomplish curricular requirements and provide clinical care for patients. They must be capable of completing appropriate medical records, documents, and plans according to protocol, in a complete and timely manner.

Sensory and Motor Coordination and Function

Candidates and students are required to possess motor skills sufficient to perform palpation, percussion, auscultation, and other basic diagnostic procedures. They must be able to execute those motor movements reasonably required to provide basic medical care, such as airway management, placement of catheters, application of pressure to control bleeding, simple obstetrical maneuvers, and the like. Such actions require coordination of gross and fine muscular movements, equilibrium, and functional use of the senses of touch and vision.

Intellectual-conceptual, Integrative and Quantitative Abilities

These abilities include measurement, calculation, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of physicians, requires all of these intellectual abilities. Candidates and students must be able to identify significant findings from history, physical examination, and laboratory data; provide a reasoned explanation for likely diagnoses, prescribed medications, and therapy; and retain information and recall it in an efficient and timely manner. The ability to incorporate new information from peers, teachers, and medical literature in formulating diagnoses and plans is essential. Good judgment in patient assessment, diagnostic, and therapeutic planning is essential; students must be able to identify and communicate their knowledge to others when appropriate.

Behavioral and Social Attributes Candidates and students must possess the ability to use their intellectual capacity, exercise good judgment, and promptly complete all responsibilities attendant to the diagnosis and care of patients under potentially stressful circumstances. They must also be able to develop empathic, sensitive, and effective relationships with patients. They must be able to adapt to changing environments and learn in the face of uncertainties inherent in the practice of medicine. Compassion, integrity, ethical standards, concern for others, interpersonal skills, interest, and motivation are all personal qualities that will be assessed during the admission and educational process.

Identification of Students with Disabilities

Pre-Enrollment Disabilities In compliance with the Americans with Disabilities Act of 1990, the Boston University School of Medicine makes no preadmission inquiry regarding disability. In general, students with physical disabilities are identified or self-identify before enrollment. Students who know that they have learning disabilities (including attention deficit disorder) may or may not self-identify before enrollment. If they do not self-identify, they will be expected to fulfill the curricular requirements without the benefit of accommodations. Once identified, students must complete the documentation process in accordance with University standards. Students are then interviewed by the Director of the Boston University School of Medicine Student Support Services, who reviews the diagnosis and the recommended specific accommodations. The Director of Student Support Services helps the student apply for approval from the Committee on Students with Disabilities. The committee is composed of faculty representatives of all four curriculum years and evaluates requests for accommodations necessary to assist disabled students in fulfilling the technical standards at a satisfactory level. Subsequent approval of the recommended accommodations from the Dean of Boston University School of Medicine is required. The student is encouraged to discuss the disability with the course

managers, and the course managers are informed in writing, by the Director of Student Support Services, as to the nature of the student's disability and the approved accommodations.

Students Who Become Disabled While at Boston University School of Medicine Students who become disabled while attending BUSM and who wish to request reasonable accommodations are expected to notify the Associate Dean of Academic Affairs and the Associate Dean for Student Affairs, as well as to seek the assistance of the Director of Student Support Services in requesting accommodation. The Committee on Students with Disabilities evaluates the disability and formulates accommodations if possible. Approval of the recommended accommodations from the Dean of Boston University School of Medicine is required. The student is referred to the Director of Student Support Services for coordination of the specific accommodations within the curriculum. The student is encouraged to discuss his or her disability with the course managers, and the course managers are informed in writing, by the Director of Student Support Services, as to the nature of the student's disability and the approved accommodations.

Students with Learning Disabilities Identified While at Boston University School of Medicine In general, such students are not identified until they experience academic or behavioral

difficulties. Identification may be self-identification or observation by course managers, promotion committee, the Director of Student Support Services, or the Associate Dean for Student Affairs. Students having academic difficulty are often directed to seek a meeting with the Director of Student Support Services, who reviews the nature of the problem, taking into account study-skill strategies, learning styles, and other possible causes for the difficulties. When appropriate, the student is referred for testing and/or counseling. Following testing and documentation of a disability in accordance with University standards, the Director of the Student Support Services reviews the diagnosis and the recommended specific accommodations. The Director of Student Support Services helps the student apply for approval from the Committee on Students with Disabilities. The Committee on Students with Disabilities evaluates the disability and the requested accommodations necessary to assist disabled students in fulfilling the Technical Standards at a satisfactory level. The student is referred to the Director of Student Support Services for coordination of any specific accommodations within the curriculum. The student is encouraged to discuss his or her disability with the course managers, and the course managers are informed in writing, by the Director of Student Support Services, as to the nature of the student's disability and the approved accommodations.



Break time in the OR for Kit Leaning, '99.

All students are required to meet all academic and technical standards, whether or not they have identifiable disabilities and whether or not they request and use accommodations.

Available Resources Boston University School of Medicine expects all of its students to become highly effective and competent physicians. A wide array of support services is available to all students. Students with disabilities are strongly encouraged to make use of these and other services.

Professional Services The Director of Boston University School of Medicine Student Support Services conducts comprehensive intake interviews to screen basic skills, information processing, and achievement. If a complete diagnostic evaluation, psychiatric referral, or physical examination is warranted, students will be referred to the appropriate community resource person or agency. The Office of Financial Management can help the student make any necessary financial arrangements for payment.

Advisory System Each student with a documented disability is given access to a member of the faculty familiar with the student's history and disability. The faculty member acts as the student's advocate in seeking services or appearing before promotion committees, offer advice as requested or may act as a sounding board when necessary.

Study Skills The Office of Student Affairs conducts a series of five workshops during the fall term of the first year. The program is made available to all first-year students. Students are introduced to and given the opportunity to practice different study skills.

Learning Resources The Alumni Medical Library of Boston University School of Medicine has numerous software programs installed in easily accessed computers under the guidance of library support staff. Most of the programs are interactive and provide students with tutorials, self-tests, reviews, or supplemental material.

Tutorial Service The Office of Student Affairs sponsors a tutorial service for approved medical students during the first two years. Students must be referred by the Director of Student Support Services to the course manager for approval. The course manager provides the student with the name and phone number of either the tutor coordinator for that course or of a tutor. It is incumbent upon the student to make arrangements for the tutorial sessions.

United States Medical Licensing Exam

Although Boston University School of Medicine cannot directly sponsor students or actively participate in petitioning for accommodations from the USMLE, the Director of BUSM Student Support Services assists students in their efforts to gather the appropriate documentation and advises students regarding the petition process. In addition, Boston University School of Medicine has a full series of review sessions open to all Boston University School of Medicine students during the semester immediately before the spring exams.

Accommodations All students, regardless of the timing or identification of their disabilities, are required to present complete documentation of the disability when requesting accommodations. Students with physical disabilities should contact the Office of Student Affairs before the beginning of classes or as soon as possible after classes begin. The office coordinates course scheduling and lecture-facility accessibility with the course managers, facility administrators, and the physically disabled student. The Director of Student Support Services coordinates any approved specific accommodations with the course managers and Office of Student Affairs.

Modular Medical Integrated Curriculum (MMEDIC)

The MMEDIC program admits to the School of Medicine, subject to review as described under "Program Requirements," a limited number of qualified students who have completed two years of liberal arts undergraduate study. It offers an integrated curriculum composed of liberal arts and medical school courses, enabling those pre-selected students to fulfill portions of the requirements of the curriculum at the School of Medicine during the latter two years of study in the College of Arts and Sciences. The MMEDIC program thus introduces certain of the preclinical subjects into the undergraduate program.

In order to achieve curricular integration, the MED and CAS faculties have collaborated in the development and teaching of an innovative series of units of instruction or informational blocks that are designated modules of instruction. These include biochemistry, computers in medicine, microbiology, psychology/psychiatry, microscopic anatomy, medical ethics, and physiology.

Portions of the junior and senior years are spent taking modular courses that not only enable the student to fulfill undergraduate

requirements, but also allow for the completion of certain requirements ordinarily undertaken in the first or second year of the School of Medicine. In addition to the modular courses, students are expected to complete requirements for their field of concentration and pursue electives in the humanities and social sciences.

Individual modules of instruction may also be open, on a seat-available basis, to qualified students not enrolled in the program and may be credited toward fulfillment of the requirements for the baccalaureate degree.

MMEDIC is not designed to accelerate the premedical-medical sequence but rather to effect a better educational transition from undergraduate to graduate professional study. Students must be registered in an undergraduate four-year degree program, of which at least three years must be taken at the College of Arts and Sciences at Boston University; the last two years of undergraduate study must be completed in the MMEDIC program at Boston University. Students must also register at the School of Medicine for at least four years for a total of eight years of combined study. Additional information may be obtained from the College of Arts and Sciences, Office of Preprofessional Advising, Room B2, 725 Commonwealth Avenue, Boston, MA 02215.

Eligibility and Admission The program is designed to admit a limited number of students who expect to enter their third year of liberal arts study in September. Acceptances are determined during the preceding spring and summer. Admission into the program, and thereby to the School of Medicine, is based on academic record, letters of recommendation, and involvement in college and community activities, as well as on less tangible qualities of personality, character, and maturity.

Applications are evaluated by the Joint Admissions Committee composed of representatives from the College of Arts and Sciences and the School of Medicine. If deemed eligible, the applicant is contacted for a personal interview with members of the committee.

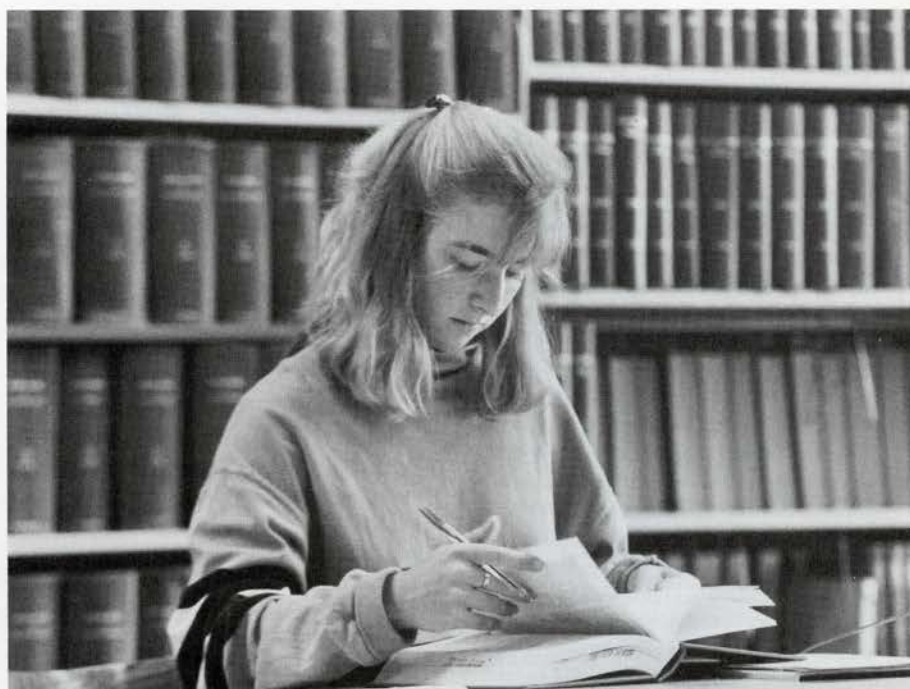
Program Requirements MMEDIC students must demonstrate their ability to master the modules of instruction and must exhibit a high degree of maturity and emotional stability to be promoted to the medical phase of the program. Four modules of instruction must be completed prior to entry into the School of Medicine, at least two of which must be in biochemistry, microbiology,

physiology, or microscopic anatomy. At the conclusion of each semester, the faculty Committee on Promotions reviews the student's progress. Students are expected to maintain a 3.20 GPA cumulatively and a 3.00 GPA in the sciences for all courses taken after entry into the program to be eligible for promotion to the next curricular year and ultimately to the School of Medicine. Failure to meet the above criteria will result in appropriate action by the Committee, including academic probation, remedial coursework, or dismissal from the program. Students who have not achieved a 3.20 GPA cumulatively and a 3.00 GPA in the sciences for all courses taken after entry into the program are ineligible for promotion to the School of Medicine.

Students must take the Medical College Admissions Test (MCAT) in the spring of the third year of undergraduate study. It is expected that students will achieve a combined score of at least 28 on the three numerically scored sections of the MCAT. The results of the exam are considered by the Committee on Promotions when it makes the final decision as to whether to promote students to the medical curriculum. Before entering their first year in the School of Medicine, students in the program must also complete the usual required premedical courses (one year each of general chemistry, organic chemistry, biology, physics, English composition or literature, and humanities). All college and program requirements must be completed prior to promotion to the School of Medicine. Students may not apply to other medical schools and remain in the program.

A student who for any reason (academic, motivational, or emotional) is found to be ill-suited for the program may be transferred without loss of credit into the liberal arts curriculum. Such students may apply for entry to the School of Medicine or any other medical school by the conventional premedical route. Students may transfer voluntarily out of the program at any point and continue their liberal arts education at Boston University.

MMEDIC is designed to provide a gradual and orderly transition into the curriculum of the School of Medicine and not to be an accelerated program. Students are expected to receive the Bachelor of Arts degree in no fewer than the traditional four curricular years. The Doctor of Medicine degree is awarded in no less than four curricular years from the time of entering the School of Medicine.



Large tables and plenty of quiet make the Med Library stacks a good place to study.

Application Applications may be obtained from the Boston University College of Arts and Sciences, Health Science Programs Office, Room B-2, 725 Commonwealth Avenue, Boston, MA 02215. Applications will be evaluated by a joint Admissions Committee.

Early Medical School Selection Program (EMSSP)

Program Summary The Early Medical School Selection Program was developed with a consortium of historically black colleges and universities in 1982. In order to make the program more diverse, it has been expanded to include students from colleges with large hispanic populations and the Indian Health Service. The program provides an early and more gradual transition into the medical school curriculum through provisional acceptance into medical school at the completion of two years of undergraduate study.

Students accepted into the program will remain within their undergraduate colleges through the junior year and must complete the maximum number of required science courses prior to entering the senior year at Boston University. During this senior year, students will retain their degree candidacy at their undergraduate institutions. Students will take MMEDIC courses and participate in individualized programs of study in the senior year which will satisfy undergraduate

academic requirements while providing a gradual transition into the medical school curriculum.

The September following the granting of the baccalaureate degree from their undergraduate institutions, students who have performed at the prescribed level will matriculate into the School of Medicine at Boston University and pursue a decompressed medical school curriculum, having already fulfilled requirements for certain medical school courses. Upon completion of the School of Medicine requirements, the degree of Doctor of Medicine will be granted by Boston University.

Requirements for Admission United States citizens are eligible to apply during the sophomore year of college, upon the recommendation of their premedical advisors. Admission to the program is based on the academic record, letters of recommendation, scope and quality of college and community activities, and such factors as personality, character, and maturity of the applicant. Requirements include: Biology (1 year) with laboratory; and General Chemistry (1 year) with laboratory.

In addition to the normal distribution of courses in the humanities and social sciences, applicants are strongly urged to complete the equivalent of one full year of physics (with laboratory) prior to beginning the senior undergraduate year at Boston University. Students are required to spend the senior year

in residence in Boston University housing. The Medical College Admission Test (MCAT) must be taken in April of the undergraduate junior year and/or August prior to the undergraduate senior year. The scores obtained will be considered by the Promotion Committee as one of the important criteria for promotion into Boston University School of Medicine (BUSM). Participants are required to file an AMCAS application in the fall of the senior year.

Applications for the Early Medical School Selection Program may be obtained from the Director, Early Medical School Selection Program, Boston University School of Medicine, 715 Albany Street, Room A-407, Boston, MA 02118.

Seven-Year Liberal Arts/Medical Education Program

The College of Arts and Sciences and the School of Medicine of Boston University offer a combined curriculum designed to improve the quality of medical education while shortening the overall period of study. Qualified applicants include seniors in secondary schools and/or high school graduates who have not previously enrolled in a formal undergraduate degree program. Those

accepted are admitted to the College of Arts and Sciences and the School of Medicine, subject to the review described under the "Program Requirements" section of this bulletin.

The first three years are spent in the College of Arts and Sciences, where the student takes premedical sciences and elective courses in the humanities and the natural and social sciences. Students are required to complete a minor concentration in one of the four divisions of the College of Arts and Sciences. In addition, the second summer is spent taking a required biology course and elective courses in the humanities and social sciences, so that the undergraduate requirements are completed by the beginning of the fourth academic year. Following completion of the required premedical courses in the first two years of study, students may enroll in certain modular medical courses in the third academic year. Many of these courses are equivalent to those taken in the first or second year of medical school. Completion of modular courses with equivalency credit will decompress the medical school curriculum. All students are required to complete a minor concentration in a discipline in one of the divisions of the College of Arts and Sci-

ences. Acceleration is made possible by the 12-week summer session. Although the program is accelerated, the student has three summers completely free for pursuing other interests. Students in this program must meet all liberal arts, residence, and course distribution requirements for the Bachelor of Arts (BA) degree.

First-year medical studies begin with the fourth year; the amount of time devoted to medical courses is the same as in the present conventional medical program. Students are awarded the Bachelor of Arts degree at the completion of the first year at the School of Medicine and the Doctor of Medicine degree at the completion of the program.

Scholarship Assistance and Loans The full range of financial assistance programs is available to students in this program. Awards are based on financial need and academic achievement. Application may be made by submitting the parents' confidential statement to the College Scholarship Service. Further information may be obtained by contacting the Office of Financial Assistance.

Acceleration The 12-week summer session is used at the end of the second academic year to achieve an accelerated pattern. Because this program requires only seven semesters of undergraduate work, advanced standing credit may *not* be used to further decrease the number of courses required for graduation. However, AP course credit may be used to meet nonscience department requirements if approved by the department.

Program Requirements Students in the program must demonstrate their capability to master an accelerated program of study and exhibit a high degree of maturity and emotional stability in order to be promoted to the fourth year of the program (MED I). At the end of each semester, the faculty Committee on Promotions reviews students' progress. Students are expected to maintain a minimum of a 3.20 grade point average, overall and in the sciences, to be eligible for promotion to the next curricular year and ultimately to the medical school. Failure to meet the above criteria will result in appropriate action by the Committee, including academic probation, remedial coursework, or dismissal from the program. Students who have not achieved a 3.20 GPA cumulatively and in the sciences by the end of the third academic year are ineligible for promotion to the Medical School.



The serene Charles River borders the Charles River Campus, a few minutes from the Medical Campus by regularly scheduled shuttle buses.

A student who, for any reason (e.g., academic, motivational, or emotional), is found to be ill-suited for the program may be transferred without loss of credits into the liberal arts curriculum. Such students may still aspire to a medical education either at the Boston University School of Medicine or at another medical school, although it must be by the conventional route. Students may transfer voluntarily out of the program at any point without loss of credit and continue their liberal arts education at Boston University.

Seven-year medical students, although admitted to the School of Medicine, are required to take the Medical College Admissions Test (MCAT) in August of the second year in the program. It is expected that students will achieve a combined score of at least 28 on the three numerically scored sections of the MCAT. The results of this exam are considered by the Committee on Promotions when it makes the final decision as to whether to promote a student to the medical curriculum. All college and program requirements must be completed prior to promotion to the School of Medicine. Students may not apply to other medical schools and remain in the program.

Combined MD/PhD Program

General Information The Combined MD/PhD degree program is offered by the School of Medicine and the Division of Graduate Medical Sciences. This program is designed for and open to highly qualified individuals who are strongly motivated toward an education and a career in both medicine and research. The purpose of the program is to provide students with the opportunity to obtain advanced education and research training in one of the medical sciences while providing exposure to and training in clinical medicine. It is anticipated, but not required, that students will elect to carry out their PhD training and research in one of the basic (preclinical) medical sciences; however, the program is designed to allow students considerable freedom of choice. The program expects to produce graduates adequately trained to cope with the increasingly multi- and interdisciplinary nature of teaching and research in the basic medical sciences, as well as graduates who will enter residency programs with a sufficient background in basic science to allow them to pursue productive careers in clinical research.

The program requires seven years of study leading to both the MD and PhD degrees, depending on the applicability of basic science courses in the School of Medicine curriculum to course requirements of the area in which study for the PhD is undertaken.

Admission Information on eligibility requirements and application procedures is given below.

Eligibility The applicant must meet the requirements for admission to both the School of Medicine as a candidate for the MD degree, and the Division of Graduate Medical Sciences as a candidate for the PhD degree. The minimum entrance requirements and the prerequisite courses for the School of Medicine are the same as those for the Division of Graduate Medical Sciences. Applicants for the MD/PhD Degree Program will be required to submit only the results of the Medical College Admission Test and not those of the Graduate Record Examination, which are normally required for admission to the Division. The applicant shall have completed the special prerequisites of the major department of the Division in which he or she is planning to specialize. Applicants must also have carried out research during their undergraduate programs or have research experience.

It is anticipated that most applicants will apply for admission to the program as first-year students, but applications will be accepted from students who are already in residence in the School of Medicine at any time before the beginning of the third year in their program. Students enrolled in the PhD program of the School of Medicine are not eligible for the MD/PhD program.

Application Applications and instructions for submission of complete credentials are available from the Boston University School of Medicine, Office of Admissions, 715 Albany Street, Boston, MA 02118, for the Combined MD/PhD Degree Program. Applicants applying as first-year students will initially be screened for their admissibility to the School of Medicine using the same criteria for admission as for students applying only to the School of Medicine. After determination of acceptability for admission to the School of Medicine, application for the MD/PhD program will be submitted to the Division of Graduate Medical Sciences for processing through the normal channels for admission to the Division. Two letters of evaluation from members of the academic

profession who have personal knowledge of the applicant's qualifications for graduate study and research ability are required by the Division to complete the application. Applicants applying while in residence in the School of Medicine or the Division should obtain application information from the Associate Dean of the Division of Graduate Medical Sciences.

Degree Requirements The degree requirements for the Combined MD/PhD Degree Program are those of the separate degree requirements for the Doctor of Medicine in the School of Medicine and for the Doctor of Philosophy in the Division of Medical and Dental Sciences. For the MD degree, the student must be at least 21 years of age, must have fulfilled all the requirements for admission to the Boston University School of Medicine, and must give evidence of having been enrolled for at least four full academic years at the School. For the PhD degree, the student must have fulfilled all the requirements for admission to the Division and give evidence of having been enrolled in the Division for at least an equivalent of two full academic years. In addition, the candidate must have fulfilled all the requirements for major and minor fields of specialization which may include a language requirement. Students enrolled in the combined MD/PhD program must complete the requirements for both degrees (except in unusual circumstances) before any degree will be awarded.

Students admitted directly to the MD/PhD program will begin their training with the first year of the regular School of Medicine curriculum. Upon completion of the first year, students in consultation with their program advisors may elect to continue with the regular School of Medicine curriculum or begin their graduate education and research training in the major departments or areas of specialization of their choice within the Division. In either case, by the end of the first year, the student in consultation with the Program Director will decide the sequence in which the regular School of Medicine and Division program will be taken. Students entering the Combined MD/PhD Degree Program from either the Medical School or Division will follow a sequence designed (in consultation with the appropriate individuals within the Medical School and Division) to meet their particular needs and to expedite the completion of the program. In all instances, the graduate cur-

riculum of each student will be developed according to his or her particular needs as worked out in consultation with his or her major advisor and approved by the chairman of the respective department of the Division.

Combined MD/MPH Program

The combined MD/MPH program is conducted under the joint auspices of the School of Medicine (MED) and the School of Public Health (SPH). It is a flexible program that combines traditional MD preparation with in-depth work in one of the following areas of public health: health services, environmental health; health law; epidemiology and biostatistics; international health; maternal and child health; and health behavior, health promotion, and disease prevention. The coursework for the two degrees generally is completed in an integrated fashion over a period of five years. Selected students may complete the dual degree program in four years.

Eligibility Any student who is accepted to and matriculates at the School of Medicine in the MD degree program may apply for acceptance to the combined MD/MPH program.

Application Students interested in the MD/MPH program are encouraged to apply to the MPH program before entering medical school. They may also apply during their first semester of medical school. The SPH application may be obtained from the Office of Admissions, Boston University School of Public Health, 715 Albany St., T-2, Boston, MA 02118; 617/638-4640, Fax, 617/638-5299; E-mail: sphadmis@bu.edu. The applicant may request that all admissions credentials be transferred from the School of Medicine to the School of Public Health for review. Additional references are required. The applicant should also meet with the MED advisor, Dr. Arthur Culbert, and the SPH advisor, Dr. Marianne Prout, to confirm the feasibility of fulfilling the requirements of the program.

Degree Requirements To earn both degrees, the student must complete the required classroom and clinical coursework for the MD degree and the required coursework for the MPH degree (48 credits for the MPH). Students must earn the grade of Pass or Honor in all MED courses and must maintain a grade point average of 3.0 (on a scale of 4.0) in SPH courses. Students may receive up to 16 credits toward the MPH for courses taken in the School of Medicine.

The tuition for the combined degree program is the tuition for the School of Medicine plus tuition for 32 credit hours in the School of Public Health.

ENGMEDIC (Engineering/Medical Integrated Curriculum)

General Information The Department of Biomedical Engineering in the College of Engineering and the School of Medicine offer a joint, early selection program for the training of biomedical engineers interested in becoming physicians. Qualified sophomores will be admitted into the joint program, Engineering/Medical Integrated Curriculum (ENGMEDIC), that will integrate some preclinical medical training with undergraduate engineering education. The program leads to a BS in Biomedical Engineering after four years, and the MD after an additional four years at the School of Medicine. The early selection aspects of the program permit a decompression of the first year of medical school and avoid the expensive and stressful process of application to medical school. ENGMEDIC is designed to effect a better educational transition from engineering and undergraduate studies to medical education; it is not designed to accelerate engineering or medical training.

Admission Students must be registered at the College of Engineering while pursuing the BS in Biomedical Engineering degree, and at the School of Medicine while pursuing their postbaccalaureate medical education. This requires a total of eight years of combined study for those students without significant AP credits.

Application Additional information may be obtained from the Department of Biomedical Engineering, College of Engineering, ERB 401, 44 Cummington Street, Boston, MA 02215-2407.

Alternative Curriculum

Students who have earned their bachelor's degree and have been accepted to the School of Medicine may, at any time during the first sixteen weeks of the first year, apply to the Alternative Curriculum. This option is designed for students who wish to have the time to pursue other interests along with their medical studies or to reinforce selected aspects of their medical education. In the Alternative Curriculum the courses of the first year are divided between two years. A number of different schedule combinations are possible, all of which yield significant

curricular decompression. Additional scheduling possibilities are available by substituting MMEDIC courses for their medical curriculum counterparts. Tuition is prorated. A maximum of ten students can be accepted into this program. If more than ten students apply, the School will select those students who appear best able to benefit from the program.

Promotion

Promotions Committees Promotions Committees are appointed from the faculty for the first, second, third, and fourth years. It is their responsibility to determine which students are to be promoted, which students require remedial work, and which students should be required to withdraw from the School. A Subcommittee on Appeals for the Promotions Committees is appointed annually through input of both faculty and students. This Subcommittee receives, reviews, and acts upon appeals filed by students.

Rules Governing Promotion:

1. The faculty reserves the right to require the withdrawal of any student at any time when, in the opinion of the faculty, he or she is unfit to continue his or her course.
2. At the present time, the reporting of student evaluation is on an honors-high pass-pass-deficiency basis. Departments or course instructors use methods of examining and evaluating students that are most appropriate to their course content. The student's record contains for each course the appropriate letter grade and, if possible, a detailed written narrative.
3. All medical students must take Step 1 of the United States Medical Licensing Examination at the end of the second year. Passing Step 1 of the USMLE is a requirement for graduation from the School of Medicine.
4. If the student is unable to achieve a pass in any given course, the Promotion Committee determines the action to be taken.
5. Written guidelines concerning promotion to each academic year are distributed to each student annually and an outline of the due process of promotions and appeals is sent to each student in the first curricular year. Copies of these documents may be obtained from the Associate Dean for Student Affairs Office.

Registration

The student receives detailed instructions from the School of Medicine concerning the procedure to be followed during the published dates for registration.

Every student must register during the official registration period.

A late fee is charged if a student does not register during the official period. In no event may a student register later than one week immediately following the official registration period without the written approval of the Dean or other authorized person of the School.

Residency Programs

Most state examining and licensing boards require a year of residency in an accredited hospital in addition to the regular four-year course. All fourth-year students are urged to participate in the National Residency Matching Program.

Microscopes

In addition to prescribed instruments and textbooks, all students are required to provide themselves with a standard medical microscope equipped with 5x and 10x oculars, four objectives (oil immersion, 4mm, 16mm, and a lower power objective of 25-32mm focal length), a mechanical stage, and a microscope lamp. The microscope should meet the approval of the course instructor. An optional rental program is offered through the Associate Dean for Student Affairs Office.

Transcripts

Each graduate or former student of the School of Medicine may request, free of charge, an official transcript of his or her academic record, provided that there are no outstanding overdue debts to the University with respect to such person. Official transcripts are confidential records forwarded to the agencies requesting them and not to the alumni. The name and address of the agency should be sent to the Office of the Registrar, Boston University School of Medicine, 715 Albany St., Boston, MA 02118. Six- or seven-year medical students must request a copy of the first two years of study at the College of Arts and Sciences from the Office of the University Registrar, Boston University, 881 Commonwealth Avenue, Boston, MA 02215. There is a charge of \$3. The University reserves the right to withhold a tran-



Mainstay of the Geriatric Home Service, George Rosenthal, MD, clinical associate professor of medicine and of socio-medical sciences and community medicine, has been mentoring students in this fourth-year clerkship for more than 25 years.

script if the individual is in debt to the University. If a transcript is withheld, the individual requesting the transcript has the right to discuss this matter with a representative of the University empowered to resolve such disputes.

Absence

A student who is absent from school assignments must inform the Registrar and relevant course manager(s) promptly of the reason for the absence and its expected duration.

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.

Students who are eligible for veterans benefits or who 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, 617/353-3678.

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. 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*, copies of which 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." These include the student's name; local or dorm address and telephone number; College of registration; degree program and major and minor; dates of attendance; part- or 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 (Associate 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 University Registrar. The parents of incoming freshmen and transfer students each year are informed of their rights under this law, and how to exercise them, by the Provost.

Equal Opportunity Policy Boston University prohibits discrimination against any individual on the basis of race, color, religion, sex, age, national origin, physical or mental handicap, 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 the Director, Office of Equal Opportunity, 25 Buick Street, Boston, MA 02215, 617/ 353-4475.

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 the Office of Analytical Services, 25 Buick Street, in accordance with the Education Amendments of 1976, Section 493A.

Financial Information

Tuition and Fees

Tuition for the Four-Year MD Program is \$35,525 for each academic year (1999/2000 rates), plus fees of \$450. Tuition for the first three years of the Seven-Year Program is \$23,770 (1999/2000 rates), plus fees of approximately \$330 per year. Tuition for the last four years of the Seven-Year Program is equivalent to the Four-Year MD Program rate. Tuition for each summer course is approximately \$354 per credit hour, with a \$40 registration fee for each Summer Term session. Tuition is to be paid in full at the time of registration.

All applicants accepted into the entering class must make an initial tuition payment of \$500 by June 15. This tuition payment is credited to the first semester of the first year and is not refundable.

Invoices are mailed to the permanent address on record for registered students. Students should complete settlement of their student accounts via the mail. Payment deadline is approximately two weeks prior to the start of classes. Payments for a student's semester bill should be directed to the Office of the Comptroller, 881 Commonwealth Avenue, Boston, MA 02215.

Deposits are credited to the student's account for application to the semester bill. Checks must be made payable to Boston University.

It has been and remains the policy of Boston University to withhold all diplomas, degrees, official transcripts, and other official recognition of work done at the University from students with respect to whom there are any outstanding overdue debts to the University, including, but not limited to, amounts owed in satisfaction of tuition, loan agreements, fees and charges, as well as monies owed for occupancy in University-owned or -operated residence facilities and apartments and for food services. No student may withdraw from the University in good

standing or graduate from the University unless all current obligations to the University 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 effort to provide comparable or substantially equivalent services, but its inability to do so shall not subject it to liability.

The Trustees of the University reserve the right to change tuition rates and fees at their discretion whenever it is deemed advisable.

Students are reminded that the refund policy on withdrawals, as stated further on in this section, is the official one, regardless of the payment schedule.

Service Charges In addition, there are several service charges which may affect a student.

Application for admission: \$95

Medical insurance (required): varies by plan

Late payment fee: Students who do not complete payment/settlement by the established deadline each semester will be assessed a late fee.

Reissue of picture ID card: \$20

Program fee: \$450

The student is assessed at actual cost for any breakage or damage to University property. Library fines are assessed by the Librarian.

All fees are nonrefundable.

United States Medical Licensing Examination

The fees are payable directly to the National Board of Medical Examiners, 3930 Chestnut Street, Philadelphia, PA 19104.

Step I: \$280

Step II: \$280

Deferred Payment A number of commercial parental loan programs are available to meet tuition costs. For additional information,

consult the booklet, *What You Must Know to Apply for Financial Aid*, available from the Office of Financial Assistance, 881 Commonwealth Avenue, Boston, MA 02215

Withdrawals and Refunds

Part-time students who reduce their course load (but remain registered) during the first five weeks of the fall or spring semesters will have their accounts adjusted for the difference between the original and reassessed tuition charge.

Students who find it necessary to withdraw from the University (both full- and part-time) must submit an official withdrawal letter to the Associate Dean of Student Affairs and must file an Official Withdrawal Form with the Registrar's Office within five days of withdrawal. Mere absence from classes does not reduce a student's financial obligations nor guarantee that a final grade will not be recorded.

Upon receipt of the Official Withdrawal form, the Registrar's Office will adjust the student's account as follows: students withdrawing during the first two weeks of classes are eligible to receive a refund or credit of 80 percent of their tuition only; during the third week, 60 percent; during the fourth week, 40 percent; during the 5th week, 20 percent. After the fifth week of classes, there will be no refund or credit.

The application fee and deposits toward tuition and/or room and board are not refundable. No fees are returned after the start of classes. Students with financial assistance/student loans must contact their financial assistance officer to request a refund of a credit balance. A resultant credit balance (overpayment) from withdrawal, cash payment, and/or other adjustment may be refunded upon written request or personal visit to: Boston University Office of the Comptroller, Student Accounts Office, 881 Commonwealth Avenue, Boston, MA 02215.

Financial Assistance

Purpose of Financial Assistance Program

The purpose of financial assistance at the Boston University School of Medicine is to help those students who could not otherwise afford to attend school to meet the costs of education at this University. To this end, the School participates in many financial assistance programs. The programs and their provisions change occasionally, so the Office of Student Financial Management attempts to provide every accepted student with a complete and descriptive list of current programs. The main source of aid for financial assistance applicants at the Boston University School of Medicine is loans. Grant funds are limited and are awarded to students with minimal resources. Students who apply directly to the School for financial assistance are considered for all financial assistance programs for which they are eligible and over which the School has control. Students are required to obtain assistance from outside sources (such as state scholarships or guaranteed student loans) as well. The student is responsible for applying to the outside sources but is encouraged to consult the Office of Student Financial Management on procedures and possibilities. Loans and grants are offered to student applicants after individual need is determined according to federal and institutional methodologies of needs analysis. Financial Assistance is limited in amount and is never offered in such a way as to exceed an applicant's need.

Student Expenses In planning to attend the Boston University School of Medicine, a student must consider all educational expenses, including basic living costs. The tuition and fees shown elsewhere in this bulletin are subject to change and the student must realize that costs will increase before completion of the four-year curriculum.

In addition to tuition and fees, the student must pay for medical insurance, room and board, books and supplies, microscope purchase or rental, laboratory fees, personal

expenses, and transportation. The Office of Student Financial Management considers the total costs of attendance, including all the items listed above, when making a financial assistance commitment. These costs change from year to year and appropriate information is available to anyone who requests it from the Office of Student Financial Management.

Application Procedures Students must apply annually for financial assistance and can obtain application materials from the Office of Student Financial Management of the Medical Campus in early February. The application deadline is April 15 or 45 days after the date of acceptance to Boston University School of Medicine, whichever is later.

Financial assistance applications are evaluated on the basis of income, assets, family size, and other relevant information for the student, spouse, and parents. The Office of Student Financial Management assesses the ability of the student and the student's family to pay for the student's education by the Institutional Needs Analysis Methodology used by the College Scholarship Service. Applications from self-supporting students who do not report parental income and assets will be accepted, but the likelihood of an offer of direct financial assistance (loan and/or grant) in such a case is unlikely.

Every student who applies for financial assistance will be informed of the School's need assessment and any assumptions made by the Office of Student Financial Management as to financial assistance which is assumed to be available to the student from outside sources. Students should bear in mind that much of the financial assistance at the School of Medicine comes from outside sources. For additional information about outside loans and scholarships available to Boston University students, refer to the Boston University School of Medicine Student Financial Management handbook.

William D. Ford Federal Direct Loan A Federal Direct Loan (formerly GSL) is a long-term, low-interest educational loan available through the federal government. All terms and conditions of Direct Loans are identical to those of Stafford Loans, except that funds are borrowed from the federal government rather than from a private lender. Disbursements are made payable to the School and student, and the student is responsible for repayment. There are two types of Direct Loans: subsidized and unsubsidized. Subsidized loans are need-based and are limited to \$8,500 per academic year at the graduate level. Financial Need is defined by the federal government and is determined through a review of the Free Application for Federal Student Aid (FAFSA). The federal government pays the interest on subsidized loans while the student is in school at least half-time and during periods of deferment. Unsubsidized loans are not need-based and are limited to \$18,500 per academic year minus subsidized amounts for that same year (e.g., \$18,500-\$8,500=\$10,000). Interest charges for the unsubsidized portion begin to accrue as soon as funds are disbursed and are the sole responsibility of the borrower. While in school, the student may either make interest payments or allow interest to accrue and capitalize.

All eligibility criteria and terms are identical for both subsidized and unsubsidized Direct Loans. Students enrolled at least half-time in an approved degree program who are citizens, nationals, or permanent residents of the United States may apply for a Direct Loan. The variable interest rate for new loans is set each July 1st and never exceeds 8.25 percent. Unpaid accrued interest is capitalized at graduation. A 4 percent insurance premium is deducted from each disbursement. Repayment begins 6 months after the student graduates, leaves school, or drops below half-time enrollment. The total of undergraduate and graduate Guaranteed

Student Loans (GSL), Stafford Loans and Direct Loans (subsidized and unsubsidized) may not exceed \$138,500.

Perkins Loan (Formerly National Direct Student Loan) (NDSL) Perkins Loans are federally funded long-term educational loans which carry no interest charges while the student is enrolled at least half time. Repayment at five percent interest begins nine months after the student ceases half time enrollment.

Loans for Disadvantaged Students This loan program is funded by federal appropriations and partially matched by the School of Medicine. Loans are awarded to students who come from disadvantaged backgrounds, and have the same interest-rate structure as the Perkins Loan.

National Medical Fellowships, Inc. (NMF) A private nonprofit organization which provides financial assistance to first- or second-year minority medical students. There is a limited number of special merit awards available for outstanding seniors nominated by medical schools. The application deadline for this need-based scholarship is April 30 for previous applicants and August 31 for new applicants.

Private Market-Rate Loans There are several private, nonfederal loan programs available. Each has its own eligibility requirements, loan limits, interest rate, insurance premium, and repayment options. The Office of Student Financial Management can provide you with current information and advice, though the borrower's individual preferences will play a role in identifying the most appropriate loan program. These loans are not subsidized and are therefore generally more expensive than federal loans. It is therefore advisable to exhaust all other options before considering them.

Primary Care Pool

The Primary Care Pool is a group of federal and institutional scholarships and loans designated for those students planning to pursue a career in primary care. The terms offered under primary care loan programs are more favorable than standard institutional loan terms. Depending on the program, there may be obligations associated with accepting awards, and penalties for not meeting those obligations. Students interested in practicing primary care should inform the Office of Student Financial Management of their

intent, even if they are not absolutely sure of their professional goals. The office will attempt to provide assistance to those demonstrating need that is appropriate to their situation. A list of the programs included in the Primary Care Pool follows:

Scholarships for Disadvantaged Students

Funded by annual Federal appropriations, these scholarships are awarded to students who come from disadvantaged backgrounds and low-income families. Preference is given to students committed to practicing primary care.

Dr. Cyril Israel Scholarship Fund An institutional scholarship of about \$1,000 made available to students who plan to enter family practice.

Peter F. Jeffries and Jeanne F. Arnold Scholarship for Rural Practice Stipends for preceptorships in family medicine and for attendance of the American Academy of Family Practice Conference of Student Members.

Robert Wood Johnson Loan Fund (1972) Long-term loans to students at the School of Medicine who are women, minority students, or residents of designated rural counties of the United States.

Primary Care Loan A low-interest revolving loan fund produced by Federal appropriations and partially matched by the School of Medicine.

John and Hannah Sandson Student Assistance Fund (1980) A revolving loan fund established by the BUSM Alumni Association from contributions of alumni, faculty, and the estate of Dr. Pedro Martinez.

John I. Sandson Student Revolving Loan Fund (1991) A revolving loan fund established in recognition of the Dean Emeritus of the School of Medicine, awarded to full-time students demonstrating financial need.

Ruth M. Batson Primary Care Loan Fund (1994) Established by Ruth M. Batson, Associate Professor of Psychiatry, as a loan fund for African American students interested in certain generalist careers.

Institutional Scholarship Funds

Dr. Jacob J. Abrams Memorial Scholarship (1965) Income used toward a scholarship for a needy and worthy student at the School of Medicine.

The Chauncey E. Albro and Florence Prinz Albro of Middleton, Rhode Island, Scholarship (1989) For the purpose of aiding needy students of the Jewish faith attending Boston University School of Medicine.

Alumni Association Scholarship Fund Provides need-based scholarship assistance to medical students.

Anonymous Scholarship for Minority Students (1974) Income used toward scholarships for minority students at the School of Medicine.

Jacob Bailen Scholarship Fund (1960) Income awarded annually to a student in the School of Medicine.

Fairy P. Brown Scholarship (1989) Income used to award scholarships to women in the School of Medicine.

Harry Cline Memorial Scholarship (1956) Income awarded annually to a first-year student in the School of Medicine without restriction as to race, creed or color.

M. Brown Colcord Scholarship (1979) Income awarded annually to student(s) in the School of Medicine.

Isidore Dressler and Hilda Ratner Dressler Scholarship Fund (1982) Income awarded to MD degree candidate(s) in good standing and demonstrating need.

Walter H. Flanders Memorial Fund (1980) Established by the estate of Jessie L. Flanders, the Fund's income is transferred annually to the BUSM Student Revolving Loan Fund.

E. Gordon Glass Memorial Fund (1954) Income awarded annually to a student who has demonstrated qualities of high ideals and motivation.

Gene and Malcolm Gordon Fund Income used toward scholarships for students at the School of Medicine.

Dr. Luther F. Grant Scholarship Fund Income to be used to assist students who plan to engage in the general practice of medicine.

Home Medical Scholarship Fund (1983) This fund provides home medical service to support the training of medical students who care for the elderly. It is for dedicated medical students.

S. J. Kechijian Scholarship Fund Provides three or more need-based scholarships of at least \$5,000 each year to students enrolled in

the four-year program at the School of Medicine, with a preference for students of Armenian descent.

Dr. William D. and Annie Lee Horton Bequest (1930) Income used for scholarships for young men of Catholic faith.

Mark Mason Scholarship Fund (1971) Income used for scholarships.

Alberico Masucci (Class of 1930) Memorial Scholarship Fund (1960) Established by his widow. Income awarded annually to a student, preferably of Italian background, in the School of Medicine.

Medical Endowed Scholarship(s) (1960) Income awarded annually to student(s) in the School of Medicine.

Evelyn L. Parsons Scholarship (1994) Income used to award a scholarship to one or more worthy female students pursuing the degree of MD.

Dr. Langdon Parsons Scholarship (1966) A fund, established by the friends and patients of Dr. Parsons, that makes a scholarship of \$1,000 available annually.

Solomon and Lena Ratner Fund (1961) Income transferred to BUSM Student Revolving Loan Fund.

Dr. Nathan and Lillian Shapiro Scholarship Fund (1968) Income transferred to BUSM Student Revolving Loan Fund.

Barbara and Roy Silvers Scholarship Fund Provides a \$2,000 scholarship for an academically worthy student in financial need.

John J. Slaterry Scholarship Fund (1984) Awarded with the purpose of aiding needy students who are attending Boston University School of Medicine.

Dr. Harold Judd Sparling, Jr., Scholarship Fund (1974) Income used towards scholarship for needy students at the School of Medicine.

Stephen Stickney Fund (1905) A gift from Mrs. Mary M.H. Spaulding to establish scholarships for women.

Dr. Bernard Tolnick Scholarship (1975) A scholarship for a student at the School of Medicine.

The Wade Fund (1873) Transfer from the New England Female Medical College for the establishment of scholarships for women.

Wexler Scholarship Fund (1977) Income awarded on the basis of merit and financial need to a student in the School of Medicine.

Institutional Loan Funds

Edward E. Allen Loan Fund (1963) A permanent student revolving loan fund established to assist School of Medicine students. Loans are based on need.

Dr. John C. and Dora B. Ayres Loan Fund (1993) A revolving loan fund established by Dr. John C. Ayres for students of the School of Medicine.

Jacob and Minnie Bacaner Loan Fund (1977) Awarded to MA and PhD candidates in the Basic Medical Sciences, who show superior academic ability and demonstrable need.

Frank Bagan Revolving Loan Fund (1989) Awarded to students on the basis of need.

Bartol Fund (1963) Established by Miss Dorothy Bartol to be awarded to School of Medicine women.

Ruth M. Batson Loan Fund (1975) Established by Ruth M. Batson, Associate Professor of Psychiatry, as a student revolving loan fund.

Ruth M. Batson EMSSP Student Revolving Loan Fund (1996) Recipients to include EMMSP students who have matriculated at Boston University School of Medicine.

Herbert K. Bloom Revolving Loan Fund (1990) Awarded on the basis of need to students at Boston University School of Medicine.

BUSM Alumni Association Student Loan Fund (1975) A revolving fund established by contributions from the Alumni at the School of Medicine.

BUSM Loan Fund I (1975) A revolving loan fund established by contributions from the School of Medicine and by contributions from the School's faculty and staff.

Boston University School of Medicine Revolving Loan Fund II Established to meet short-term and long-term needs of students at Boston University School of Medicine.

David J. Chronley, MD SRLF David J. Chronley graduated from the University of Rhode Island. This fund is earmarked for graduates of his alma mater who are enrolled in Boston University's School of Medicine.

Dr. Otto L. Churney Memorial Loan Fund (1981) A permanent student revolving loan fund established by Mrs. Loammie Churney to be awarded to MD students based on need.

Leonard J. and Shirley I. Cibley Student Revolving Loan (1993) A revolving loan awarded to students in need of financial assistance while attending Boston University School of Medicine.

H. G. Cicma Family Fund (1989) Established as a loan fund to aid needy students enrolled in the Seven-Year Program of Liberal Arts and Medical Education.

Class of 1960 Loan Fund A revolving loan fund established by the Class of 1960.

Class of 1969 Loan Fund (1979) A revolving loan fund established by the Class of 1969 for full-time BUSM/MD degree students.

Class of 1980 Loan Fund (1990) Established at the time of their tenth reunion in memory of three class members: Gary L. Bean, Michael L. Miyahara, and Susan Feigenbaum Levene. Funds to be awarded to needy students attending Boston University School of Medicine.

Class of 1983 Loan Fund (1993) A low-interest loan funded by contributions from the Class of 1983 to meet educational expenses of students in the School of Medicine.

Covich Student Revolving Loan Fund (1984) A revolving loan fund established by Marion and Sidney Covich, awarded to medical students on the basis of need.

M. Esther Creaturo Memorial Loan Fund (1989) Established by Dr. Nicholas B. Creaturo in memory of his wife. Awarded to needy medical students.

Demoulas Foundation Student Loan Fund (1986) A revolving student loan fund established in honor of Robert C. Lawlor, MD.

Andrew D. Elia and Dimetra Tsina Elia Student Revolving Loan Fund (1960) Originally established as a scholarship fund in memory of Andrew D. and Dimetra Tsina Elia. Recently re-established as a low-interest student revolving loan fund.

Fenno Tudor Fund (1886) Established under the will of Mrs. Fenno Tudor and awarded to women medical students.

Nathan L. Fineberg and Family Student Loan Fund (1986) Established by the Nathan L. Fineberg Family as a student revolving fund.

William and Beverly Franklin Loan Fund (1996) Awarded to students with demonstrated financial need.

Fred P. Freed Revolving Loan Fund (1990) Awarded to medical students demonstrating need.

Phyllis and Murray Freed Student Revolving Loan Fund (1991) Awarded to students on the basis of need, a loan fund established by

Mrs. Freed and her husband, a graduate of BUSM and Chairman of the Department of Rehabilitation Medicine at BUSM.

Richard Gaines Loan Fund (1995) Awarded to medical students based on financial need and academic achievement.

Elias R. and Theada T. Ghareeb Student Loan Fund (1986) Established by George H. Ghareeb, MD, in honor of his parents.

The Boston Globe Foundation Loan Fund (1987) Established as a student loan fund by The Boston Globe with preference given to residents of the City of Boston.

Herbert S. Gold Student Revolving Loan Fund (1993) Established as an emergency loan fund in 1975, transferred into a revolving student loan in 1993. Awarded to medical students who demonstrate financial need.

Dr. Arnold Goldenberg Loan Fund (1996) A revolving loan fund to assist students enrolled at BUSM who demonstrate financial need.

Dr. Phillip T. Goldenberg Loan Fund (1994) A loan fund intended to assist financially needy students pursuing the study of internal medicine.

Abraham Goldman Loan Fund (1972) Loan fund established by Dr. and Mrs. Jon Green to be made to minority students. No loans are to be greater than \$200.

Samuel Gregory Revolving Loan Fund for Women (1983) Established with a gift from the estate of Elizabeth Tautges, this loan fund is awarded to women medical students, on the basis of need.

John James Hayes and Olive Johnston Hayes Loan Fund (1985) Established by School of Medicine alumnus, John J. Hayes, MD, before his death, as a revolving student loan fund.

Charles H. Hood Dairy Foundation (1942) Gift of Charles Hood for loans to worthy students in the School of Medicine.

Abraham and Sarah Kaplan Loan Fund (1975) A revolving loan fund established by Fred Kaplan and awarded to students on the basis of need.

W. K. Kellogg Foundation Loan (1942) Loans to be made to worthy students who cannot enter upon or continue the study of medicine without financial assistance.

Jeffrey K. Klingenstein Loan Fund (1995) A revolving loan awarded on the basis of financial need and academic promise.

Stanley H. and Catherine M. Konefal Student Revolving Loan Fund (1991) A revolving loan fund with awards made on the basis of financial need and established by Dr. Konefal, a graduate of BUSM, and his wife.

Lewis and Ethel Kornfeld Student Revolving Loan Fund (1982) Established by Mr. and Mrs. Lewis F. Kornfeld Jr., this loan fund is awarded to medical students on the basis of need.

James Lawlor Memorial Loan Fund (1980) Loan designated for worthy School of Medicine male students.

John and Mary Marino Student Revolving Loan (1995) A restricted loan for students at BUSM.

Massachusetts Medical Society Charitable and Educational Fund Medical Student Loan Program (1976) Established by the Massachusetts Medical Society, these loans are awarded to third- and fourth-year students on the basis of need.

Medical Students Revolving Loan Fund Loans to enrolled students at the School of Medicine regardless of race, sex, color, or creed.

George W. Merck Memorial (1959) Established by the Merck Company Foundation. Awards may be made to graduates of the Boston University School of Medicine wherever they are in training, or to graduates of other medical schools who are in training at hospitals associated with the Boston University School of Medicine. Every award shall be in the form of a loan to be repaid to the University.

Rosemary Ann Murphy Memorial Loan Fund Awarded to students in need of financial assistance while attending Boston University School of Medicine.

P.A. Penta Program SRLF Provides low-interest loans to medical students.

James and Esther Pike Loan Fund (1978) Established by Norman Neal Pike, a graduate of Boston University School of Law, this loan is awarded on the basis of need.

Theresa and Julius Reutter Loan Fund (1993) A loan fund established by the estate of Theresa Reutter to assist deserving students of the School of Medicine.

John B. Rhoads (1960) This loan fund was established by Paul H. Rhoads in memory of his son and is to be designated to Boston University School of Medicine students.

George Russell Loan Fund (1884) Loans to needy and meritorious students.

Agnes Gund Saalfeld Revolving Loan Fund for Women (1983) A revolving loan fund for full-time BUSM women students; established by Agnes Gund Saalfeld.

Herman Selinsky Loan Fund Founded in memory of Herman Selinsky, this fund was established to provide loans to students at the Boston University School of Medicine to enable them to pay tuition.

Rose F. Serchuck Loan Fund (1990) Preference given to students who have worked three to four years or had other significant experience prior to entering Boston University School of Medicine.

Charles and Hazel Smith Revolving Loan Fund (1988) Awarded to students at Boston University School of Medicine who demonstrate need.

Dr. Moses J. Stone Loan Fund Fund for students in need of financial assistance while attending medical school.

Stride Rite Student Loan Fund (1984) Established by a gift from the Stride Rite Charitable Fund.

Samuel and Miriam Wein Student Loan Fund (1987) Established as a student revolving loan fund with preference given to Maine residents.

Murray Weinstock Loan Fund (1994) Awarded to students on the basis of financial need.

Pete Willard Memorial Loan Fund (1982) Revolving loan fund established by the Class of 1972 to be awarded to MD students in good academic standing.

Louis E. Wolfson Medical Student Loan Fund (1984) Established by Dr. Louis E. Wolfson, this loan fund is awarded to medical students on the basis of need.

The following loan funds are used to meet short-term, bona fide emergencies. The loans are interest-free during the period of emergency.

Ruth M. Batson Educational Foundation
Emergency Loan Fund

BUSM Alumni Association Emergency
Loan Fund

General William F. Croskery, MD, Emer-
gency Fund

Carmen Gianfortone Memorial Emer-
gency Loan Fund

Jason Lessell Contingency Fund

Michael L. Miyahara-Gary L. Bean
Memorial Emergency Loan Fund

Penta Loan Fund

Awards and Prizes

Alumni Association Award Awarded to students in the graduating class who are in good academic standing and who have contributed their time and effort in a variety of initiatives of the Alumni Association designed to benefit Boston University School of Medicine.

American Medical Women's Association

Awards American Medical Women's Association, Inc. Scholarship Citation awarded annually to those women medical graduates who are in the top 10% of their class.

American Society of Clinical Pathology Award

The American Society of Clinical Pathology Award is given to the outstanding second-year student in pathology.

Henry J. Bakst Scholarship Award This scholarship was initiated in memory of Dr. Henry J. Bakst, the Dean of Boston University School of Medicine from 1970 to 1972 and a long-time member of the faculty. Dr. Bakst was noted for his sensitivity to the needs of people and his understanding of the community. He was to many the "true physician." The award is presented annually to the senior student of the Boston University School of Medicine "who has demonstrated the qualities that exemplify the true physician."

Henry J. Bakst Award in Community Medicine

Dr. Henry J. Bakst, long a proponent of quality health care for the indigent and handicapped, was the Director of the Home Medical Service for an extended period of time. During his stewardship, the service flourished and provided a superb learning experience for the students who participated in the one-hundred-year-old Home Medical Service activities. Sensitivity to the needs of people, an understanding of the disease process, and an awareness of community resources are the criteria for this award to a student exemplifying the qualities that Dr. Bakst represented.

Boston International Foundation for Medical Education Award

This Foundation was established in January 1996 by former and/or present faculty members at one of the three Boston-based medical schools who have worked in foreign areas in health-related activities. Its purpose is to support qualified senior medical students from Harvard Medical School, Tufts University School of Medicine, and Boston University School of Medicine, who successfully complete a minimum two-month elective at a foreign medi-

cal center acceptable to the Foundation and to the respective medical school administration. The financial support is intended to defray travel and living expenses.

Boston Medical Center Student Prize

Awarded to the graduating medical student who demonstrated an outstanding overall performance at Boston Medical Center in both clerkships and electives.

Geoffrey Boughton Student Award

The Award was established by the Class of 1954 to recognize the outstanding sophomore student in the pathology course. The award is presented at Skit-Nite.

Ciba Award for Outstanding Community Service

This award was established by the Ciba Pharmaceutical Company to recognize the sophomore student who has performed laudable extracurricular activity within the community. Examples of such are the organization and staffing of neighborhood health clinics, or the development of and participation in efforts ranging from tutorial to disease-screening programs.

Ciba-Geigy Prize in Neurological Sciences

Presented to the graduating student who has demonstrated excellence in Neurosciences and basic Neurology.

Joseph Cochin Award in Pharmacology and Medical Ethics

The award is made to the graduating student distinguished by high achievement in pharmacology and medical ethics; in choosing the recipient of the award, particular emphasis is placed on extracurricular activities and on independent effort, including research. The award honors the memory of Dr. Joseph Cochin, a longtime member of the faculty. It is given in recognition of his work in the fields of analgesic drugs, pain control, and medical ethics, all of which reflect his lifelong interest in biomedical research and patient care.

Sidney Cooperband Award

Established in 1979 by faculty, friends, and his family as a tribute to the late Dr. Sidney Cooperband. An effective administrator, an accomplished scientist, and an inspired teacher, Dr. Cooperband was the Director of the Hubert H. Humphrey Cancer Research Center since its inception at Boston University Medical Center in 1973. The memorial fund's purpose is to honor a student who shows outstanding promise as a researcher in basic sciences, an aspect of medicine in which Dr. Cooperband himself was brilliantly accomplished. In his life he was an energetic, com-

passionate man full of both integrity and determination and was enormously respected throughout the American scientific community. The Sidney Cooperband Award is given each year as a living tribute to the fourth-year student who, in addition to demonstrating excellence in the basic sciences, also displays Dr. Cooperband's outstanding personal qualities.

Bertha Curtis Award Awarded annually to the female member of the graduating class of the Boston University School of Medicine who best typifies the spirit and character of Dr. Bertha Curtis ('43): sound medical knowledge, intuition, broad outside interests, and distinctive personality and grooming. The prize was first funded in 1973, the year of Dr. Curtis's death, by a gift to Boston University from her husband, John S. Perkins.

Dr. John Dittmer and Dr. Linda Wright Award for Excellence in Teaching

This award is a gift from the Class of 1994. It is presented annually to the graduating student who best portrays the outstanding teaching qualities possessed by Drs. Dittmer and Wright. The award is made to the graduating student distinguished for his/her interest in teaching; demonstrated by participation in the Tutor Program, service as a teaching assistant and, most importantly, by the willingness to give time freely to help his/her classmates both in the classroom and on the wards.

Kenneth C. Edelin Prize in Obstetrics and Gynecology

This prize was established by the Department of Obstetrics and Gynecology and its alumni. Dr. Edelin was Chairman of the Department of Obstetrics and Gynecology from 1978-1989. The prize is awarded to the graduating student who, in the opinion of the faculty, has demonstrated superior academic achievement in obstetrics and gynecology, has compassion and understanding towards patients, and has shown an interest in minority health care.

Richard J. Elkort Memorial Fund This award was established in July 1985 as a tribute to Dr. Richard J. Elkort by his family, friends, and the faculty. Dr. Elkort was a surgeon-oncologist committed to cancer research and to a better understanding of the role of nutrition in the prevention and management of cancer. He was well known for his dedication to his patients and for his love of people and life. This award is given to the fourth-year student who best exemplifies the personal qualities of Dr. Richard J. Elkort.

Robert G. Feldman, MD, Prize in Neurology

The Robert G. Feldman, MD, Prize in Neurology is awarded to the graduating medical student who has exhibited compassion, humanism, and excellence in the application of neuroscience to the care of patients with neurological disease and impairments.

Job E. Fuchs Scholarship Award This scholarship was established by a former patient of Dr. Job E. Fuchs, a long-time member of the faculty of Boston University School of Medicine. It is presented to the student who shows signs of great patience, who is a warm person, a source of quiet stability and moral strength, and who will make his or her patients partners in the medical process. The scholarship commemorates a man who obviously felt every one of his patients to be very special.

Solomon Carter Fuller Award Awarded to the student who shows those qualities most associated with Dr. Fuller; namely, personal maturity, dedication to humanitarian service, capacity for involvement in basic medical issues, especially psychiatric ones, strong social awareness, clinical excellence, high standards of scholarship and remarkable ethical performance, breadth of interest, and overall progress.

Janet M. Glasgow Memorial Achievement Citations (AMWA) Awarded annually to those women who graduate in the top 10% of their class.

Janet M. Glasgow Award (AMWA) The award is presented to the woman who graduates first in her class, for her outstanding achievement. The award is presented by the American Medical Women's Association.

Anthony L.F. Gorman Prize in Physiology

Colleagues, friends, and family of the late Dr. Anthony L.F. Gorman have established in his honor the Anthony L.F. Gorman Prize in Physiology. An annual award is presented to the outstanding student in physiology graduating from Boston University School of Medicine. Dr. Gorman, an imaginative, productive, and internationally respected scientist, contributed greatly to understanding the physiology of the nervous system and vision. As an effective teacher, he instilled in students an appreciation of the significance of basic physiological mechanisms underlying the complex function of the nervous system. This award to the best student in physiology is a fitting honor to a man whose life was dedicated to the pursuit of excellence.

Hewlett-Packard Company Medical Group Award

This award is presented to the top five graduating students of the Boston University School of Medicine in recognition of outstanding scholastic achievement in medicine.

Internal Medicine Award Awarded annually by the faculty of the Department of Medicine to graduating medical students for excellence in internal medicine.

Ishiyaku EuroAmerica, Inc. Book Award

Awarded annually to a graduating student who is outstanding in his/her medical studies.

Masakichi Itabashi Award (1953) Established as a memorial by the family and friends of the late Masakichi Itabashi for the purpose of increasing our knowledge of cancer and furthering research in this field. It is awarded to a graduating student with an outstanding interest in Oncology and oncological research.

Dr. David R. Iverson Student Award This student award fund was established in 1986, in memory of Dr. David R. Iverson, an alumnus of Boston University School of Medicine Class of 1968, by his classmates, family, and friends. The award is presented annually to the fourth-year student who has excelled in psychiatry and who has exhibited Dr. Iverson's outstanding personal qualities, namely, sensitivity, compassion, and devotion to the needs of others.

Esther B. and Albert Kahn Scholarship Award

Awarded to the student who has completed the third year and has demonstrated to teachers and peers both devotion to the profession, and concern and compassion for patients.

Chester S. Keefer Scholarship Award This scholarship was initiated in memory of Dr. Chester S. Keefer, a former Dean of the Boston University School of Medicine and for many years Chairman of the Department of Medicine and Director of the Evans Memorial. Dr. Keefer was greatly respected by all of his colleagues, peers, and students and was known as a man of excellence. The scholarship is awarded to the senior student "who embodies the ideal of excellence."

Lange Medical Publication Award This award is presented to a graduating student at Boston University School of Medicine in recognition of achievement in his/her medical studies.

Malamud Prize Awarded annually to the fourth-year student at Boston University School of Medicine who best grasps the basic

science of psychiatry as demonstrated by his/her understanding and caring work with patients both within the Division of Psychiatry as well as in other clerkships.

McGraw Hill Award Presented to the top two students who have completed their first year curriculum. The award is given to students at the beginning of their second year of medical school and is presented at Skit-Nite.

The William F. McNary, Jr. Award (1991)

Established as a gift from the Class of 1991, in celebration of Dr. McNary's 40 years of service to the Boston University School of Medicine. Dr. McNary received his PhD in Anatomy from Boston University in 1954, and was an outstanding teacher of Anatomy at the School of Medicine since then. In 1970, he was appointed as the first Dean of Student Affairs and was devoted to following the careers of medical students by recognizing their individual needs and strengths and addressing them in a sensitive and resourceful manner. The award is presented to a member of the graduating class who is in good academic standing and who best exemplifies the spirit of leadership and service to the School of Medicine that was so appreciated in Dr. McNary. Graduating fourth-year students will nominate members of their class who have a proven record of service to the School of Medicine, who have earned the respect of their peers through quiet acts of leadership, and who strive to foster support, good will, and excellence among their classmates.

Medical Student Excellence in Emergency Medicine Award

This award is offered annually to each medical school in the United States. It is awarded to the senior medical student at each school who best exemplifies the qualities of an excellent emergency physician, as manifested by excellent clinical, interpersonal, and manual skills, and a dedication to continued professional development leading to outstanding performance on emergency medicine rotations.

The Merck Manual Awards Awarded annually to outstanding students in medical studies.

Anne and David Michel Cancer Research Award

(1976) To be awarded to a senior student who has shown excellence in the field of cancer and cancer research in the estimation of the Department of Oncology.

Pauline Millstein Family Fund

Awarded annually to a student enrolled at the Boston University School of Medicine who excels in Pediatrics.

Dr. Elizabeth K. Moyer Award Awarded to a first-year student for excellence in performance in the course in Gross Anatomy.

Elizabeth K. Moyer Memorial Prize in Anatomical Science Awarded annually by the Department of Anatomy and Neurobiology in memory of Elizabeth K. Moyer, a past Professor of Anatomy (1948-1972), to the overall outstanding student in the three anatomical science courses: histology, neuroscience, and gross anatomy.

Dr. Peter J. Mozden Award The Section of Surgical Oncology, Division of Surgery, presents the Dr. Peter J. Mozden Award to a member of the graduating Medical School class who has performed in an exemplary way during his/her clinical or research elective. The student is chosen by unanimous agreement of all the faculty.

Murex Diagnostics Award in Microbiology Awarded to a graduating medical student who has demonstrated an interest and aptitude for medical microbiology during his/her education at Boston University School of Medicine.

John M. Murray Prize Awarded annually to a fourth-year student for the best four-year performance in psychiatry, with special attention to the clinical work and any elective work that the student might have undertaken.

Novartis Pharmaceuticals Prize in Neurological Sciences Presented to the graduating medical student who has demonstrated excellence in neurosciences and basic neurology.

John F. O'Connor, MD, Radiology Award This award was established to recognize outstanding performance in diagnostic radiology. It is given annually to the fourth-year Boston University School of Medicine student who shows the exemplary qualities associated with Dr. Jack O'Connor during the radiology clerkship. The recipient is selected by the faculty and staff of the Department of Radiology. Dr. O'Connor has been the director of Pediatric Radiology at Boston City Hospital since its inception and has been the Associate Dean for Admission at Boston University School of Medicine since 1981. He exempli-

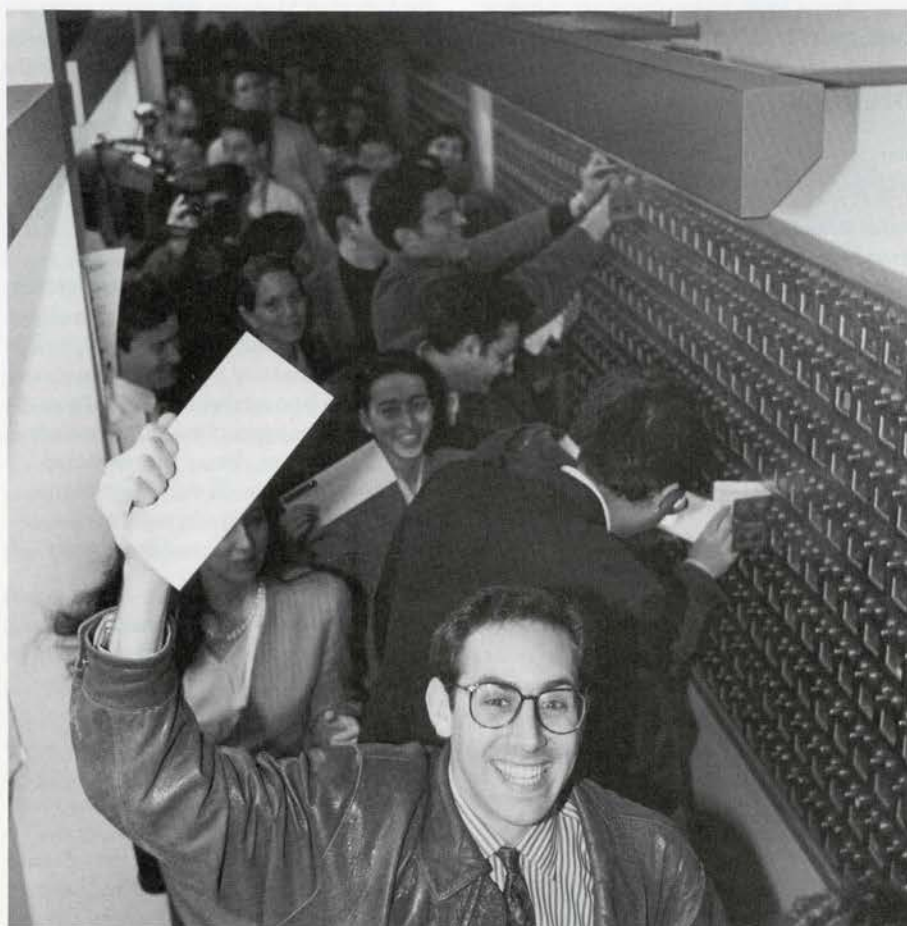
fies integrity, thoughtfulness, and humanity as well as enthusiasm and skill not only in practicing pediatric radiology, but also in personal relationships with students and faculty at the Medical School.

New England Pediatric Society Award

Awarded annually to the member of the graduating class entering Pediatrics who, in the opinion of his/her peers and faculty, best exemplifies the competence, caring, and sense of humor of a good pediatrician.

Peter E. Pochi Award for Excellence in Dermatology The Peter E. Pochi Award for Excellence in Dermatology is awarded to a fourth-year BUSM student. The student, with an interest in dermatology as a career, should exemplify the attributes and qualities as displayed by Dr. Pochi. Dr. Pochi has been a mentor and teacher to several generations of BUSM students. His contributions to dermatology have advanced the specialty to the preeminence it enjoys today. Moreover, his devotion to BUSM is exemplary for all BUSM alumni and students. Dr. Pochi has given a great deal over his career to the field of dermatology, to his patients, and to his School. With this award we salute Dr. Pochi and the student chosen, who has demonstrated excellence in dermatology.

Stephen R. Preblud, MD, Memorial Award in Pediatrics Stephen R. Preblud, MD, was an acknowledged international authority on rubella, varicella, and mumps, and was a leader in the field of childhood disease prevention. He was committed to improving the quality of life for people around the world, most of whom would never know his name. His research played a major role in the effort to vaccinate women and to prevent congenital rubella syndrome. For this and other landmark contributions to the understanding and prevention of childhood diseases, Dr. Preblud was awarded the U.S. Public Health Service's Outstanding Service Medal. Dr. Preblud died at age forty from complications of treatment for chronic myelocytic leukemia. At the time of his death, he was Chief of the Surveillance, Investigations, and Research Branch of the Division of Immunization, Centers for Disease Control, Atlanta, GA; physician at the Henrietta Egleston Hospital for Children (Atlanta); and an Assistant Professor of Pediatrics at Emory University School of Medicine in Atlanta. Dr. Preblud graduated Magna Cum Laude and Phi Beta Kappa from Brown University and the Boston University School of Medicine, where he was a



Stampede at the mailboxes on Match Day.

member of Alpha Omega Alpha. As a medical student, Dr. Preblud was recognized as an extraordinarily gifted and compassionate future physician and scientist and was selected by the Boston University School of Medicine's Department of Pediatrics for its annual award in 1975. The Boston University School of Medicine Department of Pediatrics established the Stephen Preblud Memorial Award for Pediatrics. The award is given to that student of the graduating class who exemplifies the competency and outstanding characteristics of Dr. Stephen Preblud.

Dr. Samuel L. Poplack Award (1977) Established in the memory of Dr. Samuel L. Poplack, father of three graduates of the School of Medicine, it is awarded annually to the fourth-year student who demonstrates both superior clinical competence and excellence in patient care.

Center for Primary Care Award for Excellence in Generalist Medicine The prize is awarded by the Center for Primary Care to an outstanding fourth-year student who will specialize in a primary care discipline. This student has demonstrated achievement in the skills and characteristics which exemplify primary care-generalist medicine, including a dedication to comprehensive care, skillful physical diagnosis and interview, knowledge of the characteristics of disease, and a willingness to connect emotionally with patients.

Radiology Awards In recognition of outstanding performance in the elective of Diagnostic Radiology. Selected by the faculty and staffs of the Department of Radiology of Boston Medical Center.

Stanley L. Robbins Award for Excellence in Teaching This award is given annually to an outstanding educator at the Medical School. The recipient of the award is chosen for his/her excellence in teaching and devotion to the students as best exemplified by the tradition established by the teaching of Dr. Stanley L. Robbins. The award was established in 1980 and is conferred annually at graduation.

David Rothbaum, MD, Award in Obstetrics and Gynecology This prize is awarded to an outstanding graduating student who will specialize in obstetrics and gynecology, who has demonstrated superior academic achievement in the field, and has shown compassion and understanding toward patients.

Sandoz Prize in Clinical Neurology Presented to the graduating medical student who has demonstrated excellence in Clinical Neurology as determined by the faculty.

Dora Savenor Memorial Prize for Excellence in Surgery The Dora Savenor Memorial Prize for Excellence in Surgery is presented to the graduating student who achieved the highest score during his or her third-year surgical clerkship. It is based on clinical performance and surgical knowledge as demonstrated on written examinations.

Robert Slater, MD, Prize in Anesthesiology Awarded annually to a senior student graduating with honors in Anesthesiology and Pulmonary Physiology.

The Jacob Swartz Award from the Class of 1981 The Class of 1981 voted to devote its Class Gift to the establishment of an annual Class Day award in memory of Dr. Jacob Swartz, Associate Dean of Admissions, Professor of Psychiatry, and ardent Boston University School of Medicine alumnus. We remember Dr. Swartz's wit, his unfailing good humor, his relaxed, warm, personal approach to teaching. He advised us to balance our personal and professional lives, reserving time and energy to devote to our families and friends. He was a friend who could be counted on to listen, to care, to try to understand, and to work on what needed to be done. The diversity of our student body is due in large part to his efforts. He enjoyed everything: students, family, sports, food, music, work—including presenting the Psychiatry prizes every year on this occasion. We therefore feel sure that he would enjoy the annual presentation of this award in his memory to the graduating student who best exemplifies those qualities most appreciated in him.

Benjamin Tenney Prize in Obstetrics and Gynecology This prize was established in 1980 by the Department of Obstetrics and Gynecology, its alumni, and the family of Dr. Benjamin Tenney. Dr. Tenney was Chairman of the Department of Obstetrics and Gynecology from 1949 to 1955. The prize is awarded to the graduating medical student who, in the opinion of the faculty, has demonstrated both superior academic achievement in obstetrics and gynecology and has shown compassion and understanding toward patients.

Dean Eleanor Tyler Memorial Award An annual award by the College of Arts and Sciences to the outstanding fourth-year stu-

dent at Boston University School of Medicine who fulfilled his/her premedical requirements through the "Six-Year/Seven-Year" Liberal Arts-Medical Education Program. This fund recognizes the contributions and pioneering efforts of the late Assistant Dean Eleanor Tyler of the College of Liberal Arts and her role as the first coordinator of the Six-Year Liberal Arts-Medical Education Program.

University Hospital Student Prize (1965) Awarded to the graduating medical student whose overall performance while at the Boston Medical Center in both clerkships and electives was most outstanding.

Upjohn Award Awarded to a senior student for achievements in Clinical Pharmacology.

The Wein Student Cancer Research Award Awarded to a graduating medical student in recognition of important contributions to cancer research.

Dr. Louis Weinstein Prize for Excellence in Infectious Disease The award was established by the former students, fellows, and associates of Dr. Louis Weinstein to honor this man who has contributed so much to medical education and who played such an important role in the careers of so many physicians. It is awarded annually to a graduating student from Boston University School of Medicine for excellence in infectious disease.

Fellowships

Postsophomore Fellowships It is possible for a student to devote a year to training in laboratory research after either his or her sophomore or junior year. Support for such a program may be obtained by contacting the chairman of the department in which he or she is interested in working. Before reaching a decision to spend a year in laboratory research, the student should discuss these plans with the Associate Dean of Student Affairs.

Postdoctorate Research Training Fellowships There are opportunities for postdoctorate research in almost every department of the School. The department chairman can provide information about specific research programs. Financial support for qualified individuals may often be obtained. The School maintains programs in the fields of cancer, cardiovascular disease, neurology, experimental pathology, psychiatry, human genetics, gastroenterology, and gerontology.

Courses of Instruction

The goals of the curriculum are to: (1) create an environment conducive to scholarly study; (2) stimulate a spirit of critical inquiry; (3) inculcate an understanding of the scientific method; (4) provide a sound core of appropriate information in the biological, natural, social, and behavioral sciences; (5) provide the student with early and direct contact with the issues and problems involved in the care of a patient; (6) deal with human problems of health and disease with critical, compassionate, and comprehensive understanding; and (7) provide a range of experiences in primary care and other specialties so that students can make informed career choices.

The first-year curriculum presents a study of the human being in a bio-psycho-social model. Courses are offered in the traditional biologic disciplines that lead to an understanding of the normal structure and function of the human body. Gross Anatomy and Histology emphasize the structure. Biochemistry, Physiology, and Endocrinology underscore the mechanisms of normal function. Neuroscience, Immunology, and Genetics provide important information from perspectives that are currently in the forefront of medical science. A first semester course in Psychiatry and a second semester course in the Essentials of Public Health present, respectively, the spectrum of human development and social organizations in which people participate as professionals, patients, and citizens.

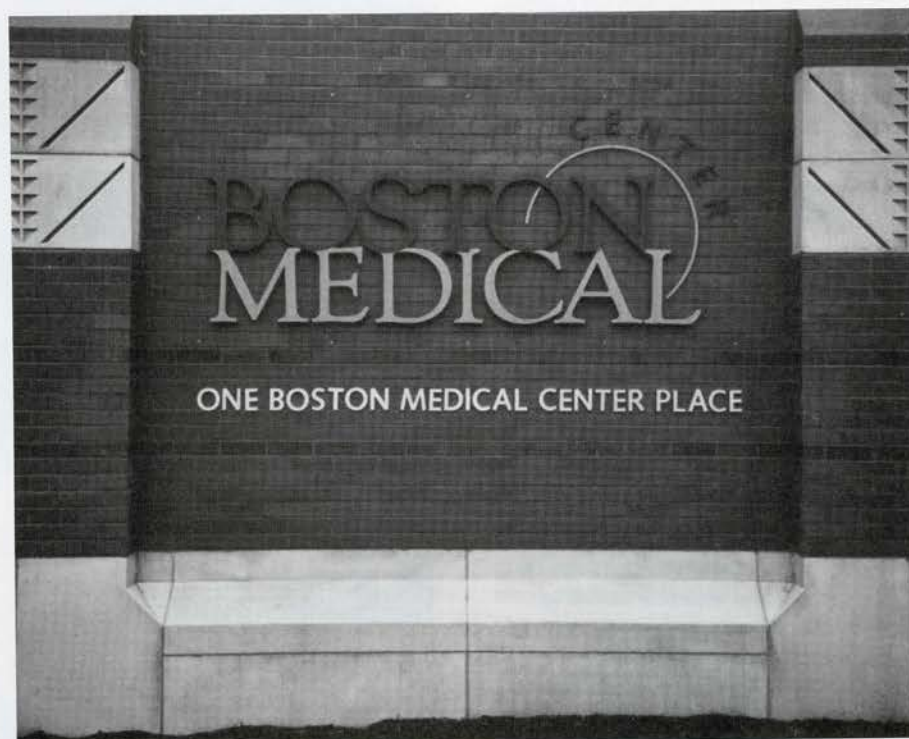
The first semester of the second year is composed of the traditional courses in Microbiology and Infectious Diseases, Pharmacology, and Pathology. The second semester is devoted to an interdisciplinary course, Biology of Disease, and a course in Psychiatry. Biology of Disease is a systems based patho-physiology course in which emphasis on the clinical sciences is closely integrated with the basic sciences.

Two courses, Integrated Problems (IP) and Introduction to Clinical Medicine (ICM), are produced longitudinally throughout the first two years of the curric-

ulum. They serve as a means of relating the basic sciences to each other and of making the transition to the clinical years. Integrated Problems is conducted in a small-group, problem-based learning format. It is a student-centered course in which student participation, cooperative group learning, problem solving, and integration of information from concurrent courses are primary features. Introduction to Clinical Medicine is based predominantly in primary care settings where student to faculty ratios are as small as 1:1. In the first year, the students explore both the various aspects of the doctor-patient relationship and the relationship of medicine to some of the broader social issues of our time. In the second year of ICM, communication skills are reinforced and techniques of physical examination are introduced so that students are appropriately prepared for their third-year clerkships.

The third year is the principal clinical clerkship year and is composed of clerkships in Family Medicine, Internal Medicine, Surgery, Obstetrics and Gynecology, Pediatrics, and Psychiatry. Directly supervised clinical work occurs in multiple settings including the medical center hospitals, community hospitals, community health centers, and physicians' offices.

The fourth year is composed of required, four-week courses including Geriatrics (Home Service), Neurology, Radiology, and a subinternship. The remaining twenty weeks of electives may be scheduled at each student's discretion. Each division and department of the School of Medicine offers a number of electives. These are predominantly clinically based but may include lectures, seminars, other formal courses, or supervised individual research. The elective program for any given student is developed



Boston Medical Center, representing the merged Boston City Hospital and University Hospital as the School of Medicine's principal teaching hospital, was created July 1, 1996.

in conjunction with a faculty advisor. Electives may include course work in other Schools and Colleges of Boston University and other approved educational institutions in the Boston area or elsewhere. Clinical and research electives in other medical schools or medical school-affiliated hospitals in this country or abroad are permitted after the division or department at the Boston University School of Medicine has confirmed the educational value of the elective and has given its formal approval.

The School of Medicine participates in the Community Partnerships Program, which is a joint program with Northeastern University, The Department of Health, Hospitals of the City of Boston, and several neighborhood health centers. Students spend a significant portion of curriculum time learning within neighborhood health centers and their communities. Many of the courses or parts of the courses described above may be fulfilled through this program. The health centers and communities may be viewed as an extended campus, which provides relationships and experiences for students over the four-year curricular continuum. The Introduction to Clinical Medicine courses, sections of the Integrated Problems Course, sections of the required third-year clerkships, plus specific fourth-year electives are sequenced in an integrated, multi-disciplinary fashion.

Conjoint Courses

First Year Neurosciences The nervous system is approached from the point of view of anatomy, physiology, and neurology. In the anatomy practical classes, brains and spinal cords are dissected, and cytology of neurons, together with the distribution of the more important tracts, are studied in microscopic sections. Practical classes and demonstrations are also held which deal with selected aspects of the physiology of the nervous system and with clinical correlation. Thus, the course presents an integrative concept of the central nervous system and its functions. *Dr. Sandell and associates*

Second Year Biology of Disease This course is a systems-based, pathophysiology course. There are a total of twelve instructional blocks. The individual blocks are internally organized by a block manager who uses faculty from several basic science and clinical departments to provide an integrated educational experience. Students learn systemic pathology and clinical pharmacology. The course emphasizes anatomic,

biochemical and physiologic principles. The faculty reinforce the case approach in clinical medicine, which involves the thought process in approaching clinical problems, the means by which clinical information is obtained, the vocabulary used in the clinical setting, and knowledge of specific disease entities.

First and Second Years Integrated Problems This course, which incorporates problem-based learning, uses clinical problems to stimulate student thinking and learning of the natural and social sciences. The material to be learned is part of the subject matter of concurrent, traditional courses. Students participate in small groups of 6-8 each and are expected to identify the problems in the cases to be solved and to develop a cooperative system of finding and sharing the information needed to understand the problems. The faculty for the course are derived from virtually every department in the school and work as facilitators with their individual groups to be sure that each member of the group is participating and learning. The groups meet once a week throughout the first two years. *Dr. Rogers and Dr. Shaw, Coordinators*

Introduction to Clinical Medicine This course is offered over a three-year continuum. ICM-1 develops student skills and understanding of the doctor-patient relationship. Issues that will be explored will include the ethical principles of the relationship, the subjective experience and meaning of the encounter, the meaning of professional identification, and the sociocultural issues of effective relationship. Additionally, six specific learning units are directed toward issues of broad social and medical import such as substance abuse, children at risk, and the effects of cultural diversity. ICM-2 emphasizes the adult and pediatric interviewing and physical examination including the ability to present, orally and in writing, a patient profile that uses a bio-psycho-social construct. ICM-3 is composed of small group sessions that enable students to develop both objective and caring perspectives about patients they are encountering, such as patients who are dying, patients who have new or chronic disabilities, or patients who present difficult behavioral or communication problems. The courses use faculty from numerous clinical departments. *Dr. Freeman, Coordinator ICM-1; Dr. Freeman, Coordinator ICM-2; and Dr. Siegel, Coordinator ICM-3.*

ANATOMY AND NEUROBIOLOGY

Required Courses

First Year Gross Anatomy Lectures and laboratory work are designed to introduce the student to basic functional anatomy. The course is divided into three sections: thorax, abdomen, and pelvis; head and neck; and locomotion. Each section is managed by one of the faculty. Students are introduced to surface anatomy, embryology, and radiologic anatomy as a way of beginning their study of physical diagnosis. Throughout all three sections of the course, clinicians are invited to discuss their specialty as it concerns morphology. When appropriate, patients are presented to reinforce the morphological relations as they apply to disease. The goal of the course is to introduce the student to nomenclature, to help the student to realize the importance of morphologic relationships, to prepare the student for his or her further study of morphology, and to aid the student in developing an appreciation for learning and for functional anatomy. *Drs. Blatt, Hoyt, Moss, Nandy, Payne, Siwek, and Van Houten*

Microscopic Anatomy (Histology)

Lectures and laboratory work are designed to introduce the student to the nomenclature, structure, and function of human cells, tissues, and organs. The course is divided into two sections: cells and tissues, and organs. Lecture material is directed towards basic concepts and recent advances in cell biology. All phases of microscopic investigation are covered. The laboratory portion focuses on detailed light microscopic examination of tissue sections. A loan collection of microscopic slides is provided for each student. Audio-visual aids are also available. Goals for the course include: appreciation of the arrangements of cells and extracellular materials as they unite to form tissues and organs, understanding of structure-function relationships, and development of a normal base of organ morphology which will be necessary for diagnosing pathologic conditions. *Drs. Peters, Riedl, Rosene, Sandell, Sorokin, Vaughan, and Van Houten*

Faculty

Professor and Chairman ad Interim

Mark B. Moss, PhD

Waterhouse Professor

Alan Peters, PhD

Professor

Helen Barbas, PhD
 Thomas F. Freddo, OD, PhD
 Thomas L. Kemper, MD
 John F. O'Connor, MD
 Deepak N. Pandya, MD
 Bertram Ronald Payne, PhD
 Eric L. Schwartz, PhD
 Mary C. Williams, PhD
 Edward H. Yeterian, PhD

Research Professor

Kalidas Nandy, MD, PhD
 Sergei P. Sorokin, MD

Professor Emeritus

Martin L. Feldman, PhD

Associate Professor

Johan G. Blickman, MD, PhD
 Richard F. Hoyt, PhD
 Douglas L. Rosene, PhD
 Julie H. Sandell, PhD
 Deborah W. Vaughan, PhD
 George P. Whitelaw, MD
 Lawrence C. Zoller, PhD

Adjunct Associate Professor

Douglas A. Cotanche, PhD

Assistant Professor

Gene J. Blatt, PhD
 Trudy Van Houten, PhD

Assistant Research Professor

Patsy B. Cipolloni, MD
 Robin J. Johnson, PhD
 Stephen G. Lomber, PhD
 Jennifer I. Luebke, PhD
 Donald P. Siwek, PhD

Instructor

Ann E. Riedl, PhD

Lecturer

Harold S. Reitman, MD

ANESTHESIOLOGY**Required Courses**

All students receive four hours of seminars on anesthesiology during their surgical clerkship.

Elective Courses

There is a two-week elective in anesthesiology at Boston Medical Center. Detailed objectives, both didactic and clinical, have been developed for this course, which is given to each student on the first day of the rotation.

Every day the student is assigned to a senior resident and a staff anesthesiologist. The student makes pre-op rounds to evaluate the patient's status, discusses anesthetic plans with staff and patients, and participates in the peri-operative management. Particular attention is given to airway management, but all aspects of intra- and post-operative management are covered, such as fluid electrolyte and acid base balance, pain management, and the multiple technical aspects, such as regional anesthesia, arterial cannulation, etc. Students are provided the opportunity to develop experience with and evaluate the effectiveness of the numerous physiological monitors utilized in the practice of anesthesiology. Minututorials with various faculty on a variety of topics are included at Boston Medical Center. Participation in departmental conferences is required. An oral patient presentation is given at the end of the rotation. Both the student's clinical performance and the case presentation are the basis of evaluation. All elective requests must be submitted through the chairman's office.

Fourth Year

Two- or four-week electives are available for which detailed and comprehensive objectives have been developed. Students are given exposure to all types of anesthesia and actively participate in the pre-, intra-, and post-operative management of the cases under supervision of senior residents and staff anesthesiologists. Participation in department conferences is required. An oral presentation is required at the end of the rotation. The student's clinical performance, participation in conferences and case presentation are the basis for evaluation. *Dr. Stanley*

Faculty**Associate Professor and Chairman**

Keith P. Lewis, MD

Professor

Benjamin J. Kripke, MD
 Marcelle M. Willock, MD

Professor Emeritus

John C. Snow, MD

Associate Professor

J. Fredrik Hesselvik, MD, PhD
 Rafael Ortega, MD
 Eric T. Pierce, MD, PhD

Associate Clinical Professor

Thieu Duong, MD, MPH
 Kathleen C. Hittner, MD

Assistant Professor

Harold M. Arkoff, MD
 A. Dwight Bramble, MD
 Michael H. Herzig, MD
 Brigitte Kuperwasser, MD
 Jayanthie S. Ranasinghe, MBBS
 Hasmig A. Salibian, MD
 Glynne D. Stanley, MBBS
 Amanollah H. Vakil, MD
 Elamana Vijayakumar, MBBS
 Lawrence C. Weinfeld, MD

Assistant Clinical Professor

Ajoy Bhattacharjya, MBBS
 Olivia V. Carcoana, MD
 Susan B. Cartier, MD
 Timothy G. Connelly, DO
 Hisham S. El-Kadi, MBBS
 Sherif A. Felix, MD
 Ayman S. Hanna, MD
 Mohammed K. Hassan, MD
 John W. Hennessey, MD
 Klaus W. Korten, MD
 Anna L. Kurian, MBBS
 Joel R. Lopes, Jr., MD
 Jyotsna V. Nagda, MBBS
 Veronica N. Nanagas, MD
 Venkata S. Ravi, MBBS
 Stuart Schneiderman, MD
 Richard P. Shockley, MD
 Mario F. Tarquino, MD

Adjunct Assistant Professor

Luca M. Bigatello, MD
 Mark E. Stoker, MD

Adjunct Assistant Research Professor

Richard C. Havel, EdD

Instructor

Mona Najib Arabi, MD
 Clifford J. Bierman, MD, DDS
 Erin Burns, MD
 Susan M. Cid-Espanola, MD
 James F. English, MD
 Cynthia Espanola, MD
 David M. Gabriel, MD
 Sanjay K. Jain, MD
 Lisa Ann Keglovitz, MD
 David W. Lerdahl, MD
 Mark D. Levin, MD
 Randall G. Mannella, MD
 Jan Paul Matejka, MD
 Jason G. Noble, MD
 Catherine Parham, MD
 Jaydev V. Sarma, MBBS
 Benjamin S. Suaco, MD

BIOCHEMISTRY

Required Courses

First Year Biochemistry Examines the nature of the chemical processes that occur in the living cell. Particular emphasis is placed on proteins, enzymes, lipids, carbohydrates, nucleic acids, their synthesis, structure, metabolism and function in mammalian systems. The role of the nucleus, mitochondria and other cellular components is studied. Application of biochemistry in clinical experience is presented. Provides the conceptual grounding in biochemistry required to understand future advances in medicine. *Staff*

Faculty

Professor and Chairman

Carl Franzblau, PhD

Professor

Peter I. Brecher, PhD
Daniel Deykin, MD
Douglas V. Faller, MD, PhD
Stephen Farmer, PhD
Richard E. Fine, PhD
Judith A. Foster, PhD
William Hollander, MD
Herbert M. Kagan, PhD
Richard M. Niles, PhD
Paul Pilch, PhD
Peter R. Polgar, PhD
Hugues J.P. Ryser, MD
G. Graham Shipley, PhD
Elizabeth Simons, PhD
F. Marott Sinex, PhD
Donald M. Small, MD
Barbara D. Smith, PhD
Gail E. Sonenshein, PhD
Phillip J. Stone, PhD
Abdulmaged M. Traish, PhD
Robert F. Troxler, PhD

Research Professor

David Atkinson, PhD
David M. Center, MD
Barbara A. Corkey, PhD
Richard D. Diamond, MD
Joseph H. Korn, MD
Joseph Loscalzo, MD, PhD
Edward J. Modest, PhD
John R. Murphy, PhD

Professor Emeritus

Karl Schmid, MD, PhD
Herbert H. Wotiz, PhD

Adjunct Professor

Jean D. Sipe, PhD

Associate Professor

Carmela R. Abraham, PhD
Ellen Berkowitz, PhD
Jerome S. Brody, MD
Matthew A. Nugent, PhD
Frank G. Oppenheim, PhD
Katya Ravid, DSc, PhD
Gordon L. Snider, MD
Keith Tornheim, PhD
Paul Toselli, MD, PhD

Associate Research Professor

Solomon Amar, DDS, PhD
Dana T. Graves, DDS
James A. Hamilton, PhD
James L. Kirkland, MD, PhD
Mary J. Murnane, PhD
Hee-Young Park, PhD
Vemuri B. Reddy, PhD
Sander J. Robins, MD
Barbara M. Schreiber, PhD
Jacqueline Sharon, PhD
Vickery Trinkaus-Randall, PhD
Mark J. Weinstein, PhD
Vassilis I. Zannis, PhD

Adjunct Associate Research Professor

David R. Janero, PhD

Assistant Professor

Miyoung Chun, PhD
Wayne A. Gonnerman, PhD
Konstantin Kandror, PhD
Karen Symes, PhD
Zhi-Xiong Xiao, PhD

Assistant Research Professor

Marcello Arsura, PhD
John C. Beldekas, PhD
Peter Bergethon, MD
Theresa A. Davies, PhD
Ronald H. Goldstein, MD
Robin J. Johnson, PhD
Shelby Kashket, PhD
Maria A. Kukuruzinska, PhD
Crystal A. Leslie, PhD
Roy A. Levine, PhD
Richard Mandel, PhD
Richard A. Miller, MD, PhD
Shirley M. Morris, PhD
Gwynneth D. Offner, PhD
Mikhail P. Panchenko, PhD
Constance L. Phillips, MPH
Basabi Rana, PhD
Michael A. Shia, PhD
Linda Taylor, PhD
Philip C. Trackman, PhD
Qiang Yu, PhD

Adjunct Assistant Professor

Carol A. Gloff, PhD

Adjunct Assistant Research Professor

Bruce A. Jackson, PhD

Instructor

Donald DeRosa, MDiv
Randy D. Krauss, PhD
B. Leslie Wolfe, PhD

Research Instructor

Mary T. Walsh, PhD

BIOPHYSICS

The Biophysics Department is interested primarily in applying modern physical and chemical techniques to the study of structural biology. Of particular interest is the structural biology of lipid metabolism, the physical state of lipids and proteins in cellular membranes and organelles, serum lipoproteins, receptors, nervous tissue, bile, and such pathological deposits as gallstones and atherosclerotic plaques. The use of a number of techniques, such as high resolution electron microscopy and image reconstruction, computer modeling, X-ray diffraction, NMR, UV and fluorescent spectroscopy, and microcalorimetry, make it possible to study the physical state of lipids and proteins *in vitro* and in live tissue preparations and pathologic deposits. These studies give information about the molecule-to-molecule interaction between proteins or between lipids and proteins. Employing structural biological rationale and techniques has helped the medical profession to understand more fully the nature of bile and the formation of gallstones, the structure and the function of lipoproteins and plasma membranes, the structure of the nuclear pore complex, the structure of the lipid lesions of atherosclerosis, and the structure of receptor-ligand complexes. The ultimate goals are to understand biology and pathology on a molecular basis.

Faculty

Professor and Chairman

Donald M. Small, MD

Professor

David Atkinson, PhD
James A. Hamilton, PhD
G. Graham Shipley, PhD

Research Professor

Peter I. Brecher, PhD
M. Carter Cornwall, PhD
Catherine E. Costello, PhD

Paul Pilch, PhD
Elizabeth Simons, PhD

Associate Professor

Christopher W. Akey, PhD
Raphael A. Zoeller, PhD

Assistant Professor

Hwai-Chen Guo, PhD
Olga Gursky, PhD
C. James McKnight, PhD
Mary T. Walsh, PhD

Instructor

Esther S. Bullitt, PhD
Haya Herscovitz, PhD
Fengli Zhang, PhD

CARDIOTHORACIC SURGERY

The Department of Cardiothoracic Surgery at the Boston Medical Center offers the fourth-year medical student an opportunity to participate fully in the clinical service. During this period, the student will have contact with patients admitted for cardiac and thoracic operations. The student will be responsible for performing history and physical examinations and will have the opportunity to review the preoperative cardiac catheterization data and angiography material before surgery. Opportunities for participation in the operating room will provide the student with direct knowledge of techniques of cardiopulmonary bypass, a variety of valve replacements, including bioprosthetic valves, prosthetic valves, and homograft valves, as well as extensive experience in coronary artery bypass surgery techniques including new, minimally invasive procedures. The rotation will also include responsibilities in the intensive care unit, directed toward the use of the intra-aortic balloon pump, inotropic drug support, antiarrhythmic drugs, and hemodynamic monitoring. A period of rotation of approximately four to six weeks would be most ideal for the student. Opportunities to observe research in the cardiothoracic research laboratories or to participate in clinical research are also possible.

Faculty

Professor and Chairman
Richard J. Shemin, MD

Professor
Harold L. Lazar, MD

Associate Professor
Oz M. Shapira, MD

DERMATOLOGY

Required Courses

Second Year Five days of the course Biology of Disease are devoted to the skin. Lectures are given on the anatomy and physiology of the skin, the skin manifestations of internal disease, prevention and detection of skin cancer, the process and diseases of keratinization, contact dermatitis, infections of the skin, acne, diseases of the hair and nails, sweating and circulation, pigmentation, fungus infections, allergy and photoallergy, viral diseases, atopic diseases, papulosquamous diseases, skin tumors, and manifestations of AIDS. *Dr. Yaar*

Electives

Fourth Year One to six months of full-time electives are offered in clinical and/or research dermatology. During the one-month clinical elective, students participate in general activities of the department, attend resident and staff conferences, work in clinics of various hospitals, and participate in inpatient consultation rounds. Special didactic sessions are provided by the senior resident staff and close interaction with the faculty is encouraged. *Dr. Kurban*

A basic research elective (for a minimum of three months) can be arranged in cutaneous cell biology. Preference is given to students with previous laboratory experience. *Dr. Gilchrist and associates*

A two-month clinical research elective is offered in dermatologic surgery and oncology. *Drs. Rohrer and Demierre*

International Graduate Dermatology Programs

Diploma in Dermatology (1 year)
Master of Science in Dermatology (2 years)
Master of Science in Dermatopathology (2 years)
Doctorate in Dermatology (3-4 years)

The diploma and master's programs in Dermatology involve, respectively, twelve and twenty-four months of full-time study for foreign medical graduates. The programs are intended for physicians in third-world countries who have or will have major responsibility for dermatologic care and education in their homelands, but who cannot obtain the required dermatologic training there. In general, these individuals are identified by their home institutions as potential leaders, and their education is

sponsored by their government or medical school. Entrance requirements include a Doctor of Medicine degree from a recognized university, fluency in written and spoken English, and at least one year's experience in the practice of medicine with an emphasis in dermatologic disease. Degree candidates may concentrate in either clinical dermatology or dermatopathology. Instruction at lectures, seminars, and small-group teaching sessions; preparation of written reports regarding specific disease entities; and periodic written and oral examinations. The doctorate program requires completion of the master's program (or its equivalent at another accredited university) followed by 12 to 24 months of additional study, including original research and a thesis dissertation. *Drs. Kurban, Bhawan, and Gilchrist*

Faculty

Professor and Chairman
Barbara A. Gilchrist, MD

Professor
Jag Bhawan, MBBS
Vincent Falanga, MD
Michael F. Holick, MD, PhD
Amal K. Kurban, MD
Mina Yaar, MD

Herbert Mescon Professor Emeritus
Peter E. Pochi, MD

Clinical Professor
G. Robert Baler, MD
Donald J. Grande, MD

Clinical Professor Emeritus
Nicholas J. Fiumara, MD
Lawrence A. Norton, MD

Adjunct Professor
Howard K. Koh, MD

Associate Professor
H. Randolph Byers, MD, PhD
Tania J. Phillips, MBBS

Associate Clinical Professor
Glenn A. Dobecki, MD
Michael T. Rosenbaum, MD
Howard S. Yaffee, MD

Associate Clinical Professor Emeritus
Edward Karian, MD
Herbert White, MD

Associate Research Professor
Mark S. Eller, PhD
Edward Karian, MD
Hee-Young Park, PhD
Herbert White, MD

Adjunct Associate Professor

Karen M. Emmons, PhD
Robert A. Lew, PhD
Bruno Maynard, MD

Assistant Professor

Anne Elizabeth Allan, MD
Marion E. Buchsbaum, MD
Maire-France Demierre, MD
Lynne J. Goldberg, MD
Cynthia A. Golomb, MD
Candace S. Lapidus, MD
Thomas E. Rohrer, MD
Jill R. Slater-Freedberg, MD
Catherine M. Stefanato, MD
W. Zoe E. Stitt, MD
Dany J. Touma, MD
Robin L. Travers, MD, PhD

Assistant Clinical Professor

George Blumental, MD
Lisa M. Cohen, MD
Arthur D. Daily, MD
Philip S. Ellerin, MD
Ronald J. Finn, MD
Alan C. Geller, RN, MPH
David Goldminz, MD
Samuel D. Goos, MD
Alfred S. Lanes, MD
Caroline S. Wilkel, MD

Adjunct Assistant Research Professor

Donald R. Miller, ScD

Instructor

Lori A. Steinberg, MD
Steven J. Ugent, MD

Clinical Instructor

Randy Berger, MD
Allen I. Berliner, MD
Bret E. Davis, MD
Jay A. Goldstein, MD
David S. Greenstein, MD
Jonathan L. Held, MD
Alan S. Rockoff, MD
Deborah A. Scott, MD
Nadia K. Sherline, MD, MPH
David J. Taub, MD

Lecturer

David S. Feingold, MD

EMERGENCY MEDICINE**First Year Introduction to Emergency Medicine**

This elective is open to all first-year students. This course teaches students the fundamental approach to a variety of emergency conditions both outside and inside the hospital. There are twelve modules which

span Basic Life Saving to trauma management. Four procedure modules teach intubation, CPR, plaster splinting, and intravenous placement. All students observe a shift in the Boston Medical Center Emergency Department and ride the Boston EMS ambulances. Course objectives are to provide the basic clinical tools to better understand relevant pathophysiology concepts in emergency medicine, and to create a foundation for future emergency medicine courses. *Drs. Medzon and Dr. Kahn.*

Third Year Advanced Cardiac Life Support

Through a series of didactic and practical sessions, students are taught how to identify and manage cardiac emergencies. Skill stations include airway management, dysrhythmia identification, and megacode. Students learn how to use cardiac medications and the defibrillator. Specific objectives include the recognition and management of myocardial infarction, tachycardia, bradycardia, ventricular fibrillation, asystole, pulseless electrical activity, and cardiogenic shock. Students who successfully complete this course will be certified by the American Heart Association. *Dr. Arnold*

Fourth Year Emergency Medicine Clinical Elective

Students spend four weeks in the Boston Medical Center emergency department, a level I trauma center, and take an active role in the initial evaluation and treatment of patients in conjunction with the residents and attending staff. Field exposure to the pre-hospital care system is provided through observation on Boston EMS ambulances.

Students participate in daily departmental conferences, present a short conference, and attend a didactic lecture series designed specifically for students interested in Emergency Medicine. *Dr. Rothenhaus*

First Year through Fourth Year Emergency Medicine Research

This four-week elective is for the highly motivated student with an interest in Emergency Medicine. Students arrange with the course director to assist investigators with design, data collection, and statistical analysis. Students work closely with the investigator and accomplish various tasks on their own. *Dr. Fish*

Faculty**Professor and Chairman**

Peter Moyer, MD

Professor

Edward Bernstein, MD

Associate Professor

James A. Feldman, MD
Susan S. Fish, D.Pharm

Associate Clinical Professor

John Lawrence Mottley, MD
Niels K. Rathlev, MD

Assistant Professor

Luther Kristian Arnold, MD
William Baker, MD
Kathryn H. Brinsfield, MD
Richard M. Caggiano, MD
Steven G. Crespo, MD
Robert G. Dart, MD
Andreas Dewitz, MD
Barbara L.A. Herbert, MD
Joseph H. Kahn, MD
Sigmund J. Kharasch, MD
Judith A. Linden, MD
Ron Medzon, MD
Elizabeth Mitchell, MD
Todd C. Rothenhaus, MD
Stacey Sperling, MD
Andrew S. Ulrich, MD

Assistant Clinical Professor

Robert S. Baratz, MD, PhD, DDS
Elliott L. Cohen, MD
Gail D'Onofrio, MD
Eric S. Freedland, MD
Richard S. Herman, MD
Barbara A. Jackson, MD
Brendan G. Magauran, MD

Adjunct Assistant Professor

Benjamin J. Kerman, MD

Instructor

Robert S. Chang, MD
Wayne A.D.E. Chin, MD
Thomas Perera, MD
Simon Paul Roy, MD

Clinical Instructor

Francine D. Cantor, MD
Peter K. Celluci, MD
Mary K. Day, MD
Karen DeFazio, MD
Christopher Eugene Dong, MD
Dale J. Ellenberg, MD
Richard C. Fiorini, MD
Julianne P. Huber, MD
Thea L. James, MD

FAMILY MEDICINE

First Year The Department of Family Medicine directs one of the sub-options in the first-year Introduction to Clinical Medicine course. Each student is placed in a family physician's office for fourteen sessions over

the spring semester. This one-on-one mentoring program allows students to directly observe and participate in patient care in an outpatient setting in a family physician's office. Students are able to start learning the skills involved in interviewing and examining patients while developing a relationship with one physician in the community. In addition to going out to offices, students are invited to attend a series of workshops where they learn how to take vital signs, use ophthalmoscopes/otoscopes, approach well child care and a variety of other topics. *Dr. Harvey*

Second Year An Extended Family Medicine Mentorship program is offered as an optional way of participating in the second-year Introduction to Clinical Medicine course. Students in this program learn their physical exam skills in an outpatient setting, taught one-on-one by their mentor from their first year. These students are also offered a series of supplemental workshops. In addition to this program, two faculty members from the Department of Family Medicine teach the physical exam in the traditional section of the Introduction to Clinical Medicine course for second-year students. *Dr. Harvey*

Third Year Family Medicine Clerkship

The Family Medicine Clerkship is a six-week rotation which is based at outpatient clinical family practice sites affiliated with the Department (Central Maine Medical Center and Beverly Family Practice Residency program), community health centers (South Boston, Codman Square, and Manet), and private group practices in and around Boston and on Cape Cod. At these sites, clerks follow a curriculum which provides for a detailed, systematic observation of student's history-taking, physical examination, clinical reasoning, and patient education skills by the principal preceptor on the rotation. Clerks are given significant responsibility for patient care. Students must complete a case report, which entails a home visit, genogram of the visited family, and a preventive medicine plan for the patient. This outpatient experience is complemented by three didactic small group sessions at BMC, based on comprehensive analysis of a simulated family. These discussions cover a wide range of topics including pediatrics, adult medicine, OB/GYN and preventive medicine. Students are evaluated by the preceptors at the clinical sites, and on the final day of the clerkship, return to the department, where they interview standardized patients, write progress notes on these interviews, and take a final examination based on the simulated family and an accompanying book of readings.

Fourth Year Fourth-year students have the opportunity to expand their exposure to Family Medicine by participating in one of our Family Medicine Electives. Elective openings include inpatient and outpatient experiences at a variety of locations, including the Family Medicine Inpatient Team at Boston Medical Center, Malden Hospital, Central Maine Medical Center, and Beverly Hospital. Special electives in medical care of the homeless and an international exchange program are also available. For more information, please see the Fourth Year Elective Bulletin or the departmental Web site www.bumc.bu.edu/departments.

Faculty

Professor and Chairman

Larry Culpepper, MD, MPH

Professor

John F. McCahan, MD

Clinical Professor

Robert Schwartz, MD

Associate Professor

Brian W. Jack, MD

Peter F. Shaw, PhD

Associate Clinical Professor

John A. Danis, MD

James R. Melloh, MD

Walter R. Peterlein, MD

Adjunct Associate Professor

Carole A. Shea, PhD

Assistant Professor

Thomas T. Gilbert, MD, MPH

Thomas C. Hines, MD

Glennon J. O'Grady, MD

Assistant Clinical Professor

Jeanne F. Arnold, MD

Joseph W. Gravel, MD

Richard F. Hobbs, MD

Timothy H. Holtz, MD

Peter F. Jeffries, MD

Timothy J. Pollard, MD

Stanley E. Sagov, MD

Eli Shapiro, MD

Deborah A. Taylor, PhD

Richard L. Zizza, MD

Adjunct Assistant Clinical Professor

John G. Kidd, Jr., MD

Instructor

Maurice Martin, MD

Clinical Instructor

Joseph A. Ackil, DO

Alex R. Bingham, MD

Adrian V. Blake, MD
Lyle G. Bohlman, MD
Bari-Sue Brodsky, MD
Gerald P. Corcoran, MD
Alan Drabkin, MBChB
Jocelyn C. Duffy, MD
Philip I. Elkin, MD, PhD
Leonard M. Finn, MD
Donald M. Green, MD
Jonathan K. Han, MD
Renee A. Hoffmann, MBBCh
Peter B. Hope, MD
Martin Iser, MD
Edith M. Jolin, MD
Martha Karchere, MD, MPH
Sara Beth Karp, MD
Barry N. Kaye, MD
Paul O. Ketrow, MD
Laura C. Knobel, MD
Gordon M. Magonet, MD
Ann Marie Morvai, MD
Julia A. Murphy, MBBS
Jody A. Naimark, MD
Philip B. Nedelman, MD
Roger A. Pompeo, MD
Mary L. Scott, MD
Patricia A. Sereno, MD, MPH
David Shamblaw, MD
Richard A. Sheff, MD
Robert E. Singer, MD
Surender Singh, MBBS
Matthew Siu, MD
Beatrix S. Thomas, MD, MPH
Rachel Wheeler, MD
Charles T. Williams, MD

Adjunct Clinical Instructor

Louise Spugnardi, RN, NP

MEDICINE

Required Courses

First Year Introduction to clinical medicine consisting of exercises throughout the year which, insofar as possible, demonstrate the clinical application of material being taught in the basic sciences. Included in the exercises are patients demonstrating the problems under discussion. The major aim is to emphasize the desirability of scientists and clinicians working together in order to understand a clinical problem. *Staff*

Second Year Teaching of medicine in the second year is incorporated in the course Biology of Disease, and includes emphasis on the relationship between pathological processes and the manifestations of disease as

well as etiology, diagnosis, and management of illness. A course on the examination of the patient, physical diagnosis and history taking, is coordinated with Biology of Disease. *Staff*

Third Year This is the principal clinical year in which students serve as clinical clerks for twelve weeks on the medical wards and outpatient programs of affiliated hospitals and neighborhood health centers. Students are divided into small groups and become an integral part of the hospital services. They participate in ward rounds, clinics, and special conferences that deal with diagnosis, therapeutics, pathology, and social and environmental factors peculiar to particular disease processes. *Staff*

Fourth Year The department offers subinternships during which students obtain advanced training in internal medicine. They serve as members of patient care teams on the medical services of affiliated hospitals. The department also sponsors many electives, both clinical and research oriented, for further study in internal medicine and its subspecialties, including arthritis, cardiology, endocrinology, gastroenterology, geriatrics, hematology, hypertension, respiratory diseases, infectious diseases, oncology, peripheral vascular, and nephrology. Faculty with appointments in the Department of Medicine supervise the fourth-year requirement of the Home Medical Service. *Staff*

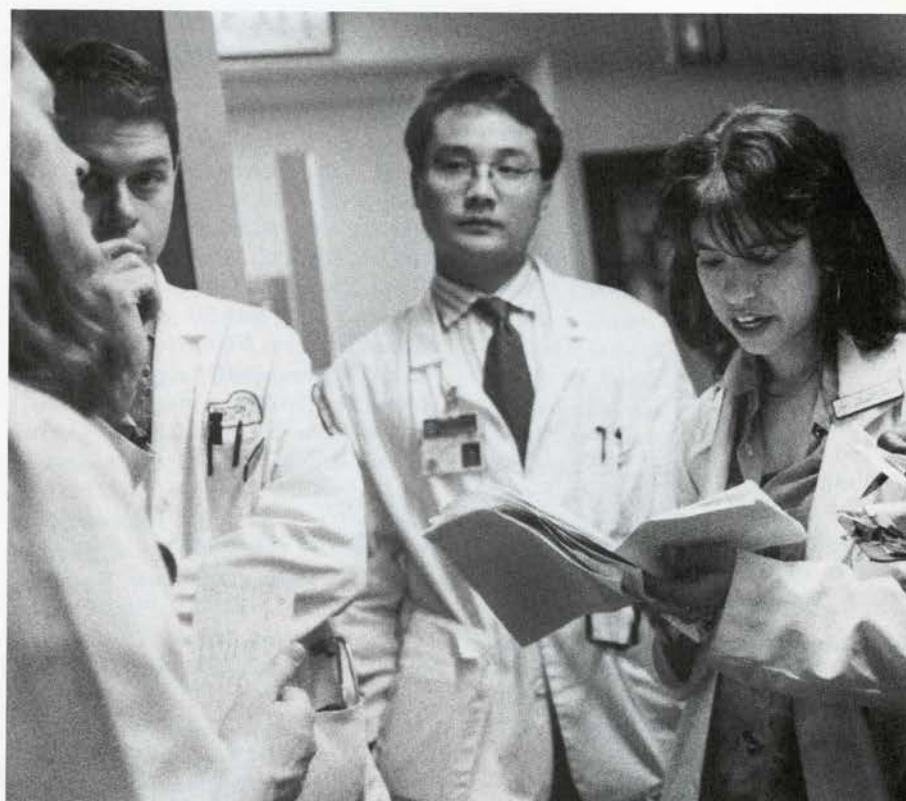
Faculty

Wade Professor and Chairman

Joseph Loscalzo, MD, PhD

Professor

Edward A. Alexander, MD
Jack E. Ansell, MD
Carl S. Apstein, MD
Robert D. Arbeit, MD
Gary J. Balady, MD
Patricia P. Barry, MD
David I. Beller, PhD
Jerome S. Brody, MD
Edgar S. Cathcart, MBBCh
David M. Center, MD
Aram V. Chobanian, MD
Jay D. Coffinan, MD
Richard A. Cohen, MD
Wilson S. Colucci, MD
Barbara A. Corkey, PhD
Deborah J. Cotton, MD, MPH
Donald E. Craven, MD
Daniel Deykin, MD
Richard D. Diamond, MD
Sam T. Donta, MD



Third-year students discuss a case.

Merrill F. Elias, PhD
Robert Curtis Ellison, MD
Rodney H. Falk, MBChB
Douglas V. Faller, MD, PhD
Harrison W. Farber, MD
David T. Felson, MD
Haralambos P. Gavras, MD
Ronald H. Goldstein, MD
Michael F. Holick, MD, PhD
William Hollander, MD
Alice K. Jacobs, MD
William B Kannel, MD, MPH
Howard K. Koh, MD
Joseph H. Korn, MD
Norman G. Levinsky, MD
Stuart M. Levitz, MD
Ronald P. McCaffrey, MD
Robert F. Meenan, MD, MPH
James C. Melby, MD, PhD
Mark A. Moskowitz, MD
John R. Murphy, PhD
John Noble, MD
Peter A. Rice, MD
Sander J. Robins, MD
Isadore N. Rosenberg, MD
Thomas L. Rothstein, MD, PhD
Richard A. Rudders, MD
Neil B. Ruderman, MD
Thomas J. Ryan, MD
David J. Salant, MBBCh
Clark T. Sawin, MD

Elihu M. Schimmel, MD
John H. Schwartz, MD
Martha M. Skinner, MD
Donald M. Small, MD
Gordon L. Snider, MD
James J. Steinberg, MD
Alan M. Sugar, MD
Alfred Irme Tauber, MD
Joseph R. Tucci, MD
C. Robert Valeri, MD
Pantel S. Vokonas, MD
David J. Waxman, PhD
Donald A. Weiner, MD
Lewis R. Weintraub, MD
Alan B. Weitberg, MD
Robert W. Wilkins, MD
Mary C. Williams, PhD
M. Michael Wolfe, MD
Daniel G. Wright, MD
Stephen H. Zinner, MD

Clinical Professor

J. Scott Abercrombie, Jr., MD
Warren Bennett, MD
Daniel S. Bernstein, MD
Joel G. Caslowitz, MD
Herbert L. Cooper, MD
Jack T. Evjy, MD
Leendert J. Faling, MD
Harvey E. Finkel, MD
Irene M. Gavras, MD
Robert J. Hamburger, MD

Michael D. Klein, MD
 Bernard E. Kregar, MD, MPH
 Farouk A. Pirzada, MBBS
 Philip J. Podrid, MD
 Burton Sack, MD
 Joel B. Solomon, MD
 James O. Taylor, MD

Research Professor

Arlene S. Ash, PhD
 Oscar H. Bing, MD
 Peter I. Brecher, PhD
 Allan D. Callow, MD, PhD
 Judith Gwathmey, VMD, PhD
 Shyr-Te Ju, PhD
 Herbert M. Kagan, PhD
 Elizabeth W. Markson, PhD
 Una S. Ryan, PhD
 Tsuranobu Shirahama, MD, PhD
 Philip A. Wolf, MD
 Vassilis I. Zannis, PhD

Distinguished Professor Emeritus of Medicine and Rheumatology

Alan S. Cohen

Professor Emeritus

Paul H. Black, MD
 Thomas R. Dawber, MD, MPH
 Gene H. Stollerman, MD

Research Professor Emeritus

Belton A. Burrows, MD
 Alvin Essig, MD

Associate Professor

Carmela R. Abraham, PhD
 Nezam H. Afdhal, MBBS
 Walter Baigelman, MD
 Thomas W. Barber, MD
 David L. Battinelli, MD
 Emelia J. Benjamin, MD
 Dan R. Berlowitz, MD, MPH
 Jeffrey S. Berman, MD
 John Bernardo, MD
 C. Michael Bliss, MD
 Chava E. Chapman, MBBS
 Stuart R. Chipkin, MD
 Sanford Chodosh, MD
 Margarita Cladaras, PhD
 Timothy P. Cooley, MD
 William W. Cruikshank, PhD
 Francis J. Cummings, MD
 Ravin Davidoff, MBBS
 Matthew J. Fenton, PhD
 Benjamin Graeme Fincke, MD
 Francine M. Foss, MD
 Kenneth A. Freedberg, MD
 Karen M. Freund, MD, MPH
 Robert H. Friedman, MD
 Douglas T. Golenbock, MD
 William E. Greer, MD
 Diane E. Handy, PhD
 Kevan L. Hartshorn, MD

Victoria L.M. Herrera, MD
 Helen M. Hollingsworth, MD
 Nawfal W. Istfan, MD, PhD
 Hershel Jick, MD
 Martin Joyce-Brady, MD
 Joel B. Karlinsky, MD
 James S. Kaufman, MD
 John F. Keaney, Jr., MD
 James L. Kirkland, MD, PhD
 Hardy Kornfeld, MD
 Edward V. Lally, MD
 Robert M. Levin, MD
 Sharon A. Levine, MD
 Daniel Levy, MD
 Wilfred Lieberthal, MBBS
 Joel Maslow, MD, PhD
 John F. McCahan, MD
 George T. O'Connor, MD
 Gwynneth D. Offner, PhD
 Michael A. Passero, MD
 Susan P. Perrine, MD
 Burton J. Polansky, MD
 Marianne N. Prout, MD
 Rahul Ray, PhD
 John A. Rich, MD
 Jeffrey H. Samet, MD
 Gunther W. Schmitt, MD
 Paul C. Schroy, MD
 Rebecca Silliman, MD, PhD
 Robert W. Simms, MD
 Gail Skowron, MD
 David Sparrow, ScD
 Carol Ann Sulis, MD
 Arthur C. Theodore, MD
 Charles P. Tiff, MD
 Ramachandron S. Vasan, MD
 Joseph A. Vita, MD
 Robert A. Witzburg, MD
 Ken S. Zaner, MD, PhD
 Bernard Zimmerman, MD

Associate Professor Emeritus

Sidney Kibrick, MD, PhD

Associate Clinical Professor

Kathleen A. Ackerman, MD
 Barry M. Arkin, MD
 Sheilah A. Bernard, MD
 Rita A. Blanchard, MD
 Mark J. Brauer, MD
 David K. Broadwell, MD, MPH
 Frank V. Coco, MD
 Kent A. Creamer, MD
 James F. Cummins, MD
 Mohammad Farivar, MD
 Job E. Fuchs, MD
 Gerard L. Gaughan, MD
 Meyer H. Halperin, MD
 Eric J. Hardt, MD
 Melvyn L. Hecht, MD
 Warren Y. Hershman, MD, MPH
 Robert H. Lerman, MD, PhD

Caryn Ann Libbey, MD
 Michael B. Macko, MD
 Arnold Marglin, MD, PhD
 Lillian E.C. McMahon, MD
 Geoffrey A. Modest, MD
 Harvey W. Neidlich, MD
 Joseph L. Perrotto, MD, JD
 Stephen Podolsky, MD
 Munro H. Proctor, MD, MPH
 Samuel M. Putnam, MD, MPH
 Arthur G. Robins, MD
 Clifford J. Rosen, MD
 George Rosenthal, MD
 Robert Schwartz, MD
 Martin L. Spivack, MD, PhD
 Robert L. Steinbrook, MD
 Stephen E. Sweet, MD
 H. Emerson Thomas, Jr., MD
 Wayne Michael Trebbin, MD
 Thomas H. Winters, MD
 F. Russell Wolf, MD
 Abraham P. Zimelman, MD
 Mary Anne Zubler-Doherty, MD

Associate Research Professor

Killimangalam R. Bhaskar, PhD
 Wesley W. Brooks, DSc
 Tai C. Chen, PhD
 A. Raymond Frackelton, Jr., PhD
 James A. Hamilton, PhD
 Marijke E. Holtrop, MD, PhD
 Martin G. Larson, SD
 Juey-Shin L. Lin, PhD
 Edgar C. Lucey, PhD
 Aaron Miller, MD
 George M. Patton, PhD
 Katya Ravid, DSc, PhD
 Nelson Ruiz-Opazo, PhD
 Dorraine Ward Slingerland, MD
 You-Xun Zhang, PhD

Adjunct Associate Professor

William P. Castelli, MD
 Michael J. Fox, MD
 Norbert G. Riedel, PhD
 Peter W.F. Wilson, MD

Adjunct Associate Research Professor

Per-Olof Yngve Berggren, PhD
 Raphael Breuer, MD
 Narendra B. Oza, PhD
 Klaus Schollmeier, PhD

Assistant Professor

Elaine J. Alpert, MD
 Robert M. Amick, MD
 Elizabeth K. Ascher, MD
 David L. Bachrach, EdD
 Cheryl S. Barbanel, MD, MBA, MPH
 M. Anita Barry, MD
 Kathleen M. Bennett, MD
 Mark J. Berenberg, MD
 John L. Berk, MD

Barbara M. Berland, MD
 Jonathan D. Bier, MD
 Paul E. Boinay, MD
 Steven Craig Borkan, MD
 Charles D. Brackett, MD, MPH
 Mary T. Brophy, MD
 Wellington V. Cardoso, MD, PhD
 Philip C. Carling, Jr., MD
 Sheila E. Chapman, MD
 Jeffrey S. Cohen, MD
 Herbert T. Cohen, MD
 Raymond L. Comenzo, MD
 Chester H. Conrad, MD, PhD
 John M. Conte, MD
 Sondra S. Crosby, MD
 Kathleen A. Crowley, MD, MPH
 James D. Dangel, MD
 Michele M.A. David, MD, MPH
 Laura M. Dember, MD
 Carl E. Dettman, MD
 Susana A. Ebner, MD
 Matthew D. Epstein, MD
 Alan Epstein, MD
 Arthur H. Eskew, MD
 Alan Fine, MD
 Louis D. Fiore, MD
 Susan M. Frayne, MD
 Stephan A. Gaehde, MD
 Michael M. Givertz, MD
 Renee M. Goetzler, MD, MPH
 Ronald F. Gomes, MD
 Daniel J. Gottlieb, MD, MPH
 Krista K. Graven, MD
 Angela H. Jackson, MD
 Kathleen L. Kelly, PhD
 Herbert H. Kleinman, MD
 Vasken Kroshian, MD
 Robert A. Lafyatis, MD
 Antonio A. Lazzari, MD, PhD
 Joan M. Lebow, MD
 Adam Lerner, MD
 Jerrold S. Levine, MD
 Richard I. Levy, MD
 David R. Lichtenstein, MD
 Jane Liebschutz, MD
 Robert D. Lille, MD
 Joseph S. LoCastro, PhD
 Zhijun Luo, MD, PhD
 Amer B. Malik, MD
 Mary E. Manning, MD, MPH
 Timothy E. McAlindon, DM, MPH
 Daniel P. McQuillen, MD
 Joseph Meharg, MD
 Lisa A. Mendes, MD
 Douglas E. Mesler, MD
 Lynn L. Moore, DSc
 Dianne Munson, MD
 Joanne M. Murabito, MD
 Sara J. Nuciforo, MD
 David Nunes, MBBS
 James J. O'Connell, MD
 Deborah Ann O'Keefe, MD

Jay D. Orlander, MD, MPH
 Lauren Jean Oshry, MD
 Mark S. Ostrem, MD
 Nereida A. Parada, MD
 William B. Patterson, MD
 Marcos C. Pedrosa, MD
 Jon J. Pehrson, MD
 George J. Philippides, MD
 David F. Polakoff, MD
 William S. Postal, MD
 Mark J. Prashker, MD, MPH
 Neal R. Ready, MD
 Christine Campbell Reardon, MD
 Carol Lisa Rosenberg, MD
 Daniel E. Rubinstein, MD
 Nicholas A. Ruocco, MD
 Richard Saitz, MD, MPH
 Suzanne Sarfaty, MD
 Jussi J. Saukkonen, MD
 Douglas B. Sawyer, MD, PhD
 David C. Seldin, MD
 Christopher W. Shanahan, MD
 Daniel S. Shapiro, MD
 Michael A. Shia, PhD
 Cynthia Silbert, MD
 Mara T. Slawsky, MD, PhD
 Howard A. Sussman, MD
 Thomas M. Suter, MD
 Michael W. Thane, MD
 Chi-Chuan Tseng, MD, PhD, MPH
 Niraj Varma, MBChB
 H. Christian Weber, MD
 Lee M. Wetzler, MD
 Andrew M. Wolf, MD
 Zhi-Xiong Xiao, PhD
 David Z. Young, MD, MPH
 Qiang Yu, PhD
 Yuqing Zhang, DSc, MPH

Assistant Clinical Professor

Daniel P. Alford MD, MPH
 Saralynn J. Allaire, ScD
 Gulbir Kaur (Dina) Anand, MBBS
 Heidi P. Auerbach, MD
 Nicholas M. Aurigemma, MD
 David A. Bailen, MD
 Eva M. Balash, MD
 Robert S. Baratz, MD, PhD, DDS
 Michael M. Bartleson, MD
 Peter Berman, MD, MPH
 Victoria Bolotina, PhD
 Michael O. Boylan, PhD
 Gary H. Brandeis, MD
 Mark E. Braun, MD
 Margaret R. Bresnahan, DSc
 Elizabeth Buonpane, PharmD
 Adams B. Burrows, MD
 John B. Cadigan, III, MD
 Antonio J. Cayatte, MD
 Rajinder S. Chawla, MBBS
 John V. Chobanian, MD
 Sasha M. Christensen, MD

Chinhak Chun, MD
 Saul Cohen, MD, PhD
 Paul M. Copeland, MD
 Barry P. Cuiffo, MD
 Alya Dabbagh, PhD
 Jose Carlos T. DaSilva, MD
 Michael F. DeBruin, MD
 Mandeep Dhadly, MBChB
 W. John Dickerson, II, MD
 Peter J. DiMatteo, MD
 Jerline S. Dixon, MD
 Daniel F. Driscoll, MD
 Roger M. Epstein, MD
 Caroline Eyvazzadeh, MD
 Mark L. Finklestein, MD
 Margaret S.M. Flinn, MD
 John E. Franklin, MD
 John D. Freedman, MD, MBA
 Jon Fuller, MD
 Robert S. Galvin, MD
 Sreela Ghoshroy, MBBS
 Antonio Granfone, MD
 David S. Green, MD
 Andrew A. Guccione, PhD
 Joseph R. Halperin, MD
 Elizabeth K. Handleman, PhD
 Michelle Hankins, MD
 Faysal M. Hasan, MD
 Aileen M. Healy, PhD
 Barbara C. Holbert, MD
 Patricia T. Hopkins, MD
 Francis E. Hubbard, MD
 Donald E. Humphries, PhD
 Susan C. Kalish, MD
 Boris Karpovsky, MD
 Zohrab Kassarian, MD
 Julie Kaufmann, MD, PhD
 Lewis E. Kazis, ScD
 Robert F. Kelliher, MD
 Maha M.I. Khodeir, MBBS, MPH
 Raphael I. Kieval, MD
 Xiang Kong, PhD
 Barbara B. Lambl, MD, MPH
 Peter J. Leahy, MBBS
 Harvey Lederman, MD
 Myung-Ho Lee, PhD
 Rongliu Liao, PhD
 Sandra Looby-Gordon, MD
 Richard P. Lucey, MD
 Dean A. MacLaughlin, PhD
 John S. Manuelian, MD
 Lawrence J. Markson, MD
 Richard W. Marquis, MD
 Anjana Rastogi, MBBS
 Ina B. Ratner, MD
 Joseph D. Restuccia, DrPh, MPH
 Arun K. Rishi, PhD
 Elizabeth A. Roaf, MD
 M. Audrey Rudd, PhD
 Leon Ryack, MD
 Thomas C. Ryan, PhD

Miguel A. Sala, MD
 Richard J. Samaha, MD, PhD
 Kurt William Saupe, PhD
 Joel H. Schwartz, MD
 Krishna Singh, PhD
 Alma D. Smith, PhD
 Jerome E. Sobieraj, Jr., MD
 Glen M. Stall, MD
 Lorraine Stanfield, MD
 Babette-Ann Stanton, PhD
 Judith L. Steinberg, MD
 William M. Stenson, MD
 Jerry S. Stern, MD
 Samuel K. Stewart, MD
 David R. Strehlow, PhD
 Margaret M. Sullivan, MD
 Gary L. Taylor, MD
 Madhusudan P. Thakur, MBBS
 Maria R. Trolliet, PhD
 Carl J. Turissini, MD
 Johanna C. vanderSpek, PhD
 Graham W. Ward, MPH
 Craig L. Weston, MD
 Russell L. Widom, PhD
 Spencer Van B. Wilking, MBBS, MPH
 Laurence S. Wohl, MD
 Yuk-Chor Wong, PhD
 Hou-Xiang Xie, DSc
 Wei Yu, PhD
 Michael B. Zack, MD
 Eleni E. Zanni, PhD
 Beth A. Zeeman, MD
 Yujun Zhang, PhD
 Ying Yi Zhang, PhD
 Raphael A. Zoeller, PhD
 Kenneth Marc Zoller, MD

Adjunct Assistant Clinical Professor

Robert M. Canova, MD
 Pauline Y. Chao, MD
 George J. Chilazi, MD
 Kabir Chuttani, MBBS
 Annick F. Clement, MD
 Van H. Dunn, MD, MPH
 Franz R. Eberli, MD
 James E. Fanale, MD
 Matthew W. Gillman, MD
 Eugene C. Jagella, MD
 Kevin M. Koshy, MD
 Joanne K. Linevsky, MD
 Myron S. Mazer, MD
 Roseanna H. Means, MD
 Thomas E. Murphy, MD
 Enrico Petrillo, MD
 Christine S. Ritchie, MD
 Mark B. Sostek, MD
 Mahesh L. Wadhwa, MD
 Edward J. Weiner, PhD
 Anita U. Yap, MD

Assistant Research Professor

Wen Guo, PhD
 Yasuo Ido, MD, PhD

Adjunct Assistant Research Professor

Edward G. Hayman, PhD
 Savvas C. Makrides, PhD
 Riccardo Sarzani, MD

Instructor

Abhijit Banerjee, PhD
 Arthur R. Bregoli Jr, MD
 Leann R. Canty, MD
 Margaretha B. Carraway, PhD
 Amos Charles, MD
 Peggy P. Chou, MD
 Gerald V. Denis, PhD
 Rose M. Duver, MD
 Mary Ellen Ehlers, MD
 Maura Fagan, MD
 Eileen E. Falvey, PhD
 John M. Fitzpatrick, MMBCh
 David S. Friedenberg, DO
 Allison H. Holmes, MBBS
 Robin R. Ingalls, MD
 M. David Kelleher, MD
 John W. Kinch, MD
 Alan Malabanan, MD
 Alison G. May, MD
 Lawrence Moschitto, MD
 Hiro-Omi Mowri, PhD
 Charles A. Powell, MD
 Ian R. Rifkin, MBBCh., PhD
 Michael T. Rosenbaum, MD
 James E. Scharback, MD
 L. Eric Schlepphorst, MD
 Debra Lynn Sherman, MD
 Glenn T. Shwaery, PhD
 Geza F. Sirokman, PhD
 Stacey Sperling, MD
 Narasimha N.S. Swamy, PhD
 Stephen P. Tarpy, MD
 Margaret Vallen-Mashikian, MD
 Cyrus Vaziri, PhD
 Yihan Wang, MD
 James Wickis, PhD
 Xin Xu, PhD, PhD
 Huaiping Yuan, MD, PhD

Clinical Instructor

Alyce R. Adams, MD
 Oluranti A. Aladesanmi, MD
 Murat A. Anamur, MD
 Jamshed Anvari, MD
 Antoine W. Badlissi, MD
 Ranjit M. Balse, MBBS
 Donna R. Barnard, MD
 Bruce S. Becker, MD
 Harvey M. Bidwell, MD, MPH
 Subhash Bowry, MD
 Ylisabyth S. Bradshaw, DO
 Steven E. Carr, MD
 John M. Carroll, MD
 Peter T. Cheung MD
 Steven P. Disterhoft, MD

Alfred M. Donovan, MD
 Mark Drews, MD
 Joseph D. Emma, MD
 Robert P. Falkowski, MD
 John A. Fallon, MD
 Robert D. Fallon, Jr., MD
 Leonor Fernandez, MD
 Alan I. Frolich, MD
 Alan Garber, MD
 Peter H. Gonzalez, MD
 Nancy V. Gwon, MD, MPH
 Lana Habash, MD
 Roger R. Jean-Charles, MD
 Russell L. Jeffrey, MD
 Warren Kantrowitz, MD
 Nathan E. Kaufman, MD
 Rhonda Kaufman, MD
 Christine Keegan, MD
 Winifred Anne Kender, MD
 Stefan G. Kertesz, MD
 Yamil H. Kouri, MD
 Kenneth S. Lader, MD
 Kevin F. Law, MD
 Sheldon S. Lockman, MD
 John J. Looney, MD, MPH
 William W. Macomber, MD
 Jason Mann, MD
 Ronald N. Margolin, MD
 Denise M. Mayo, MD
 Joseph J. Miaskiewicz, Jr., MD
 Orietta Miatto, MD
 Gerald F. Muldoon, MD
 Chander M. Nagpaul, MD
 Albert Namias, MD
 Arthur J. Neiterman, MD
 Burt M. Perlmutter, MD
 Paula M. Podrazik, MD
 Michael D. Richmond, PhD
 Daniel Rosenberg, MD
 Giergio Scappini, BA
 Anthony L. Schlaff, MD
 Parul Shah, MD
 Mawya Shocair, MD
 Carl Singletary, MD
 Joel J. Snider, MD
 Gary Leslie Stanton, MD
 Marcia V. Tanur, MD
 Ann Marie Testarmata, MD
 Marc S. Weinberg, MD
 Gerald L. Weinhouse, MD
 Philip S. White, MD
 Richard E. Wild, MD, JD
 Burt J. Yankiver, MD
 Robert A. Yood, MD
 Michael C. Zaslow, MD

Adjunct Clinical Instructor

Michael K. Rees, MD, MPH

Adjunct Instructor

Anne L. Meneghetti, MD

Research Instructor

Sergei B. Aleshkov, MD, PhD
Sang-Yun Choi, PhD
Sunati Gulati, DSc

Lecturer

Louis Weinstein, MD, PhD

MICROBIOLOGY**Required Courses**

Second Year Microbiology Bacteriology, parasitology, mycology, and virology are covered. The aim is to impart an understanding of the various pathogenic microorganisms and the diagnosis, pathogenesis, and treatment of infectious diseases. General characteristics of pathogenic bacteria, viruses, rickettsia, and fungal infections of humans are covered. Study of the genetics and physiology of organisms gives a basis for understanding of diagnosis, sensitivity to environment and antibiotics. Laboratory instruction includes the elements of bacteriological technique and observation of the characteristic properties of the more common microorganisms including their biochemical activity and genetics. Essential knowledge concerning biology, epidemiology, and clinical laboratory diagnosis of important diseases due to animal parasites is presented. In addition to classroom lectures, wet laboratories, and group case discussions, video discs and interactive computer programs are part of the learning experience. *Staff*

Faculty**Professor and Chairman**

Ronald B. Corley, PhD

Professor

Selwyn A. Broitman, PhD
Iih-Nan (George) Chou, PhD
Donald E. Craven, MD
Eva R. Kashket, PhD
Herbert Z. Kupchik, PhD
Stuart M. Levitz, MD
Ann Marshak-Rothstein, PhD
Thomas L. Rothstein, MD, PhD

Adjunct Research Professor

Vernon N. Reinhold, PhD

Professor Emeritus

Paul H. Black, MD

Associate Professor

Robert D. Arbeit, MD

Richard D. Diamond, MD
Susan H. Fisher, PhD
Elinor M. Levy, PhD
Frederick L. Moolten, MD
Cynthia A. Needham, PhD
Peter A. Rice, MD
Glen B. Zamansky, PhD

Associate Clinical Professor

Kurt D. Stottmeier, PhD

Associate Research Professor

David I. Beller, PhD
Wande Li, MD

Assistant Professor

Douglas T. Golenbock, MD
Jianming Hu, MD, PhD
Margaret A. Johns, PhD
Joel Maslow, MD, PhD
David C. Seldin, MD
Guillermo E. Taccioli, PhD
Gregory A. Viglianti, PhD
Lewis V. Wray, PhD

Assistant Research Professor

Stefan Doerre, PhD

Adjunct Assistant Professor

Charles Seymour, PhD

Instructor

Steven P. Treon, MD, PhD

NEUROLOGY**Required Courses**

First Year Neurosciences Basic neuroanatomy and neurophysiology presented in relation to clinical problems, using lectures and patient demonstrations. *Staff*

Second Year Biology of Disease Formal lectures, tutorials, slide demonstrations, and clinical correlations offered to teach principles of pathophysiology and morphology of diseases of the nervous system. *Staff*

Physical Diagnosis Tutorial and demonstration groups providing opportunity to learn techniques of evaluating the normal and abnormal nervous system by application of reflex actions and detailed history taking and physical examination. *Staff*

Fourth Year Clerkship in Neurology

Building on the foundation of the first year Neurosciences course, the second year Biology of Disease course, the Physical Diagnosis course, and intermittent experience in the third year Internal Medicine clerkship, the fourth year Clinical Neurology clerkship

offers the opportunity for medical students to gain added familiarity with the clinical practice of neurology including examination, evaluation, and treatment of patients with cerebrovascular disease, movement disorders, epilepsy, peripheral nervous systems disorders, demyelinating disease, pain disorders, spinal cord pathology, neurological emergencies, and neurobehavioral and dementing disorders.

Faculty**Associate Professor and Acting Chairman**

Sanford H. Auerbach, MD

Professor

Martin L. Albert, MD, PhD
Viken L. Babikian, MD
Norman H. Bass, MD
Marlene Oscar Berman, PhD
Thomas R. Browne, III, MD
Laird S. Cermak, PhD
Lindsay Farrer, PhD
Howard E. Gardner, PhD
Harold Goodglass, PhD
Philippe Grandjean, MD
Nancy Helm-Estabrooks, ScD
Robert G. Feldman, MD
Carlos S. Kase, MD
Thomas L. Kemper, MD
Neil W. Kowall, MD
Jan Kucera, MD
Mark B. Moss, PhD
Richard H. Myers, PhD
Flaviu C. A. Romanul, MD
Daniel S. Sax, MD
Roberta F. White, PhD
Arthur Wingfield, DPhil
Philip A. Wolf, MD
Edgar B. Zurif, PhD

Clinical Professor

Margaret Kelly-Hayes, EdD
Michael J. Moore, MD

Research Professor

Carlo J. DeLuca, PhD
Richard E. Fine, PhD
David A. Gansler, PhD
Davis H. Howes, PhD
William P. Milberg, PhD
Margaret A. Naeser, PhD
Deepak N. Pandya, MD
Jeremy D. Schmähmann, MBChB
Lucia Vaina, DSc., PhD

Adjunct Professor

Edith F. Kaplan, PhD

Visiting Professor

Batsheva Bonne-Tamir, PhD

Associate Professor

Jeannette A. Chirico-Post, MD
David L. Coulter, MD
Raymon Durso, MD
Joe F. Jabre, MD
Douglas I. Katz, MD
Ann C. McKee, MD
Remedios K. Rosales, MD
Nagagopal Venna, MD
Mieke H. Verfaellie, PhD

Associate Clinical Professor

Edward J. Hart, MD
Edgar Y. Oppenheimer, MBChB
Donald H. Osterberg, MD
Norman L. Paul, MD
Arthur P. Safran, MD
Fereydown Shahrokhi, MD

Associate Research Professor

Robert J. Ferrante, PhD
Rhea D. Gendzier, PhD
Thomas E. Mulholland, PhD
Loraine Obler, PhD
Susan P. Proctor, DSc

Adjunct Associate Professor

Michael P. Alexander, MD
David N. Caplan, MD, PhD
Yosef Grodzinsky, PhD

Assistant Professor

Linda Y. Buchwald, MD
Patsy B. Cipolloni, MD
Anita L. DeStefano, PhD
Barbara A. Dworetzky, MD
Samuel A. Elias, MD, PhD
Jules M. Friedman, MD
Richard Gan, MD, MPH
Bonnie P. Hersh, MD
Marilyn R. Kassirer, MD
Margaret M. Keane, PhD
Janice E. Knoefel, MD
Claire A. Levesque, MD
Alan M. Mandell, MD
Ippolit C.A. Matjucha, MD
Elias R. Melhem, MD
Clyde A. Niles, MBChB
James A. S. Otis, MD
Cynthia M. Rooney, MD
Marie-Helene Saint-Hilaire, MD
Manisha Thakore-James, MD
Cathi-Ann Thomas, MS

Assistant Research Professor

Rhoda Au, PhD
Lisa T. Connor, PhD
Lee D. Cranberg, MD
Patricia B. Eisenhauer, PhD
Rhoda B. Friedman, PhD
Robert H. Friedman, MD
James J. Gilbert, MD

Ellen C. Gower, PhD
Norine G. Johnson, PhD
Jeffrey S. Kixmiller, PhD
Reva B. Klein, MD
Kimberly C. Lindfield, PhD
Richard T. Linn, PhD
Felice L. Loverso, PhD
Peter A. Mosbach, PhD
Margaret O'Connor, PhD
Penny Prather, MD, PhD
Lewis P. Shapiro, PhD
Joseph A. Tornabene, MD
William Tosches, MD
Marie M. Walbridge, PhD
E. Joseph Wasserman, MD
William Wiener, MD
Janice Faye Wiesman, MD
Irving Zieper, MD

Adjunct Assistant Clinical Professor

Ellen F. McCarty, PhD

Adjunct Assistant Research Professor

Hiram H. Brownell, PhD
Barbara LeDuc, PhD

Instructor

Theslee J. DePiero, MD
Neva L. Frumkin, PhD
Oscar Joost, PhD
Lenore N. Joseph, MD
Huey-Juan Lin, MD, MPH
Lena Moskovich, MD
Angela M. O'Neal, MD
Elliott P. Palmer, Jr., MD
Juliann M. Paolicchi, MD
Srecko Pogacar, MD
Thomas Sciascia, MD
Edward B. Shaw, BS
Christine A.C. Wijman, MD

Clinical Instructor

Nancy Catanese Allen, MSN
Avraham Almozilino, MD
Alan J. Bell, MD, MPH
Joseph Furtado, MSN, RN
Maxine H. Kregel, PhD
Eloise Licata-Gehr, MS, RN
John F. Mahoney, MD
Karen S. Marans, PhD
Matthew J. Murnane, MD
Suzanne J. Patrick-Mackinnon, MD
Michael J. Walsh, MD

Research Instructor

Norman B. Leafer
Byron T. Salzsieder, SB
John M. Wells, PhD

Adjunct Instructor

Luke Sato, MD
Jean Wilkins, BA

Lecturer

Daniel H. O'Leary, MD
Joseph Francis Polak, MD
Charles M. Poser, MD
N. Paul Rosman, MD

NEUROSURGERY

The Department of Neurosurgery offers rotations for third-year students as part of their General Surgery rotations. One-month elective rotations are offered to fourth-year students who have special interest in learning more about neurosurgery. First- and second-year students who wish to gain general insight into the field have the opportunity to shadow one of the attending neurosurgeons. Students use the facilities of the Boston Medical Center, providing both inpatient and outpatient experiences.

Faculty**Professor and Chairman**

Edward L. Spatz, MD

Associate Professor

Ronald W. Mortara, MD
Joe I. Ordia, MBBS

Assistant Professor

Sanjiv Bhatia, MBBS
Edward Fischer, MD
Anthony Jabre, MD
Jules M. Nazzaro, MD
James E. Reed, MD
Arthur P. Rosiello, MD

Assistant Clinical Professor

Shapur A. Ameri, MD
Sin H. Choo, MBBS
John Pershing Latchaw, MD
Krishna Nirmel, MD

Clinical Instructor

Sidney N. Paly, MD

OBSTETRICS AND GYNECOLOGY**Required Courses**

First Year The Department of Obstetrics and Gynecology collaborates also with the Division of Psychiatry, the Department of Socio-Medical Sciences, and many basic science departments in presentations pertinent to the field.

Second Year The Department participates in the Biology of Disease course, using the case method approach to teaching the reproductive tract. The Department also participates as facilitators for the Integrated Problems course and lectures in the Introduction to Clinical Medicine II course on the topic, "Introduction to the Pelvic Examination." *Staff*

Third Year A six-week clinical clerkship is conducted at Boston Medical Center and MetroWest Medical Center. At all hospitals, the rotation includes experiences in ambulatory care clinics, the inpatient gynecology service, and the inpatient obstetrics service.

The ambulatory care clinic offers an opportunity to develop skills in diagnosing and managing the many problems of an ambulatory population of women. The inpatient gynecology rotation includes mini-rotations on the oncology, endocrinology, and general gynecology services. Duties and responsibilities include the performance of history and physical examinations and participation in preoperative, operative, and postoperative care. The obstetric experience includes perinatology, caring for women assessed as being at high risk for adverse pregnancy outcome, Midwifery Service, and a rotation in the Labor and Delivery Suite.

Students are expected to attend and to actively participate in all lectures and conferences that occur within the department.

Fourth Year During the fourth year, the department offers several electives.

Maternal-Fetal Medicine The student works with the perinatal staff caring for high-risk pregnant patients in both ambulatory and in-patient settings. The student becomes familiar with the use of sonography to detect congenital anomalies and fetal compromise, weekly perinatal, fetal monitoring, and low Apgar conferences. *Dr. Callan and perinatal staff*

Substance Abuse and Pregnancy The student has supervised clinical responsibility for the pharmacological management of chemical dependency during pregnancy, participating in all aspects of antenatal, intrapartum and post-partum care. Faculty supervise involvement in scholarly activities; a completed project is anticipated. *Dr. Aboagye*

Reproductive Endocrinology and Infertility The student participates in the activities of the BCH Fertility and Endocrine Unit. The diagnosis and treatment of reproductive endocrine abnormalities, including

infertility, menstrual irregularities, and hirsutism are taught. Surgical training in the management of these problems will be integrated as part of the rotation. Students will have the opportunity to observe advanced fertility treatment, including in vitro fertilization. Available only in January, April, July, and October. *Dr. Weiss*

Inpatient Gynecology The student participates, as a sub-intern, in aspects of inpatient and ambulatory gynecology service, assisting in minor and major gynecological surgical procedures and following patient post-operatively. *Dr. Hamid and staff*

Ambulatory Gynecology The student participates, under supervision, in the management of a variety of ambulatory gynecology illnesses, including colposcopic evaluation of abnormal PAP smears. A paper on some aspect of ambulatory gynecology is required. *Dr. Brown*

Faculty

Professor and Chairman
Phillip G. Stubblefield, MD

Professor
Kenneth C. Edelin, MD
Aubrey Milunsky, MBChB
Daniel Tulchinsky, MD

Clinical Professor

Leonard J. Cibley, MD
Wayne A. Miller, MD

Adjunct Clinical Professor

Howard A. Blanchette, MD
Machelle Seibel, MD

Clinical Professor Emeritus

C. Thomas Griffiths, MD

Associate Professor

Elizabeth R. Brown, MD
Michael Feingold, MD
John M. Kasznica, MD
Lisa L. Paine, DrPH
Joel S. Rankin, MD
Ginter Sotrel, MD

Associate Clinical Professor

Lynn Borgatta, MD
Dick A.J. Brown, MD
Burton C. Grodberg, MD
Mohamed A. Hamid, MBChB
Thomas Paull, MD
Moshe Zilberstein, MD

Associate Research Professor Emeritus

Sisir K. Sengupta, PhD

Adjunct Associate Professor

Rachel Zachariah, DNSc

Assistant Professor

Aparna Chatteraj, MBBS, PhD
Anjan Chaudhury, MD

In the Family Medicine clerkship, "standardized patients" and their medical charts, above, simulate real cases.

David L. Coppedge, MD
 Sarah L. Crane, MD
 Samuel P. Donegan, MD
 Kenneth H. Kaplan, MD
 Gary E. Kaufman, MD
 Kwabena Kyei-Aboagye, MD, PhD
 Jean-Robert Larriex, MD
 Orlando B. Lightfoot, Jr., MD
 Bernard J. Logan, MD
 Athar B. Mirkatuli, MD
 Raja A. Sayegh, MD
 Rosario A. Scandura, MD
 Wendy J. Smith, MD, MPH
 Valena Soto-Wright, MD
 Robert M. Weiss, MD

Assistant Clinical Professor

Balmookoot Balgobin, MBBS
 Shalom Bar-Ami, PhD
 Warren D. Briscoe, MD
 Byungyol Chun, MD
 Frank T. DiMasi, MD
 Benjamin C. Eleonu, MD
 Robert J. Fallon, MD
 Kenneth B. Gordon, MD
 David C. Harrison, MD
 Leon Herman, MD
 Sylvia K. Herz, MD
 Mitchell J. Levine, MD
 Vilma E. Ruddock, MD
 Anthony A. Sierra, MD
 Miljan R. Stankovic, MD, PhD
 Kalliope Varaklis, MD
 Susanna M. Walsh, MD

Instructor

Paul M. Hendessi, MD
 Denise V. Page, MD

Clinical Instructor

Richard D. Bush, MD
 Cheryl J. Calheiros, CNM
 Stella Chan-Flynn, CNM, MPH
 Lora O. Chatfield, CNM, MPH
 Elizabeth R. Diaz, MSM
 Scott D. Dreiker, MD
 Jean M. Ewan, CNM, MPH
 Mark Faucher, MD
 Sidney D. Ginsburg, MD
 Harold J. Ginsburg, MD
 Marilee Ann Hanson, MD
 Mary Hogan-Donaldson, MSW
 Julia V. John, RN
 Il Kim, MD
 Heidi E. Lyle, MPH
 Doina Marina, MD
 Ann Marie Massed, CNM
 Julie A. McCullough, MD
 Donald R. Monteiro, MD
 Sharyn F. Perpall, CNM, MPH

Francisco J. Reina, MD
 David H. Richman, MD
 Michael S. Robertson, MD
 Dona M. Rodrigues, MPH
 Susan C. Rose, MSN, CNM
 Jeffrey M. Sondler, MD
 Maria Valentin-Welch, MPH, CNM
 Catherine E. Walker, BSN, MPH
 Darwish R. Yusah, MD

OPHTHALMOLOGY

Required Courses

First Year Lectures and laboratory exercises on the anatomy and physiology of the eye presented as part of the courses of anatomy and neural sciences. *Staff*

Second Year Clinical examination of the eye and emphasis on ophthalmoscopy and tonometry; presented as part of the course Biology of Disease. *Staff*

Faculty

Professor and Chairman

Howard M. Leibowitz, MD

Professor

S. Arthur Boruchoff, MD
 Thomas F. Freddo, OD, PhD
 Moshe Lahav, MD
 Seymour Zigman, PhD

Clinical Professor

Bishara M. Faris, MD

Associate Professor

Kristine A. Erickson, PhD
 Matthew A. Nugent, PhD
 Vickery Trinkaus-Randall, PhD

Associate Clinical Professor

Mohammad T. Ashrafzadeh, MD
 Edward F. Goodman, MD
 Mohandas M. Kini, MD, PhD
 John I. Loewenstein, MD
 Marc W. Richman, MD
 Carter B. Tallman, MD

Assistant Professor

Michael L. Cooper, MD, PhD
 John P. Frangie, MD
 Robert Haimovici, MD
 Usha R. Kurumety, MD
 Ippolit C.A. Matjucha, MD
 Clifford M. Michaelson, MD
 Setsuko M. Oak, BA

Michael J. Price, MD
 William M. Tang, MD
 Susan M. Tucker, MD
 Santiago J. Villazon, MD

Assistant Clinical Professor

Paul C. Barsam, MD
 Richard J. Blocker, MD
 Thomas M. Fay, MD
 Albert R. Frederick, Jr., MD
 Gerald R. Friedman, OD
 Norma R. Garber, BS
 George E. Garcia, MD
 B. Thomas Hutchinson, MD
 Behrooz Koleini, MD
 David C. Moverman, MD
 Jose D. Peczon, MD
 B. Andre Quamina, MD
 Joel M. Reisman, MD
 James W. Rosenberg, MD
 George P. Santos, MD
 Y. Jacob Schinazi, MD
 Andrew G. Tsuk, PhD

Assistant Research Professor

Haiyan Gong, MD, PhD

Adjunct Assistant Professor

Charles N.S. Soparkar, MD, PhD

Instructor

Edward Chaum, MD, PhD
 Xun Zhang, PhD

Clinical Instructor

George B. Citron, MD
 Steven H. Cobb, MD
 Richard A. Dornfeld, MD
 David E. Eisenberg, MD
 David A. Fleishman, MD
 Peter P. Gudas, MD
 Robert E. Kellan, MD
 Donald R. Korb, OD
 Alexander Levine, MD
 Edward V. Miller, MD
 Stephen H. Rostler, MD
 Larry H. Roth, MD
 Terry D. Ryan, MD
 Theodore A. Stamas, MD
 Dennis F. Stoler, MD
 J. Elliott Taylor, MD
 Edward F. Walata, MD
 Lawrence E. Weene, MD
 Irving L. Weissman, MD
 Stephen A. Youngwirth, MD

Lecturer

Jules L. Baum, MD
 Simmons Lessell, MD
 Bernard Schwartz, MD, PhD

ORTHOPAEDIC SURGERY

Courses

Trauma The elective will be shaped according to the individual student's future objectives. In particular, there is access to pediatric and adult trauma as well as hand trauma and spine trauma.

As an orthopaedic team member, the student will participate actively in the care of patients seen in the operating rooms, emergency rooms, clinics, and on the floors. Much of the time will be spent in the emergency care of patients, fracture reduction, application of casts and splints, and participating in the daily work effort. Students are encouraged to go to the operating room to observe cases on patients whom they have treated. The basic schedule begins at 5:30 a.m. with ward rounds, followed by a conference at 6:15 a.m. in which the attending staff reviews all of the patients treated the previous day and their x-rays. There are teaching conferences on Monday, Wednesday, Friday, and some Tuesdays. These conferences include grand rounds, didactic lectures, and a weekly case review of all operations performed during the week. Attending physicians run all conferences. Guest lecturers are frequently present for grand rounds presentations.

This elective offers multiple opportunities in the clinical and academic environment from which the student can draw. The elective is a busy one but should be extremely educational. The opportunity to get involved in research also exists. *Dr. Tornetta and associates*

Orthopaedic Sports Medicine and Adult Reconstruction This elective is for fourth-year medical students interested in pursuing a career in orthopaedic surgery or a sports medicine-related field. The student will be involved with inpatient/outpatient as well as on the field evaluation and treatment of athletic injuries. This would include sports medicine clinics at Boston Medical Center and Boston University. The student will also be involved closely with inpatient care of the orthopaedic service patients and with the surgical procedures performed by the preceptor. Furthermore, the student will be expected, at the appropriate time of year, to attend intercollegiate athletic events with the preceptor for on-the-field management and care of athletic injuries. *Dr. Schepsis and associates*

Orthopaedic Pediatric, Foot and Ankle, Hand and Spine Surgery

Boston Medical Center has an active orthopaedic staff with the majority of operative procedures being reconstructive operations. The student will work with four orthopaedic surgeons specializing in foot and ankle, pediatric, hand and spine surgery. The student will act in the capacity of a junior resident with regular patient responsibilities plus operating room duties. He/she will attend the teaching conferences and rounds of the orthopaedic staff. It is not intended that the student act as an observer in this elective but as an integral part of the patient care team. *Dr. Pacicca and associates*

Pediatric Orthopaedics The student will work at Shriners Hospital for Children in Springfield, Massachusetts. This institution has 40 inpatient beds, three operating rooms, extensive outpatient clinics, a Gait Analysis Laboratory, and a Department of Orthotics and Prosthetics. The student will participate in outpatient and inpatient activities as well as daily teaching conferences. Time will be allowed for clinical research. The elective will be quite valuable for future orthopaedic surgeons, pediatricians, radiologists and family practitioners. *Dr. Drvaric and associates*

Faculty

Professor and Chairman
Thomas A. Einhorn, MD

Professor
Robert E. Leach, MD
John M. Roberts, MD
Isadore G. Yablon, MD

Professor Emeritus
Leon M. Kruger, MD

Associate Professor
David M. Drvaric, MD
Louis Gerstenfeld, PhD
Mark S. Mizel, MD
G. Richard Paul, MD
Anthony A. Schepsis, MD
Paul Tornetta, MD
George P. Whitelaw, MD

Associate Clinical Professor
John D. DeWeese, MD
William L. Healy, MD
Harilaos T. Sakellarides, MD

Assistant Professor
William R. Creevy, MD
Timothy E. Foster, MD
Ronald C. Hillegass, MD
Richard Iorio, MD

Mark J. Lemos, MD
Howard A. Lipton, MD
Michael D. Mason, DO
Donna M. Pacicca, MD
Robert Y. Pick, MD
Arnold M. Savenor, MD
John B. Sledge, MD
Richard M. Wilk, MD

Assistant Clinical Professor
Michael Corbett, MD
Robert S. Cowan, MD
Graham J. Gumley, MBBS
Morton D. Lynn, MD
Steven W. Margles, MD
Peter D. Mastro, MD
Bernard A. Pfeifer, MD
Mark H. Pohlman, MD
Steven M. Wenner, MD
Jeffrey C. Wint, MD

Instructor
George L. Barnes, PhD
Mordechai M. Kamel, MD
Robert J. Krushell, MD
Douglas A. Patch, MD

Clinical Instructor
Barry C. Dorn, MD
Richard J. Fingerioth, MD
Ronald F. Kaplan, MD
Sumner E. Karas, MD
John W. Zimmer, MD

Lecturer
Benjamin E. Bierbaum, MD
Harold Reitman, MD

OTOLARYNGOLOGY

Elective Courses

Fourth Year A four-week elective is offered to students during their fourth year. During this month a student is likely to develop advanced skills in complete physical diagnosis in otolaryngology and in the medical treatment of commonly occurring problems. The experience is gained in the departmental offices, in the clinics, and on the wards. For those students who are interested, an opportunity to assist at major and minor surgery in the operating room is available.

Faculty

Professor and Chairman
Kenneth M. Grundfast, MD

Professor

Gerald B. Healy, MD
 Thomas G. Polanyi, PhD
 Stanley M. Shapshay, MD
 M. Stuart Strong, MD

Research Professor

Geza J. Jako, MD

Visiting Professor

Claus Jansen, MD
 Jacob Sade, MD

Clinical Professor Emeritus

Nathan L. Fineberg, MD

Associate Professor

L. Clarke Cox, PhD

Associate Clinical Professor

G. David King, MD
 Charles W. Vaughan, MD

Associate Research Professor

Herbert F. Voigt, PhD

Adjunct Associate Professor

Nabil S. Fuleihan, MD
 Margaret A. Kenna, MD

Assistant Professor

Glenn W. Bunting, MS
 Nicholas Yusuf BuSaba, MD
 Gerard F. Domanowski, MD
 Gregory A. Grillone, MD
 Roger L. Hybels, MD
 Charles Bruce MacDonald, MD
 Graeme A. McDonald, MD
 Eric Smouha, MD
 Remco A. Spanjaard, PhD
 John R. Stram, MD

Assistant Clinical Professor

John R. Bogdasarian, MD
 R. Kirk Bohigian, MD
 Richard J. Buckley, Sr., MD
 Robert E. Hillman, PhD
 Allyn E. Hubbard, PhD
 John F. Kveton, MD
 R. William Mason, MD
 David C. Mountain, Jr., PhD
 Nizar S. Nuwayhid, MD
 Peter Oliver, MD
 Dennis S. Poe, MD
 Pierre E. Provost, MD
 Elie E. Rebeiz, MD
 Peter Van Orman, MD
 Daniel H. Vogel, MD
 Judith A. White, MD, PhD

Adjunct Assistant Professor

Marvin P. Fried, MD
 Ellen M. Friedman, MD
 Steven M. Zeitels, MD

Instructor

Joseph F. DiTroia, MD
 Richard V. Grentzenberg, MD
 James B. Howell, MD
 Arnold E. Katz, MD
 Trevor I. McGill, MD
 Dominick A. Sampogna, MD

Clinical Instructor

Robert Gilman, MD, DMD
 Usama Sami Hamdan, MD
 Parviz Janfaza, MD
 John F. O'Brien, MD
 Leslie M. Silverstein, MD

PATHOLOGY AND LABORATORY MEDICINE

Required Courses

First Year Medical Immunology Basic principles of immunology, with emphasis on their medical relevance, presented through lectures and reading. *Dr. Sharon*

Second Year General Pathology Core curriculum offered in the first semester dealing with general principles and fundamental mechanisms of disease. A variety of learning experiences is offered, including (1) lectures; (2) laboratory, which includes projected gross and microscopic examination of tissues, informal laboratory discussions, and question and answer periods; (3) required computer-assisted programs in the library computer learning facility; and (4) optional autopsy and gross pathological demonstrations at the hospital. The laboratory and computer-based study of material supports the didactic program by correlating clinical and anatomic changes. An attempt is made to emphasize that a knowledge of pathology provides insights into the mechanisms and dynamics of the clinical manifestations of organic disease and provides the tools for clinical problem-solving. *Drs. Gottlieb, Rogers, and Pathology faculty*

Systemic Pathology Systemic pathology taught by organ systems closely integrated with clinical medicine and the other basic sciences in the course Biology of Disease. In such an integration, many disciplines within the Medical School collaborate to produce an in-depth presentation of the diseases affecting an organ system; particular emphasis on the interrelationships among the pathogenesis of a disease, the tissue changes

evoked, and the resultant clinical implications. Such a program offers an effective method of understanding the clinical implications of pathology and its immediate relevance to the patient. *Drs. Gottlieb, Rogers, and Pathology faculty*

Faculty**Professor and Chairman**

Leonard S. Gottlieb, MD, MPH

Professor

Charles F. Arkin, MD
 David I. Beller, PhD
 Leonard D. Berman, MD
 Jag Bhawan, MBBS
 Jan K. Blusztajn, PhD
 Selwyn A. Broitman, PhD
 Iih-Nan (George) Chou, PhD
 Thomas F. Freddo, OD, PhD
 Benjamin Gerson, MD
 Christian C. Haudenschild, MD
 John A. Hayes, MBChB
 Shyr-Te Ju, PhD
 Thomas L. Kemper, MD
 Neil W. Kowall, MD
 Herbert Z. Kupchik, PhD
 Robert Lev, MD
 Abby L. Maizel, MD, PhD
 Aubrey Milunsky, MBChB
 Michael J. O'Brien, MBChB
 Adrienne E. Rogers, MD
 Ann Marshak-Rothstein, PhD
 Richard A. Rudders, MD
 Hugues J.P. Ryser, MD
 David J. Salant, MBChB
 Jacqueline Sharon, PhD
 David H. Sherr, PhD
 Alfred Irme Tauber, MD
 Daniel G. Wright, MD
 Mina Yaar, MD
 Steven H. Zeisel, MD, PhD

Clinical Professor

J. Scott Abercrombie, Jr., MD
 Margaret Bauman, MD
 Milton R. Okun, MD

Research Professor

Nancy L. Bucher, MD
 Douglas V. Faller, MD, PhD
 Freddy Homburger, MD

Professor Emeritus

Paul M. Newberne, PhD
 Stanley L. Robbins, MD
 Joseph J. Vitale, ScD, MD

Adjunct Clinical Professor

Mark A. Popovsky, MD

Visiting Professor

Elimelech Okon, MD
Gershom Zajicek, MD

Research Professor Emeritus

Arnold E. Reif, BSc

Associate Professor

Charles K. Allam, MD
Thomas G. Christensen, PhD
Antonio de las Morenas, MD
Matthew J. Fenton, PhD
Francine M. Foss, MD
Gherardo J. Gherardi, MD
Carlos S. Kase, MD
John M. Kasznica, MD
Hardy Kornfeld, MD
David M. Larson, PhD
Richard Mandel, PhD
Ann C. McKee, MD
Mary J. Murnane, PhD
Carl J. O'Hara, MD
Remedios K. Rosales, MD
Magda M. Stilmant, MD
Oon Tian Tan, MBBS
Michael T. Watkins, MD
Herman E. Wyandt, Jr., PhD

Associate Clinical Professor

Handrik A. Bogaars, MD
Jila Khorsand, MD
Nicola Koultab, PhD
N. Peter Libbey, MD
Giselle S. Pechet, MD

Associate Research Professor

Kazem M. Azadzi, MD
Robert J. Ferrante, PhD
Johanna Stoeckler, PhD

Adjunct Associate Professor

Sami J. Harawi, MD
Leili Khachatryan, PhD
Jonathan L. Tilly, PhD

Adjunct Associate Research Professor

Raphael Breuer, MD

Assistant Professor

Christopher D. Andry, PhD
Shahla Asvadi, MD
Steven A. Bogen, MD, PhD
Stephen M. Brecher, PhD
Bohdana F. Burke, MD
Constance A. Buttlar, MD
Wellington V. Cardoso, MD, PhD
Desiree A. Carlson, MD
Raymond L. Comenzo, MD
Gerard F. Domanowski, MD
Richard J. Evans, MD
Patricia L. Foster, PhD

Lynne J. Goldberg, MD
Allen C. Goldberger, MD
Aldo Gonzalez-Serva, MD
George G. Katsas, MD
Harvey Kaufman, MD
Sanford R. Kurtz, MD
Adam Lerner, MD
Barbarajan Magnani, MD, PhD
Sigfus T. Nikulasson, MD
Elizabeth M. O'Neill, MBChB
Michael E. Ottlinger, PhD
Denise V. Page, MD
Carol Lisa Rosenberg, MD
Kedarnath Sastry, PhD
Richard H. Seder, MD, MPH
Daniel S. Shapiro, MD
Sania Shuja, MBBS, PhD
Barbara E. Slack, PhD
Lance M. Tibbetts, MD
Shi Yang, MB

Assistant Research Professor

Brygida Berse, PhD
Richard F. Corkey, MD
Paul R. Ferbend, DO
Edward T. Grimes, MD
Peter Lukl, MD
John W. Morgan, PhD
Leonid Simanovsky, MD, PhD
Akiku Takeda, PhD

Adjunct Assistant Professor

Michael W. Conner, DVM
Pedro Crespo de la Rosa, MD, PhD
Jerome Glickman, EdD
Michael I. Klibaner, MD, PhD
John C. O'Keane, MBChB
Kieran Sheahan, MBChB

Instructor

Antonio E. Boschetti, MD
Kathleen Brady, MD, PhD
Carl H. Critz, MD
Laura E. Dike, PhD
Michael N. Gold, MD
Qin Huang, PhD
Stanton C. Kessler, MD
Pamela S. Larson, PhD
Henry M. Nields, MD, PhD
Steven P. Treon, MD, PhD

Clinical Instructor

Devayani C. Lathi, MBBS

Adjunct Instructor

Jose Luis Arredondo, MD

Lecturer

John A. Hayes, Jr., MBBS

PEDIATRICS**Required Courses****Second Year Introduction to Pediatrics**

Lectures, seminars, and clinical experiences dealing with the neonatal assessment of infants and the interview of new parents. The observation and interaction with pediatricians in an office setting and a review of normal child development by observation of preschool age children. Selected pediatric topics are presented in the Biology of Disease course. *Dr. Siegel and associates*

Third Year Clinical instruction given to each student for a seven-week period on the inpatient and ambulatory service of the Pediatric Department at either Boston Medical Center, Framingham Union Hospital, Emerson Hospital, or Franciscan Children's Hospital and Rehabilitation Center. *Dr. Siegel and associates*

Faculty**Professor and Chairman**

Barry S. Zuckerman, MD

Professor

Joel J. Alpert, MD
Norman H. Bass, MD
Howard Bauchner, MD
Johan G. Blickman, MD, PhD
Douglas V. Faller, MD, PhD
Murray Feingold, MD
Neil R. Feins, MD
Michael A. Grodin, MD
Elizabeth S. Hillman, MD
Donald A. Hillman, MD, PhD
Jerome O. Klein, MD
Aubrey Milunsky, MBChB
Allen A. Mitchell, MD
John F. O'Connor, MD
Stephen I. Pelton, MD
Benjamin S. Siegel, MD
David W. Teele, MD
Steven H. Zeisel, MD, PhD

Clinical Professor

Joel L. Bass, MD
John J. McNamara, MD, MPH
Kishor A. Mehta, MBBS
Michael E. Osband, MD
John G. Palfrey, MD, PhD

Research Professor

Jonathan Howland, PhD, MPH

Associate Professor

Chris T. Amemiya, PhD
 Elizabeth R. Brown, MD
 Ellen Rae Cooper, MD
 Michael J. Corwin, MD
 David L. Coulter, MD
 William R. Cranley, MD
 Richard A. Famularo, MD
 Deborah A. Frank, MD
 Alan M. Fujii, MD
 Timothy C. Heeren, PhD
 Ralph W. Hingson, ScD, MPH
 Melanie S. Kim, MD
 Roger V. Lebo, PhD
 Alan F. Meyers, MD
 Mark H. Mirochnick, MD
 Jan E. Paradise, MD
 Steven J. Parker, MD
 Susan P. Perrine, MD
 Suzanne F. Steinbach, MD
 Robert J. Vinci, MD
 Harland S. Winter, MD
 Paul H. Wise, MD, PhD

Associate Professor Emeritus

Sidney Kibrick, MD, PhD

Associate Clinical Professor

Gilbert R. Fisch, MD
 Linda M. Grant, MD, MPH
 Edward J. Hart, MD
 Margot Kaplan-Sanoff, EdD
 Peter F. Loewinthan, MD
 Lillian E.C. McMahon, MD
 Grier H. Merwin, MD, MPH
 Edgar Y. Oppenheimer, MBChB
 Sidney G. Starobin, MD
 Pamela A.M. Zuckerman, MD

Adjunct Associate Professor

Colin D. Marchant, MD

Assistant Professor

William G. Adams, MD
 George L. Askew, MD
 Marilyn C. Augustyn, MD
 Elizabeth D. Barnett, ScD, MD
 Cynthia Chase, PhD
 Ann Wang Dohman, MD
 David H. Dorfman, MD
 Glenn Flores, MD
 Paul L. Geltman, MD, MPH
 Joshua Greenberg, MD, JD
 Eileen A. Keneck, MD
 Sigmund J. Kharasch, MD
 Perri E. Klass, MD
 Theresa M. Kohlenberg, MD
 Candace S. Lapidus, MD
 Lourdes O. Linares, PhD
 Lois McCloskey, DrPh, MPH
 Jeffrey M. Milunsky, MD

Steven L. Moulton, MD
 Cynthia J. Osman, MD
 Barbara J. Philipp, MD
 Cynthia M. Rooney, MD
 Ruth Rose-Jacobs, ScD
 Marianne B. Sutton, MD, MPH
 Xiaobin Wang, MD, MPH, ScD
 Bruce W. Weinstock, MD

Assistant Clinical Professor

Amy Arnett, MD
 Anthony F. Bonacci, MD
 Neal G. Bornstein, MD
 Lorna W. Bratton, MBBS
 Sidney Brodie, MD, MPH
 David C. Carr, MD
 John P. Cocchiarella, MD
 Linda M. Cohen, MD, MPH
 Jeffrey J. Colucci, PhD
 William A. DeBassio, MD, PhD
 Robert Franklin, MD
 Joseph J. Frassica, MD, DDS
 Paul B. Gustafson, MD
 Margaret M. Gutierrez, MD
 Karen A. Hacker, MD
 Jo-Ann S. Harris, MD
 Joel Herskowitz, MD
 Virginia S. Kharasch, MD
 Maureen O'Brien Kruskal, MD
 Rafail Kushak, PhD, DrSci
 Yhu-Hsiung Lee, MD
 Steven E. Lipshultz, MD
 Betsy McAlister-Groves, MSW
 Suleiman N. Mustafa-Kutana, MBChB
 Jane E. O'Brien, MD
 Felix A. Perriello, MD
 Nicole Prudent, MD, MPH
 Randa I. Reitman, MD
 Devaki N. Sadhu, PhD
 Amy E. Sampson, PhD
 Ashtok Sen-Gupta, PhD
 Mohammad Shahabuddin, MBBS
 Sharon Williams Shay, PhD
 Pauline Q. Sheehan, MD
 Peter G. Stringham, MD
 Lloyd Tarlin, Jr., MD
 Martha M. Vibbert, EdD, PhD

Adjunct Assistant Professor

Richard J. Cowen, PhD
 Martin T. Feldman, MD
 Matthew W. Gillman, MD
 Meredith H. Harris, EdD
 Barbara J. Moore, MD

Instructor

David A. Ansel, MD
 Natalie Aronson, MD
 Franz E. Babl, MD, MPH
 Peter M. Barkin, MD

John C. Brancato, MD
 Elizabeth A. Calmar, MD
 George Cassady, MD
 Patricia A. Davis, MD
 Pegeen W. Eslami, MD
 Sabin L. James, MD
 Barbara R. Kelley, MPH, EdD
 Linda C. Loney, MD
 Mary E. McClain, MS
 Juliann M. Paolicchi, MD
 Ronald J. Schneebaum, MD

Clinical Instructor

C. Coe Agee, MD, PhD
 Carole E. Allen, MD
 Sarah M. Axel, MD
 Neil D. Beneck, MD, MPH
 Jonathan A. Benjamin, MD
 Robert D. Bornstein, MD
 Jeanne S. Clifford, MD
 Nien T. Dong, MD
 Whaja Woo Fenton, MD
 Laura W. Gal, JD
 Cheryl M. Greenfield, MD
 Martin A. Gross, MD
 Edward Gross, MD
 Lester J. Hartman, MD
 Larry H. Honikman, MD
 Aline Hutner, MD
 Natalia Kandror, MD
 Doreen P. Karoll, MD
 Barbara J. Katz, MD, MPH
 Kelly P. Knowles
 Mirjana Kostich, MD
 Jeffrey I. Lasker, MD
 Robert M. Levenson, MD
 Melvyn B. Levine, MD
 Mary Ann Lunsford, MD
 Kate McIntosh, MD
 Dianne M. Morris, MD
 Vivien M. Morris, MS
 Catherine Nowal, MD
 Rosalinda J. Ott, MD
 Veronica S. Peterson, MD
 Marian H. Putnam, MD
 Ann Marie Regan, MEd
 Kathleen Fitzgerald Rice, MSED
 Carolyn F. Sax, MD
 Leslie J. Scherl, MD
 Janet L. Schwaner, MD
 Maya B. Shahani, MBBS
 Julie Silberman, MD
 Ewa Smockiewicz, MD
 Milana Stavitsky, MD
 Juliette Tuakli-Williams, MBChB
 Phyllis J. Wagner, MD
 Berestrand Williams, MD
 Doris N. Wong, MD, MPH
 Mary Wong, MD

Research Instructor

Christine E. Briggs, PhD

Adjunct Instructor

Jean G. Cole, MS

Alfred E. Gavaghan, BA

Edward R. Skeffington, JD

Lecturer

Mary E. Avery, MD

Ivan DeRay Frantz, III, MD

Sydney S. Gellis, MD

Claire Hayes, MEd, CAGS

Joseph L. Kennedy, Jr., MD

Donald N. Medearis, MD

N. Paul Rosman, MD

Timos N. Valaes, MD

PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS**Required Courses**

Second Year General Medical Pharmacology General principles of drug action, the fate of drugs in the body, and the pharmacology and toxicology of drugs of major interest to the physician. Presented in lectures and workshops. Extensive use of clinical pharmacologic data emphasizes the quantitative and comparative aspects of pharmacology and facilitates development of skills important for clinical evaluation of data pertaining to drugs. *Staff*

Elective Courses

Elective in Pharmacology Seminars open to students in all curricular years. Offerings vary, but include Current Topics in Pharmacological Sciences, Principles of Pharmacokinetics, Behavioral Pharmacology, Molecular Neurobiology and Pharmacology, Laboratory Techniques in Pharmacology, Gene Regulation and Pharmacology, and Neuroendocrine Pharmacology. *Staff*

Faculty**Professor and Chairman**

David H. Farb, PhD

Professor

Charles R. Cantor, PhD

Aram V. Chobanian, MD

Alan S. Cohen, MD

Robert G. Feldman, MD

Benjamin Gerson, MD

Conan Kornetsky, PhD

Susan E. Leeman, PhD

Hugues J.P. Ryser, MD

Cassandra L. Smith, PhD

Ladislav Volicer, MD, PhD

Research Professor

Mark W. Bitensky, MD

Reinhard K.R. Kage, MD, PhD

Temple F. Smith, PhD

Konstandean Steliou, PhD

Adjunct Professor

Barry A. Berkowitz, PhD

Steven M. Paul, MD

S. William Tam, PhD

Professor Emeritus/Emerita

J. Worth Estes, MD

Ruth R. Levine, PhD

Edward W. Pelikan, MD

Associate Professor

Norman D. Boyd, PhD

Thomas R. Browne, III, MD

Gladys Friedler, PhD

Philip J. Podrid, MD

Carol T. Walsh, PhD

Associate Research Professor

Kristine A. Erickson, PhD

John F. Keaney, Jr., MD

Susan P. Perrine, MD

Associate Research Professor Emeritus

Sisir K. Sengupta, PhD

Adjunct Associate Professor

Przemyslaw A. Marek, DVM, PhD

Judith K. Marquis, PhD

L. Bruce Pearce, PhD

Carl E. Rosow, MD, PhD

W. Mark Vogel, PhD

Assistant Professor

Mark J. Alexander, PhD

Terrell T. Gibbs, PhD

Tohru Ikuta, MD, PhD

Kevin A. Jarrell, PhD

Isabelle Marie Mintz, PhD

R. Christopher Pierce, MD

Shelley J. Russek, PhD

PHYSIOLOGY**Required Courses**

First Year Physiology Course This course presents the mechanisms underlying the function of the body from molecular and cellular levels to integrated functions of the organ systems. It devotes considerable time

to the regulation and integration of these systems in the body as a whole. The physiological basis for understanding clinical conditions is also presented. Small group problem-solving discussions, of mainly clinical cases, promote the participation of students. Students also carry out observations and physiological measurement on themselves wherever possible; these laboratory exercises are supplemented with animal experimentation and demonstrations.

Faculty**Professor and Chairman**

Benjamin Kaminer, MBBCh

Professor

M. Carter Cornwall, PhD

Ferenc I. Harosi, PhD

James F. Head, PhD

Michael F. Holick, MD, PhD

William J. Lehman, PhD

Norman G. Levinsky, MD

Edward Ford MacNichol, Jr., PhD

James C. Melby, MD, PhD

Enrico Nasi, PhD

Neil B. Ruderman, MD

Barbara A. Seaton, PhD

Osamu Shimomura, PhD

H. Eugene Stanley, PhD

Raymond E. Stephens, PhD

Research Professor

Edward A. Alexander, MD

Carl S. Apstein, MD

Richard A. Cohen, MD

Wilson S. Colucci, MD

Judith Gwathmey, VMD, PhD

M. Michael Wolfe, MD

Professor Emeritus

Alvin Essig, MD

William C. Ullrick, PhD

Associate Professor

Jesus Fernando Garcia-Diaz, PhD

Herbert L. Kayne, PhD

Simon Levy, PhD

Paul M. O'Bryan, PhD

Kenneth J. Rothschild, PhD

Judith D. Saide, PhD

Associate Research Professor

Stuart R. Chipkin, MD

Andrew C. Jackson, PhD

Rahul Ray, PhD

Adjunct Associate Professor

Lawrence C. Kuo, PhD

Ete Z. Szuts, PhD

Douglas Tillotson, PhD

Assistant Professor

Karen N. Allen, PhD
 Rama Bansil, PhD
 David A. Cameron, PhD
 Gregor J. Jones, PhD
 Hector A. Lucero, PhD

Assistant Research Professor

Victoria Bolotina, PhD
 Maria D.P. Gomez, PhD
 Susan C. J. Kandarian, PhD
 Robert B. Moreland, PhD
 Jon J. Pehrson, MD
 Chi-Chuan Tseng, MD, PhD, MPH

Adjunct Assistant Professor

Stephen J. Quinn, PhD

Instructor

Joseph Libonati, PhD

PSYCHIATRY

Required Courses

The instruction given by the Division of Psychiatry consists of lectures, clinical demonstrations, conferences, seminars, and practical work at numerous clinical sites. The primary purpose of the program is to impart to students an understanding of the human personality, its development, and its functions in health and disease. The program provides students with knowledge of the symptoms of disturbed mental functioning, its syndromes and their etiologies, and teaches evaluative and therapeutic skills. The program is under the direction of Dr. Phillip S. Freeman, Director of the Medical Student Program in Psychiatry and Dr. Pamela Wine, Associate Director.

Required instruction begins in the first year, during which the structure, function, and development of the normal personality are elucidated. Relevant concepts in the fields of neurophysiology and lifespan issues are presented in lectures, clinical demonstrations and section discussions. The second-year course includes lectures on psychopathology and psychodynamics, and sections to practice using the concepts presented. In the third year, the clinical manifestations, diagnosis, and treatment of psychiatric illnesses of adults and children are studied in a seven-week clerkship; students are assigned to clinical sites to evaluate and treat patients under supervision.

Electives

Elective opportunities are offered to a limited extent the first three years and extensively in the fourth year.

Faculty**Professor and Chairman**

Domenic A. Ciraulo, MD

Professor

Marlene Oscar Berman, PhD
 Gaston E. Blom, MD
 Joseph D. Bronzino, PhD
 Elaine Carmen, MD
 Bernard H. Fox, PhD
 Donald S. Gair, MD
 Janina R. Galler, MD
 Howard T. Hermann, MD
 Terence M. Keane, PhD
 Conan Kornetsky, PhD
 Orlando B. Lightfoot, Jr., MD
 William I. Malamud, MD
 Douglas M. McNair, PhD
 Allan F. Mirsky, PhD
 David I. Mostofsky, PhD
 Richard C. Pillard, MD
 Benjamin S. Siegel, MD
 Gerald Stechler, PhD
 Louis Vachon, MD
 Bessel A. Van der Kolk, MD

Clinical Professor

Walter E. Barton, MD
 Albert C. Gaw, MD
 Samuel Kaplan, MD
 Jean Baker Miller, MD
 Theodore Nadelson, MD
 Chester A. Pearlman, MD
 A. Michael Rossi, PhD

Research Professor

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 Jan K. Blusztajn, PhD
 Daniel W. King, PhD
 Lynda A. King, PhD
 Francesca LaVecchio, MD, PhD
 Peter Morgane, PhD
 Robert N. Ross, PhD

Professor Emeritus

Melvin Rosenthal, PhD
 James C. Skinner, MD

Adjunct Professor

Edith F. Kaplan, PhD

Adjunct Clinical Professor

Walter P. Christian, PhD

Visiting Professor

Frank C. Ramsey, MBBS, MPH
 Oscar Resnick, PhD

Associate Professor

Sanford H. Auerbach, MD
 Ruth M. Batson, MD
 Padriac Burns, MD
 George H. Carter, MD

Paul R. Draskoczy, MD
 Richard A. Famularo
 Deborah A. Fein, PhD
 Francis R. Frankenburg, MD
 Gladys Friedler, PhD
 James A. Haycox, MD
 Douglas H. Hughes, MD
 Richard J. Kahn, MD
 Danny G. Kaloupek, PhD
 Kenneth H. Kaplan, MD
 Alan S. Katz, MD
 Paul Kaufman, MD
 Marilyn L. Lanza, DNSc
 Brett T. Litz, PhD
 Joseph S. LoCastro, PhD
 Jane S. O'Hern, EdD
 Godehard Oepen, MD
 Elaine B. Pinderhughes, MSSW
 Eva B. Pragay, PhD
 John A. Renner, Jr., MD
 Ethan S. Rofman, MD
 Chaim M. Rosenberg, MBChB, PhD
 Hartej S. Sandhu, MD
 Nathan T. Sidley, MD
 Lyn Weiner, MPH
 Jessica Wolfe, PhD

Associate Clinical Professor

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 Gregory K. Binus, MD
 Thomas C. Bond, MD
 Bernard Katz, MD
 Thomas Maier, MD
 Robert G. Mayer, MD
 Laurence H. Miller, MD
 Judith F. Milne, MBChB
 Edward Monnelly, MD
 Harry S. Olin, MD
 Anthony E. Raynes, MBBS
 Arnold Robbins, MD
 Daniel Shaw, MD
 Ana Maria Soto, MD
 Sumer Verma, MD
 Howard Weintraub, MD
 Howard A. Wishnie, MD

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 Thomas E. Mulholland, PhD
 Judith L. Rubenstein, PhD
 Babette-Ann Stanton, PhD
 John Tonkiss, PhD
 M. David Ullman, PhD

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 Lily Awad, MD
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 Cynthia Chase, PhD
 Lisa T. Connor, PhD
 Alan G. Corman, MD
 Helen S. Denison, PhD
 Charles E. Drebing, PhD
 G. Rita Dudley, PhD
 Barbara A. Dworetzky, MD
 Phillip S. Freeman, MD, DMH
 John D. Gambill, MD
 Diana Hearst-Ikeda, PhD
 J. Stephen Heisel, MD
 Lawrence R. Herz, MD
 Barbara Jeanne Horner, MD
 Anthony H. Jackson, MD
 Peggy Lyn Johnson, MD
 Herbert M. Joseph, PhD
 Arnold M. Kerzner, MD
 Clifford M. Knapp, PhD
 Joseph Lifftik, PhD
 Ignacio Lopez, MD, PhD
 Daryl B. Matthews, MD, PhD
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 Robert L. Muellner, MD
 Tamara L. Newton, PhD
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 R. Christopher Pierce, MD
 Felix O. Pitterson, MD
 Penny Prather, MD, PhD
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 Amit Granot, MD
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 Kathleen K. Shahrokhi, PhD
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 Maureen E. Smith, MD
 Hugh S. Smith, MD
 Derek A. Stern, PhD
 Gerald Sweet, PhD
 Ralph E. Talbot, MD
 Pierre Tetreault, MD
 Carol E. Weichert, MD
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 Lorraine Emily Wolf, PhD
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 David A. Danforth, PhD
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 John Dundas, MD
 Don G. Elligan, PhD
 Edward J. Federman, PhD
 Steven P. Goldsmith, MD
 Dolores E. Goode, PhD
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 Margaret C. Nast Hayes, MSW
 Richard H. Ho, DSW
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 Paul D. Lipsitt, PhD
 Robert A. Lobis, MD
 Paul E. McLean, MD
 Alexander C. Morgan, MD
 Ana Lordes Portales, PhD
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 Scott Reinhardt, PhD
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 Mark C. Singer, MD
 Jeanne C. Smith, MD

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Mel Barton, PhD
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Stuart L. Koman, PhD
James M. Krainin, MD
Michael A. Krieger, MD

William B. Land, MD
Catherine L. Lee, PhD
Paul E. Lynch, MD
Michael J. Macht-Greenberg, PhD
Yefim Magitsky, MD
Sean A. Mallari, MD
John E. Mathews, PsyD
Joseph More, MD
Barbara Neizo, RN
John A. Nichols, PsyD
Harvey L. Nissman, MD
Domingo Pagan, MD
Cathy A. Perkins, MD
L. Scott Permesley, MD
Linda A. Piwowarczyk, MD
Eugene L. Pogany, PhD
Mark F. Poster, MD
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Lecturer

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Alan Fisch, MD
Ernest L. Hartmann, MD
David G. Satin, MD
Alan E. Siegel, EdD
Lionelle D. Wells, MD
Deborah Yurgelun-Todd, PhD

RADIOLOGY

Required Courses

First Year Normal Radiographic Anatomy

Correlation lectures and seminar demonstrations of diagnostic radiology given concurrently with gross anatomical dissections of each area. *Dr. O'Connor and staff*

Second Year Eight workshops teaching radiology of the chest and abdomen are integrated with the Biology of Disease course. Small groups of students are taken through a step-by-step approach to radiographic diagnosis by both community radiologists and the radiology staff. The material covered updates the radiologic work-up of clinical problems by introducing the newer technologies and illustrating their use in typical clinical situations. *Dr. Raagas and staff*

Third and Fourth Years A one-month radiology required course is offered to fourth-year Boston University students, during which time the student is exposed to every aspect of a large university radiology program. Programmed audiovisual teaching aides and several hours of didactic teaching each day are an integral part of the course. The student rotates through all of the various radiologic subspecialties and has freedom to spend extra time in areas of personal interest. Students participate in departmental conferences on a daily basis.

A radiology elective for a one-month period can be specifically tailored for a student wishing to spend one or more months in a subspecialty such as pediatric radiology, neuroradiology, gastrointestinal radiology, or ultrasound. *Dr. Blickman and staff*

Elective

A radiology elective following the initial General Radiology course can be obtained for a one-month period and can be specifically tailored for students who wish one or more months in a subspecialty such as pediatric radiology, neuroradiology, nuclear radiology, gastrointestinal radiology, ultrasound, MRI, or vascular/interventional radiology.

Faculty

Professor and Chairman

Joseph T. Ferrucci, MD

Professor

Johan G. Blickman, MD, PhD
 M. Elon Gale, MD
 Ewa Kuligowska, MD
 Victor W. Lee, MD
 John F. O'Connor, MD
 Alan H. Robbins, MD
 Jerome H. Shapiro, MD
 Edgar K. Yucel, MD

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 Robert Nebesar, MD
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 Richard J. Tello, MD
 Shripad P. Tilak, MBBS

Associate Clinical Professor

Shyam Dayal, MD
 Uve F. Hublitz, MD
 Carl R. Larsen, MD
 Richard S. Pieters, MD
 Manuel S. Raagas, MD
 Charles E. Taylor, MD

Clinical Associate Professor

Daniel J. O'Connor, MD

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Glenn D. Barest, MD
 Matthew Barish, MD
 David L. Cail, MS
 Peter D. Clarke, MD
 Richard W. Dunlop, MD
 Daniel R. Gale, MD
 Laurie Gianturco, MD
 Charles Hyde, MD
 Heriberto Pagan-Marin, MD
 Sidney D. Pollack, MD
 Oliver H. Pomeroy, MD
 Thomas Ptak, MD, PhD
 Scott K. Reid, MD
 Ranji N. Samaraweera, MD
 Deborah C. TerMeulen, MD

Assistant Clinical Professor

James M. Bevilacqua, MD
 Daniel L. Grosso, MD
 Daryl R. Parker, MD
 Warren Salzman, MD

Adjunct Assistant Professor

Kenneth G. Burgess, MBA
 Anthony Zeitman, MD



Almer Ray Love II, '00, reads x-rays.

Instructor

Victorine Muse, MD
 Rebecca K. Schwartz, MD

Clinical Instructor

James L. Hayes, MD

REHABILITATION MEDICINE

Required Courses

First Year During the Gross Anatomy course, the department presents demonstrations of normal neuromuscular and musculoskeletal functions, followed by the study of impaired function through the presentation of patients with dysfunction. Both hospitalized and ambulatory patients participate. *Staff*

Third Year Introduction to Rehabilitation

A survey of rehabilitation medicine is available for third-year medical students early in the year. The course is designed for students with little exposure to clinical medicine.

Prerequisites: None

Duration: 2 weeks

Spinal Cord Injury Team

Students become a part of the treatment team on the spinal cord injury unit. Each student will follow two or three inpatients, attend team conferences, rounds, therapy sessions, and lectures. Spinal cord injury clinic for outpatients rounds out the experience. Readings are assigned.

Objectives: Understanding the complex rehabilitation process, prevention of medical complications

Prerequisites: Medicine, Surgery, Psychiatry, Pediatrics

Electives**Third Year Rehabilitation Medicine—Third and Fourth Year**

The rehabilitation of a patient with a variety of clinical problems is explored. The student is expected to follow two to three patients, attend their therapy sessions, rounds, didactics, and team meetings. Reading will be assigned around aspects of patient care. Clinical entities include neurologic, cardiovascular, rheumatologic, and orthopedic problems.

Prerequisites: Medicine, Surgery

Fourth Year Brain Injury Rehabilitation Team

Students become a part of the treatment team on the brain injury unit. Each student will follow two or three inpatients, and attend team conferences, rounds, therapy sessions, and lectures. Brain injury clinic for outpatient rounds out the experience. Readings are assigned.

Objectives: Understanding of the complex rehabilitation process, prevention of medical complications

Prerequisites: Medicine, Surgery, Psychiatry, Pediatrics

Rehabilitation Medicine Consultations

Students join the rehabilitation consultation team and review complex problems with resident and attending staff. Assessment of

level of care, as well as use of appropriate physical therapy, occupational therapy, orthotics, and prosthetics will be reviewed.

Research in Rehabilitation Members of the rehabilitation medicine faculty can assist students in the development of independent study projects. Prior to the rotation, the student should meet with the preceptor to identify a specific area of study. Design, data, and progress are reviewed weekly. A short paper is required at the end of the rotation.

Outpatient Management of Rehabilitation Problems Concentrating on the rehabilitation problems of ambulatory patients offers a different perspective than the usual approach to the hospitalized patient. The student attends general rehabilitation as well as specialty clinics (e.g., spinal cord injury, muscular dystrophy, multiple sclerosis) to gain experience with outpatients.

Faculty

Assistant Professor and Chairman ad Interim
Shanker Nesathurai, MD

Clinical Professor
Stanley H. Ducharme, Jr., PhD

Research Professor
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Associate Clinical Professor
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Buck Hong Woo, PhD

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Mary J. Willard, EdD

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Erik P. Purins, MD
Andrea J. Wagner, MD

Instructor
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Robert A. Furman, MD
Judith Zazula, MS

Adjunct Clinical Instructor
Paulette Demers Turco, OD
Stuart J. Glassman, MD

Lecturer
Anna Pomfret, MBChB

SOCIO-MEDICAL SCIENCES AND COMMUNITY MEDICINE

Required Courses

Essentials of Public Health The course Essentials of Public Health recognizes that delivering quality health care requires extensive knowledge of the health system in which a physician practices. Being an efficient and effective physician requires knowledge of health services, medical economics, and ethical, legal, political, and regulatory constraints. Awareness of the environmental and social factors which influence health in individuals and populations is necessary for the promotion of health and the prevention of disease. Caring for patients requires a sensitivity to language, culture, and ethnicity as well as familiarity with psychosocial and behavioral models. Knowledge of epidemiology and biostatistics is necessary for evaluating effective medical interventions as well as the population basis for the practice of community medicine.

Topics of core lectures include: medical ethics, health care regulation, medical malpractice, informed consent, confidentiality, reproduction, organ transplantation, terminal illness, health promotion and disease prevention, health education, medical anthropology, environmental and occupational health, health services, health care delivery systems, health care financing, managed care, elementary biostatistics, epidemiology, randomized clinical trials, clinical measurements, diagnostic testing, and clinical decision making.

Home Medical Service

Fourth Year Students are assigned in groups of eight to ten for a period of one month to the Home Medical Service, sponsored jointly

by the Boston Medical Center and School of Medicine.

Medical care is furnished by students and their physician preceptors to the elderly and/or handicapped population in their homes or in elderly housing developments in many Boston neighborhoods.

The program stresses the teaching of principles of primary care and geriatric medicine in a practice setting. Didactic conferences are presented each morning by staff and guest lecturers in addition to "morning report," where every patient seen by a student is presented.

Faculty

Professor and Chairman
Robert F. Meenan, MD, MPH

Professor
Joel J. Alpert, MD
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William J. Bicknell, MD, MPH
Theodore Colton, ScD
Leonard H. Glantz, JD
Michael A. Grodin, MD
Ralph W. Hingson, ScD, MPH
Wendy K. Mariner, JD
Elizabeth W. Markson, PhD
Allan R. Meyers, PhD
Barbara M. Millen, MPH, DrPh
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Anthony Robbins, MD, MPA
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Judith P. Swazey, PhD
Eileen H. Zungolo, EdD

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George Rosenthal, MD

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William B. Patterson, MD

Adjunct Assistant Professor
Dagmar B. Friedman, MSW, MPH

Assistant Professor Emerita
Constance C. Cornog, MD

Instructor

Margaret J. Polito, MPH

Adjunct Instructor

Lisa J. Levine, MPH

SURGERY**Required Courses**

First year Clinical Correlation Surgical instruction begins in the first year with a series of clinics correlating regional anatomy with the treatment of diseases amenable to surgery. *Staff*

Second Year Surgical material is integrated into each of the organ system sections of the Biology of Disease course. One portion of this course is devoted to trauma. Overview sessions cover the following topics: initial assessment, stabilization and transport, shock and resuscitation, airway management and ventilation, thoracic trauma, abdominal trauma, head injury, vascular trauma, orthopedic trauma, burns, nutritional support, sepsis, trauma and domestic violence. *Dr. Frederick H. Millham and the general surgery and specialty staffs*

Third Year Clinical Clerkships Seven weeks of the session are assigned to an inlying hospital (Boston Medical Center, or Boston Veterans Administration). One-third is assigned to an outlying hospital (Brockton, Cape Cod). The remaining one-third is assigned to two rotations in surgical subspecialties (Anesthesia, Cardiothoracic, Neurosurgery, Orthopedic, Otolaryngology, Pediatric, or Urology). Assignment to the various rotations is arranged through the Registrar's Office just prior to the beginning of the academic year. An orientation meeting on the first day of the clerkship reviews the students' responsibilities, and the evaluation process and departmental final examinations are discussed. During this clerkship, the student assumes active responsibility, under supervision, for the care of patients as a junior member of the surgical team. Informal instruction is given on wards and in the operating room, and formal instruction is given during lectures, seminars, rounds, and conferences in which students are expected to participate. *Dr. Cantelmo, Director of Surgical Education, and surgical staffs of involved hospitals*

Faculty**James B. Utley Professor and Chairman**

James M. Becker, MD

Professor

Robert M. Beazley, MD
Sang I. Cho, MD
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Neil R. Feins, MD
Erwin F. Hirsch, MD
Willard C. Johnson, MD
Wayne W. LaMorte, MD
Barry M. Manuel, MD
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Edward L. Spatz, MD
Harold J. Wanebo, MD

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Warren J. Taylor, MD

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Kevin J. McBride, MD
Harold I. Miller, MD
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Arthur Glasgow, MD
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Steven L. Moulton, MD
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Alphonse L. Gallitano, MD
Amitabha GhoshRoy, MBBS
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Roger W. House, MD
David F. Hyatt, MD
Gregory J. Kechejian, MD
Francis R. Kenney, MD
Paul M. Konowitz, MD
Knowles B. Lawrence, MD
Richard H. Litner, MD

Ming Lu, MD
 Donald W. Lucek, MD
 William P. Luke, MD
 John A. Malcolm, MD
 Robert S. Nierman, MD
 Charles N. Peabody, MD
 Martin Phillips, MD
 William J. Porell, MD
 Somnath Prusty, MD
 Edward Reardon, MD
 Stephen G. ReMine, MD
 Patricia L. Roberts, MD
 Maher M. Samaha, MBBCh
 Stephen F. Schill, MD
 Alfonse Serrano, MD
 Melvin H. Sher, MD
 David Shroyer, MD, PhD
 Louis Vito, MD
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Clinical Instructor

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 Stephen W. Brooks, MD
 Annella Brown, MD
 Mitchell W. Bush, MD
 Anthony G. Capobianco, MD
 Roger N. Chabra, MD
 William F. Croskery, MD
 Gerard Desforges, MD
 Armond Enos, Jr., MD
 Morteza Farizan, MD
 Thomas E. Fitzgerald, MD
 Carlos A. Fonts, MD
 Richard L. Grotz, MD
 Albert H. Guay, DMD
 Bernard Lin-Nan Huang, MD
 H. Walter Kaess, MD, PhD
 Nishan Kechejian, MD
 Robert M. Kim, MD
 Charles Mahanor, Jr., MD
 Arcangelo V. Mariano, MD
 Ronald L. Nath, MD
 Edward T. O'Hara, MD
 Williams J. Powers, MD
 Mary T. Pronovost, MD
 Seppo E. Rapo, MD
 Michael S. Rosenblatt, MD, MPH
 Robert A. Scarpato, MD
 George W.B. Starkey, MD
 Katharina Anna Trede, MD
 Julie G. White, MD
 David R. Williams, MD

Adjunct Clinical Instructor

Christopher J. Corey, MD
 Richard L. Paulson, MD

Lecturer

Burton H. Harris, MD

UROLOGY

Required Courses

First and Second Years The first year is limited and consists of several lectures presented to the whole class on the anatomy of the genitourinary system during the course in anatomy. During the second year, urologic lectures and conferences are correlated with instruction by allied departments in the course Biology of Disease. Emphasis is placed on the etiology and basic pathophysiology of some of the major disease problems of the genitourinary system including trauma, neurogenic bladder disease, impotence, cancer, calculus disease, and infection. Examination of the genitourinary system of the male is also reviewed.

Third and Fourth Years During the three-month general surgical clinical clerkship at several Boston University affiliated hospitals, instruction in clinical urology continues in the form of a two-week elective with the Department of Urology. Emphasis is placed on correlation of clinical manifestations and underlying pathology. In the affiliated hospitals instruction continues in the form of one-to two-hour lectures or conferences conducted weekly or bimonthly by members of the urology staff at each one of the hospitals. In the fourth year, a student may elect a one-month intensive elective in urology at the Boston Medical Center.

Faculty

Professor and Acting Chairman

Richard K. Babayan, MD

Professor

Irwin Goldstein, MD
 Robert J. Krane, MD
 Mike B. Siroky, MD
 Abdulmageed M. Traish, PhD

Clinical Professor

David T. Mahony, MD

Research Professor

Daniel G. Udelson, PhD

Research Professor Emeritus

Herbert H. Wotiz, PhD

Associate Professor

Gennaro A. Carpinito, MD
 Robert D. Oates, MD

Associate Clinical Professor

Manuel J. Correia-Branco, MD
 Steven R. Previte, MD
 Edward T. Rafferty, MD

Associate Research Professor

Kazem M. Azadzo, MD

Adjunct Associate Professor

Inigo Saenz de Tejada, MD

Assistant Professor

Robert A. Edelstein, MD

Assistant Clinical Professor

Vincent A. Andaloro, Jr., MD
 Stanley H. Ducharme, Jr., PhD
 Anthony M. Filoso, MD
 Sandeep Gupta, PhD
 Liam J. Hurley, MD
 Jeffrey S. Lamont, MD
 Robert B. Moreland, PhD
 Renee A. Reijo, PhD

Instructor

Joseph A. Baron, Jr., MD
 Jennifer R. Berman, MD
 Paul S. Freedberg, MD
 George D. Kornitzer, MD
 Ossama E. Sakr, MBChB
 Bernard R. Sears, MD

Clinical Instructor

Charles R. Burke, MD
 Roland O. Laferte, MD
 Anup K. Singh, MD

DIVISION OF GRADUATE MEDICAL SCIENCES

The rapid expansion of knowledge in the health sciences during the past half century has necessitated a marked "division of labor" quite apart from the development of the numerous medical specialties. The specific requirements for teaching, research, and patient care, necessitate in each case distinctive training and qualifications. It can be generalized that, whereas the care of the sick and the clinical training of future physicians is the primary responsibility of the physician (MD), the teaching of the basic medical sciences has devolved largely upon individuals specifically trained in fundamental research

(either PhD or MD). The major training of both groups, however, occurs within schools of medicine. Medical scientists teaching in the School of Medicine are members both of the Medical School faculty and that of the Division of Graduate Medical Sciences of the University.

Boston University School of Medicine grants MA and PhD degrees in the medical sciences to students enrolled in the Division of Graduate Medical Sciences who carry out the major part of their programs at the School of Medicine. Such students must meet the requirements and standards of the Division of Graduate Medical Sciences, which administers the program within the School of Medicine. Students may apply for admission to this program upon completing their undergraduate requirements, or during their predoctoral or postdoctoral medical training. A student interested in a program of study leading to an MA or PhD degree should consult the Associate Dean of the Division of Graduate Medical Sciences. Application forms and bulletins are available from the Division of Graduate Medical Sciences, 715 Albany Street, Boston, MA 02118. A program encompassing both medicine and graduate study is separately described under the heading Combined MD/PhD Degree Program.

Graduate programs in the Division of Graduate Medical Sciences are available in each of the following departments or programs: Anatomy and Neurobiology, Behavioral Neuroscience, Biochemistry, Biophysics, Microbiology, Pharmacology, Physiology, and Pathology and Laboratory Medicine. Research training in related subject areas including biomolecular pharmacology, human genetics, immunology, cell and molecular biology, and neurosciences is also available. For detailed information regarding the several programs and prerequisites, consult the Division bulletin, obtainable with application forms directly from the Division.

Assistance is available to help finance the graduate education of qualified applicants through departmental training grants and federal fellowship programs. Information regarding financial assistance may be obtained from the program in which the student's major interest lies.

SCHOOL OF PUBLIC HEALTH

Boston University School of Public Health is a separately accredited school, administratively located within Boston University School of Medicine. Its mission is to promote a stimulating academic environment that supports excellence and innovation in education, research, and service to improve the health of local, national and international populations, particularly the disadvantaged, underserved, and vulnerable.

The School educates current and future public health professionals, on a full-time or part-time basis, for a practice-oriented career. Interested medical students may take courses at the School or pursue a dual degree. The School offers degree programs leading to the Master of Public Health (MPH), the Master of Science (MSc) in Epidemiology, and the Doctor of Science (DSc) in Epidemiology and in Environmental Health Sciences. Dual-degree programs are also offered in conjunction with the School of Medicine (MD/MPH), the School of Law (JD/MPH), the School of Social Work

(MSW/MPH), the School of Management (MBA/MPH), and the Division of Graduate Medical Sciences (MA in Medical Sciences/MPH). The School also offers a Master of Arts (MA) and a Doctor of Philosophy (PhD) in Biostatistics jointly with the Department of Mathematics of the Graduate School of Arts and Sciences and with the collaboration of the Division of Graduate Medical Sciences. A Nurse-Midwifery Education/MPH program is available to registered nurses. Several nondegree certificate programs are offered through the Department of International Health.

For further information and a bulletin, contact the Office of Admissions, Boston University School of Public Health, 715 Albany Street, Boston, MA 02118; 617/638-4640; Fax 617/638-5299; E-mail: sphadmis@bu.edu. To view the bulletin or find out more about the school on the Web: www.bumc.bu.edu/sph.



School of Public Health students organized student volunteers for the Boston Coalition for Adult Immunization project and managed immunization and education programs for elders and high-risk individuals at clinics throughout the city.

Register of Students

Class of 1999

Acharya, Kruti; Dudley, MA
 Agarwal, Saurabh; Cedar Grove, NJ
 Alankar, Archana; Fairport, NY
 Allen, Aaron; Boston, MA
 Almaleh, Michael; Watertown, MA
 Azam, Fatema; Mitchellville, MD
 Barsam, Charles; Belmont, MA
 Beasley, Leslie; Denver, CO
 Beauparlant, H. Peter; Middleton, MA
 Bhatt, Kirit; Rutherford, NJ
 Boes, Matthew; Wayland, MA
 Branch, Steven; Cambridge, MA
 Bryant, Roosevelt; Dorchester, MA
 Bubna, Shally; Fremont, CA
 Caplan, Michael; Brookline, MA
 Chamberlin, Paul; Allston, MA
 Chander, Suneer; Gaithersburg, MD
 Chang, Michael; Newton, MA
 Charrette, Thomas; Charlestown, MA
 Chen, Pei-Lin; Brookline, MA
 Chen, Chung-Ming; Fort Wayne, IN
 Chism, Derek; Palo Alto, CA
 Choi, Michael; Claremont, CA
 Chong, Deborah; Kingston, WI
 Chopra, Ritu; Palos Verdes, CA
 Chou, David; Cambridge, MA
 Ciarimboli, Betsy; Greensburg, PA
 Coffey, El Centro; Dallas, TX
 Cohen, Gregory; Boston, MA
 Cole, Wendy; Boston, MA
 Costello, Thomas; Avon, CT
 Damallie, Kushna; Nassau, Bahamas
 DiGiovanni, Brian; Somerville, MA
 Dittmer, Joshua; Newton, MA
 Dittmer, Christine; Boston, MA
 Doolittle, Andrew; Weston, MA
 Dwarka, Dan; Newtonville, MA
 Ebb, Ronald; Leominster, MA
 Ellis, Michael; Millbury, MA
 Epstein, Jonathan; Allston, MA
 Erasmus, Sapna; Fremont, CA
 Ewen, Jennifer; Derwood, MD
 Fagioli-Petrillo, Laura; East Boston, MA
 Farivar, Alexander; Newton, MA
 Farokhzad, Omid; Brighton, MA
 Gagne, Jean-Pierre; Cambridge, MA

Garg, Arvin; Belmont, MA
 Golla, Dinakar; Pittsburgh, PA
 Gronda, Douglas; Watertown, MA
 Gruber, Joachim; Gaithersburg, MD
 Gurney, Jennifer; Boston, MA
 Hawkins, Bradley; Fayetteville, NC
 Herman, Alysa; Nassau, Bahamas
 Heung, Michael; Thornhill, Ontario, Canada
 Hirsch, Michelle; Newton Upper Falls, MA
 Ho, Jet; Berkeley, CA
 Hsieh, Stephanie; Brighton, MA
 Huang, Ih-Ping; Mamaroneck, NY
 Huang, Wynne; Camarillo, CA
 Huang, Ivan; Camarillo, CA
 Husni, Nicholas; Gates Mills, OH
 Israni, Rubeen; Edison, NJ
 Jalisi, Scharukh; Rego Park, NY
 Janas, Stephen; Cambridge, MA
 Jirawuthiworavong, Guy; Boston, MA
 Johnson, David; Harvard, MA
 Katz, David; Brighton, MA
 Kelley, N. Christopher; Presque Isle, ME
 Kenney, Christopher; San Diego, CA
 Kessler, Joshua; Guilford, CT
 Killoran, Katherine; Rockport, ME
 Kim, Jeffrey; Concord, MA
 Kim, Anthony; Frankfort, IL
 Kim, Jin; Irvine, CA
 Koo, Jacqueline; Los Altos Hills, CA
 Koshy, Sheeba; Hopkington, MA
 Kumar, Amit; Fishkill, NY
 Kuo, Timothy; Claremont, CA
 Laker, Scott; West Bloomfield, MI
 Le, P. Nelson; Wichita, KS
 Leaning, Katharine; Cambridge, MA
 Lee, Margaret; Winchester, MA
 Lee, Jung; Little Neck, NY
 Lee, Jennifer; Canton, OH
 Lee, John S.; Boston, MA
 Lee, Kathryn; Cambridge, MA
 LeMaire, Julie; Somerset, MA
 Lepore, Mark; Nesconset, NY
 Levin, Amiel; Boston, MA
 Lisson, Scott; Allston, MA
 Liu, Austin; Carlisle, MA
 Lobel, Robert; Seattle, WA

Loew, Matthew; North Attleborough, MA
 Lowenstein, Robert; Baltimore, MD
 Luu, Le Le; Fairfax, VA
 Mair, Evan; New City, NY
 Mammen, Joshua; Kaplan, LA
 Mathew, Manesh; East Northport, NY
 Mazzoni, Cristina; Malden, MA
 McDonnell, Marie; Quincy, MA
 McGuiggin, Mary; Stoneham, MA
 Mourtzinos, Arthur; Lowell, MA
 Murray, Margaret; Needham, MA
 Ng, Gan Xon; Boston, MA
 Nguyen, Marielle; Boston, MA
 Niece, Valerie; Reading, MA
 Ning, Mingming; New York, NY
 O'Callaghan, James; Tewksbury, MA
 Obie, Eric; Worcester, MA
 Okahara, Tomoko; Irvine, CA
 Olusanya, Oluyomi; Brighton, MA
 Oster, Alan; Brighton, MA
 Pabby, Ajay; Liverpool, NY
 Palladino, Richard; Cambridge, MA
 Parekh, Selene; West Orange, NJ
 Patel, Rajen; Westbury, NY
 Patel, Nina; Carol Stream, IL
 Paul, Karen; Brookline, MA
 Pho, Kevin; Boston, MA
 Pourati, Isaac; Brookline, MA
 Prasad, Srinivas; Holmdel, NJ
 Primich, James; Metuchen, NJ
 Prokopis, Peter; Palm Beach Gardens, FL
 Psyk, Andrew; Westmont, IL
 Puopolo, Anthony; Holliston, MA
 Remis, Melissa; Peabody, MA
 Riskin, Daniel; New York, NY
 Rossi Beyda, Victoria; Boston, MA
 Rubinstein, Gennady; Los Angeles, CA
 Salahuddin, Azhar; Karachi, Pakistan
 Sawhney, Ritu; Franklin Park, NJ
 Sethi, Jesse; Wayne, NJ
 Shah, Rupa; Tucson, AZ
 Shakir, Huzaifa; Abqaiq, Saudi Arabia
 Sovak, Mika; Rancho Santa Fe, CA
 Sullivan, Anthony; Brooklyn, NY
 Sweet, Lydecke; Portland, OR
 Takach, Patricia; Zanon, VA
 Thorpe, William; Boston, MA

Tsai, Richard; New Hyde Park, NY
 Tso, Raymond; Hong Kong
 Tu, Bill; Seal Beach, CA
 Ukleja, Michelle; Chicopee, MA
 Vavvas, Demetrios; Montreal, Quebec, Canada
 Vega, Maria; Boston, MA
 Vega, Luis; Allston, MA
 Wallshein, Jay; Boston, MA
 Wilson, Melodi; Boston, MA
 Xanthopoulos, Larry; Framingham, MA
 Yablon, Corrie; Chestnut Hill, MA
 Yeh, Jane; Colleyville, TX
 Yoffe, Kenneth; Jamaica Plain, MA
 Youssef, Denise; Framingham, MA
 Zipoli, Matthew; South Dartmouth, MA
 Zovein, Ann; Stoughton, MA

Class of 2000

Ackerman, Ashley; Boston, MA
 Adler, Eric; New York, NY
 Advani, Sharmeela; Scotch Plains, NJ
 Agarwal, Akash; Troy, MI
 Aguilar, Leticia; Brighton, MA
 Ahmed, Sameena; Marlboro, NJ
 Akopian, Gabriel; La Crescenta, CA
 Alexander, Rani; Yorktown Heights, NY
 Alkon, Joseph; Brookline, MA
 Amorosino, Mark; Braintree, MA
 Andrus, Phillip; Somerville, MA
 Anhwere Akoma, Elizabeth; New Rochelle, NY
 Atieh, Deena; Totowa, NJ
 Benson, Emily; Providence, RI
 Berman, Ari; Brookline, MA
 Bhandari, Ritesh; Danbury, CT
 Bibat, Madeleine; Daly City, CA
 Block, Natalie; Boston, MA
 Boss, Renee; Jamaica Plain, MA
 Brown, Eric; Durham, NC
 Buras, Wende; Boston, MA
 Burke, Garrett; Chelmsford, MA
 Catalano, Christa; Silver Spring, MD
 Cavalaris, Joy; Miami Springs, FL
 Charo, Satish; Dyer, IN
 Chen, Kent; Nashville, TN
 Chen, Lucy; Seattle, WA
 Cheng, Michael; Cambridge, MA
 Cherry, Suraj; Lufkin, TX
 Christian, James; Braintree, MA
 Counts, Rachel; Providence, RI
 Crockett, Karen; Tampa, FL
 Daram, Parvati; Hunstville, AL
 Davidov, Tomer; Scarsdale, NY
 Deutsch, Limor; Newton, MA
 Dhir, Vinita; Santa Monica, CA
 Dodge, Gregory; Stoughton, MA
 Dogon, Alexander; Newton, MA

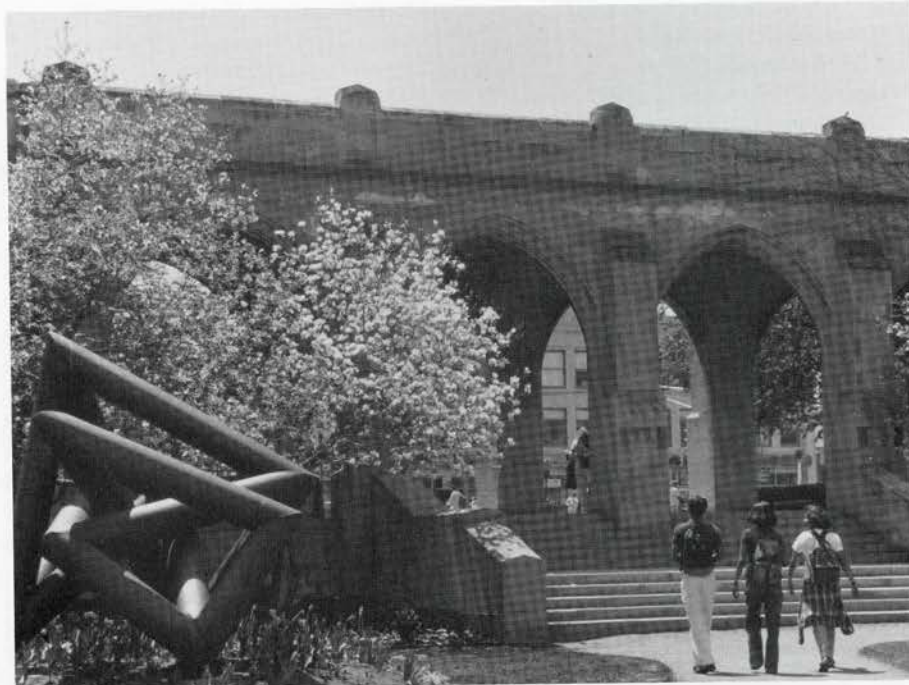
Donta, Theodore; Middletown, CT
 Douglas, R. Duncan; Lake Placid, NY
 Dygert, Paula; Afton, NY
 Eddinger, Jonathan; Manchester, NH
 Eliseo, Laura; Jamaica Plain, MA
 Entekhabi, Fatemeh; Cambridge, MA
 Erdos, Brandon; Amherst, MA
 Eubany, Jacqueline; Moreno Valley, CA
 Fifi, Johanna; Plantation, FL
 Fignar, Timothy; Bloomington, MN
 First, Eric; South Boston, MA
 Fisher, Caroline; Somerville, MA
 Fleming, Sandra; Somerville, MA
 Francisco, Ann Marie; San Francisco, CA
 Franklin, Malcolm; Baltimore, MD
 Gaitatzes, Chrysanth; Boston, MA
 Galin, Ira; Simsbury, CT
 Glovsky, Robert; Boston, MA
 Goswami, Sanjeev; Jamaica Plain, MA
 Guarino, Paul; Colonia, NJ
 Hammond, Jason; Cumberland, RI
 Han, Liz; Andover, MA
 Howard, Robert; Plymouth, MA
 Hsu, Peggy; Fremont, CA
 Huang, Gina; Diamond Bar, CA
 Jacobson, Jonathan; Newton, MA
 Jacobson, Sara; Leominster, MA
 James, Ernest; Kenner, LA
 Jay, Steven; Lynn, MA
 Jeanmonod, Donald; Duxbury, MA
 Kaczka, David; Dorchester, MA
 Kadakia, Reepa; Poughkeepsie, NY
 Kannler, Christine; Wakefield, MA
 Karimi, Banu; Brookline, MA
 Khozozian, John; Watertown, MA
 Kiley, Robert; East Bridgewater, MA
 Kim, Andrew; Rye, NY
 Kim, Dong; Baltimore, MD
 Kirk, Matthew; Poughkeepsie, NY
 Kovatch, Kristina; Hingham, MA
 Kuo, Tom; Brookline, MA
 Kurup, Suraj; Overland Park, KS
 Kwan, Michael; Calgary, Alberta, Canada
 Labin, Lisa; East Aurora, NY
 Lambert, David; Chelmsford, MA
 Landmann, Ron; Fair Lawn, NJ
 LaRocca, Richard; Cambridge, MA
 Lassi, Amy; Medford, MA
 Legner, Margaret; Riverside, CA
 Liao, Justin; Agoura, CA
 Liberman, Joshua; Sharon, MA
 Lipstreuwer, Kristen; Mentor, OH
 Liu, Jong; Boston, MA
 Love, Almer; Jamaica Plain, MA
 Lu, Ronnie; South Pasadena, CA
 Major-Theran, Michelle; North Weymouth, MA
 Mandal, Swagata; Houston, TX
 Manger, Philip; Newtown, CT

Manuel, Jennifer; Brighton, MA
 Marshall, Gad; Brookline, MA
 Mason, Daniel; Worcester, MA
 Mehta, Neerav; North Potomac, MD
 Mehta, Jay; Elk Grove, IL
 Mierzejewski, Cynthia; Boston, MA
 Mittal, Rajesh; Hopewell Junction, NY
 Morin, Denise; Hamden, CT
 Morris, Marvin; Boston, MA
 Morton, Glenville; St Thomas, VI
 Napier, Mark; Albuquerque, NM
 Naugles, Darren; Lithonia, GA
 Nazarey, Pradeep; Wappingers Falls, NY
 O'Connor, Daniel; Westwood, MA
 Oates, Daniel; Cranston, RI
 Oddman, Stacey; Brookline, MA
 Oster, Paula; Baltimore, MD
 Paik, Steve; Boston, MA
 Pak, John; Pusan, South Korea
 Patel, Abhay; Brookline, MA
 Patel, Milan; Piscataway, NJ
 Pichakron, Kullada; Gnetna, LA
 Pisick, Evan; Newton, MA
 Pollack, H. Clinton; San Francisco, CA
 Porudominsky, Vanessa; Boca Raton, FL
 Riccio, Christopher; Methuen, MA
 Richman, Alexandra; Brookline, MA
 Rizkalla, Rami; Brighton, MA
 Ross, Sudeesh; Pittsburgh, PA
 Rowley, Jetuan; Brighton, MA
 Salimpour, Pedram; Cambridge, MA
 Sambursky, Robert; Vestal, NY
 Scott, Jordan; Dedham, MA
 Shah, Rahul; Gaithersburg, MD
 Shuck, Kirsten; Morgantown, WV
 Sigmond, Benjamin; Laurel Springs, NJ
 Singh, Simran; Northbrook, IL
 Sloane, Jacob; Brookline, MA
 Smith, David; North Billerica, MA
 Sobel, Jason; Englewood, CO
 Sokolove, Jeremy; Canton, MA
 Spektor, Vadim; West Roxbury, MA
 Spencer, Terri; Portland, OR
 Sterling, Cheryl; College Park, GA
 Stice, Ligaya; Kaneohe, HI
 Stiles, Jeffrey; Buffalo, NY
 Sylvia, Lisa; Lee, MA
 Tabaddor, Ramin; Mamaroneck, NY
 Thomas, Priya; Raynham, MA
 Thornton, Andrew; Hingham, MA
 Tibbles, Michael; Sharon, MA
 Timothy, Emmanuel; Quincy, MA
 Tobin, Joshua; Westwood, MA
 Tracy, Jason; Guilford, CT
 Tripathi, Paul; Columbia, SC
 Trivedi, Manan; Fleetwood, PA
 Vaynberg, Eduard; Buffalo Grove, IL
 Venna, Suraj; Brookline, MA
 Vnuk, Monika; Brighton, MA
 Walecka, Kevin; Fairhaven, MA

Walker, Alexander; La Habra, CA
 Wallace, Rebecca; Newton, NJ
 Walsh, Mark; Acton, MA
 Weiner, Bradford; Westwood, MA
 Weinstein, Craig; Baltimore, MD
 Wen, C. Charles; Boston, MA
 Wilson, Joanne; Massena, NY
 Woldin, Christine; Philadelphia, PA
 Wright, Jr, Stephen Carter; Cambridge, MA
 Yau, Regan; New York, NY
 Yeboah, Christiana; Brighton, MA
 Zai, Adrian; Brookline, MA
 Zamor, Philippe; Glen Rock, NJ
 Zimmet, Jeffrey; Middletown, CT
 Zolotor, Wendy; Sun City, AZ

Class of 2001

Adelstein, Mitchell; Boston, MA
 Allred, Carl; Colorado Springs, CO
 Alpert, Caroline; Swampscott, MA
 Amin, Naseem; Latham, NY
 Anand, Rahul; Trumbull, CT
 Anderson, Jennifer; Sandwich, MA
 Andrade, Anna; Scituate, MA
 Andreoli, Christopher; Wheaton, IL
 Arakawa, Gordon; Hull, MA
 Atwal, Diana; Boston, MA
 Bailey, Gerald; Wollaston, MA
 Balikian, Richard; Belmont, MA
 Barker, Colin; Chevy Chase, MD
 Belfort, Gabriel; Boston, MA
 Berman, Jessica; Somerville, MA
 Bhatki, Amol; Piscataway, NJ
 Bhrany, Amit; Grand Blanc, MI
 Bihuniak, Tamara; Manlius, NY
 Bloomenthal, Aaron; Sudbury, MA
 Bolenbaugh, Julie; Rockford, OH
 Bremer, Andrew; St. Louis, MO
 Brewer, Edward; Needham, MA
 Brightman, Lori
 Brodie, Mark; Boston, MA
 Brown, George; San Francisco, CA
 Brusky, John; Laguna Beach, CA
 Burch, William; West Roxbury, MA
 Cabral, Paul; Cranston, RI
 Chan, Danny; Boston, MA
 Chang, Robert; Newton, MA
 Chang, Grace; Walnut, CA
 Chen, James; Stanford, CA
 Chien, David; Brookline, MA
 Choi, Christine; Claremont, CA
 Christie, Pearl; St. Thomas, VI
 Chudnovsky, Aleksander; Brookline, MA
 Chung, Arnold; Inverness, IL
 Chung, Connie; Boston, MA
 Clark, Nathaniel; Rockport, MA



Cobb, Nathan; Cambridge, MA
 Cohen, Philip; Hewlett, NY
 Craig, Margaret; Henderson, TX
 Crotty, Kelly; Ormond Beach, FL
 Cukor, Barry; Natick, MA
 Cureton, Janetta; Boston, MA
 Deluise, Anthony; Johnston, RI
 Dhir, Prajay; Houston, TX
 Dinsmore, Mahnee; Tierra Verde, FL
 Eipe, Sarah; Chatsworth, CA
 El-Jack, Amr; Glendale, CA
 Enderlin, Harry; Seattle, WA
 Espinoza, Barbara; El Paso, TX
 Ferullo, Shawn; Lynnfield, MA
 Finkel, Steven; Boston, MA
 Fitzgerald, Tamara; Boston, MA
 Flagg, Artemus; Boston, MA
 Fleischmann, Arnold; Boston, MA
 Florence, Kim; Columbus, GA
 Galeckas, Kenneth; Leicester, MA
 Gaposchkin, Daniel; Acton, MA
 Garza Polanco, Tracy; Boston, MA
 Gee, Denise; Morganville, NJ
 Gogia, Navneet; Santa Ana, CA
 Goodwin, Julie; Needham, MA
 Greenberger, Brett; East Meadow, NY
 Hayne, Cynthia; Cambridge, MA
 Herman, Sharon; Sharon, MA
 Huang, Sihong; Brookline, MA
 Huang, Agnes; Somerville, MA

Huang, Thomas; Boston, MA
 Hume, Patricia; Cambridge, MA
 Ingui, Christian; Medford, MA
 Johnson, Keith; Sherman Oaks, CA
 Jun, Sunny; Revere, MA
 Kakkannatt, Anand; Armonk, NY
 Karakouzian, Raffi; Santa Monica, CA
 Kaufman, Jennifer; Westmount, Quebec, Canada
 Kaushal, Aradhana; Rockville, MD
 Keller, Darren; Brookline, MA
 Kelly, Michelle; Allston, MA
 Kerr, Tina Ann; Boston, MA
 Keswani, Rajesh; Roselle, IL
 Khidhir, Besam; Boston, MA
 Kim, Laura; Palisades, NY
 Kim, Katherine; Vestal, NY
 Kinkhabwala, Aditi; Edison, NJ
 Klein, Autumn; Towson, MD
 Knight, Bradford; Berlin, NJ
 Kornguth, David; Newton, MA
 Kornguth, Linda; Newton, MA
 Korvek, Scott; Somerville, MA
 Lane, Clayton; Boston, MA
 Latimer, John; Belmont, MA
 Lau, Garrick; San Diego, CA
 Lau, Francis; Brookline, MA
 Lee, John Y.; Philadelphia, PA
 Lee, Kuenok; Ann Arbor, MI
 Lee, Cassandra; San Marino, CA

Lehrfeld, Todd; Suffern, NY
 Lemos, David; Burlington, MA
 Liou, James; Brookline, MA
 Liu, Yu; Brighton, MA
 Love, John; Somerville, MA
 MacDonald, Paul; Melrose, MA
 Madden, Matthew; Citrus Heights, CA
 Mansour, Michael; Westwood, MA
 Marino, Richard; Medford, MA
 Mathews, Maureen; Syracuse, NY
 Mayer, Stephen; Newton, MA
 Mian, Arshad; Weston, MA
 Moon, Richard; Brookline, MA
 Mooney, James; Holyoke, MA
 Nakajima, Hideko; Cambridge, MA
 Nassiri, James; Boston, MA
 Nicolaou, Michael; Nicosia, Cyprus
 Noorhasan, Dorette; St Croix, VI
 Noorhasan, Marisela; Boston, MA
 Nurenberg, Michael; New York, NY
 O, Teresa; Boston, MA
 O'Loughlin, Terence; South Portland, ME
 O'Neil, Dennis; South Boston, MA
 Oeser, Richard; Malden, MA
 Ouellette, Jason; Rochester, NH
 Paine, Rainer; Brighton, MA
 Patel, Jayen; Boston, MA
 Pavlovich, Ryan; Belle Vernon, PA
 Pedraza, Isabel; Southboro, MA
 Peng, Phyllis; Davis, CA
 Person, Thomas; San Francisco, CA
 Phillips, Karran; Washington, DC
 Pinto, Ann; Hamden, CT
 Platt, David; Brooklyn, NY
 Poulos, George; Canton, MA
 Prioleau, John; West Roxbury, MA
 Protasovicki, Roxanne; Boston, MA
 Prusty, Deepanwita; Brookline, MA
 Putnoi, Eric; Cambridge, MA
 Ramjiani, Amisha; Lakewood, CO
 Ramzan, Usman; Milford, CT
 Reel, Bhupinder; Nairobi, Kenya
 Renzulli, Joseph; Warwick, RI
 Rhee, David; Wilmette, IL
 Richard, Michael; Cumberland, RI
 Riederer, Mark; Bensalem, PA
 Rising, Joshua; Cheshire, CT
 Rojas, Rebecca; El Paso, TX
 Rosenstein, David; Portland, OR
 Sabharwal, Ashu; Troy, MI
 Shabatian, Babak; Santa Monica, CA
 Shakibai, Neema; Vernon, CT
 Sharma, Sheena; Brookline, MA
 Shofer, Scott; Huntington Beach, CA
 Singh, Rishi; Nashua, NH
 Siparsky, Nicole; Denver, CO
 Smith, Jason; Newport News, VA
 Soudan, Abdul; Camden, NJ
 St. John, Jeffrey; Westfield, MA

Stephen, Michael; Cambridge, MA
 Su, Teddy; Fremont, CA
 Suzuki, Joji; Brighton, MA
 Teele, Sarah; Lewisville, NC
 Tetrault, Jeanette; Woodbury, CT
 Thavarajah, Krishna; Bloomfield Hills, MI
 Tong, Carrie; Fort Lee, NJ
 Torchinsky, Cyrus; Cambridge, MA
 Tsai, Angel; Monterey Park, CA
 Wang, Nadia; North Potomac, MD
 Wang, Scott; Boston, MA
 Ward, Charisse; St. Thomas, VI
 Watson, Todd; Wyckoff, NJ
 Webb, Heather; Cambridge, MA
 Weinberg, Benjamin; Marshfield, MA
 Woods, Kevin; Staatsburg, NY
 Young, Sara; Memphis, TN
 Yung, Alice; Medford, MA
 Zygiel, John; New Bedford, MA

Class of 2002

Abiri, Alison; Edgewater, NJ
 Adhikari, Sapana; Painted Post, NY
 Alfieri, Cristina; Lincoln, RI
 Allen, David; Montague, MA
 Altschuler, Scott
 Ambewadikar, Samrat; Staten Island, NY
 Andrews, Louis; Milton, MA
 Avedissian, Lena; Boston, MA
 Bartolomei, Kelly; Holyoke, MA
 Bergstrom, Charles; Norwood, MA
 Bezdikian, Vatche; Los Angeles, CA
 Bhat, Rahul; Holmdel, NJ
 Bhatt, Mona; Wyomissing Hills, PA
 Bial, Erica; Randolph, MA
 Brighton, Brian; Barnegat, NJ
 Brown, Andrew; Cresskill, NJ
 Buckland, Golden; Boston, MA
 Campbell, Susan; Quincy, MA
 Chakravarthy, Bharath; Fremont, CA
 Chand, Rajat; Gaithersburg, MD
 Chang, Albert; San Francisco, CA
 Chen, Billy; Baldwin Park, CA
 Chen, Vicki; Weston, MA
 Cheng, Christopher; Boston, MA
 Choi, Jung Yoon
 Christensen, Richard; Somerville, MA
 Cook, Richard; Wakefield, MA
 Cote, Gregory; Newton, MA
 Cubriel, Andres; San Antonio, TX
 Daly, Ryan; Waltham, MA
 Davarpanah, Nicole; Upland, CA
 Davidson, Eric; Pittsford, NY
 Della Torre, Thomas; Providence, RI
 Demirjian, Aram; Belmont, MA
 Derderian, Christopher; Attleboro, MA
 DiPetrillo, Melissa
 Diulus, Lewis; Brook Park, OH
 Dodd, Kimberly; Riverside, RI
 Dover, Roman; Brookline, MA
 Drubetskiy, Denis
 Eagan, Joan; Concord, MA
 Edwards, Rania; Boston, MA
 Elizondo, Joseph; Boston, MA
 Elman, Michael; Swampscott, MA
 Eubanks, Mark
 Farb, Joshua; Allston, MA
 Ferrell, Laviesta; Clinton, MS
 Foo, Roy; Maynard, MA
 Ford, Christian; Cohasset, MA
 Foster, Mark; Boston, MA
 Frank, Benjamin; Glencoe, IL
 Gada, Satyen; North Providence, RI
 Galaburda, Laura; Andover, MA
 Gallo, Anthony; Cranston, RI
 Gaudiani, Jennifer; Portola Valle, CA
 Gauthier-Delaplane, Mary; Boston, MA
 Georgakis, Alexander; Boston, MA
 Glasser, Melissa; Plainview, NY
 Gleason, Michele; Somerville, MA
 Goldman, Frederic; Brookline, MA
 Goorin, Amy; Boston, MA
 Gruner, Charles
 Hansen, Lars
 Hong, Jane; Boston, MA
 Hong, Joe
 Irani, Rashna; Boston, MA
 Jawaid, Benazeer; Coral Gables, FL
 Jindal, Vikas; Brighton, MA
 Kamran, Poornima; St. Paul, MN
 Kaneshiro, Alan; Torrance, CA
 Katz, Mark; Brookline, MA
 Kieran, Kathleen; Brighton, MA
 Ko, Paul; Rancho Palos, CA
 Komakula, Sushma; Westwood, MA
 Kowal, Alexander; Bronx, NY
 Kowal, Daniel
 Kwon, Eric; Neptune, NJ
 Laky, Diana; Boston, MA
 Lee, Lawrence; Cortland, NY
 Leu, James; Mill Creek, WA
 Levin, Joshua; Nanuet, NY
 Levine, Saul; Aurora, CO
 Liang, Michael; Brighton, MA
 Lin, Li-Wei; Boston, MA
 Lochner, Heather; Glencoe, IL
 Loew, Burr; Salem, NH
 Lopez, Ricardo; Toa Baja, PR
 Lou, David; Rancho Palos, CA
 Louie, Michael; South Pasadena, CA
 Luck, Michael; Randolph, MA
 Lunsford, Leif; Concord, CA
 Macron, Donald; Fairfield, CT
 Magid, Michelle; Houston, TX
 Maltais, Eileen; Worcester, MA
 Martin, Jillian; Orefield, PA
 Masiello, David; Saratoga, CA

McDonald, Neil; Semora, NC
 Meoli, Vincent; Saugus, MA
 Mitchell, Robert
 Nakra, Navin; Minnetonka, MN
 Nandy, Lisa; Bedford, MA
 Nangia, Geeta; Williamsport, PA
 Natori, Paige; Torrance, CA
 Nedeau, April; Pembroke, NH
 Ng, Jeremy; Stoughton, MA
 O'Brien, Christine; Attleboro, MA
 O'Brien, Kerry; Seabrook, NH
 Omokaro, Stephanie; Mastic, NY
 Oyama, Leslie; Alameda, CA
 Pantazelos, Marion; Lincoln, MA
 Park, Helen; Allston, MA
 Parpos, Stefanos; Framingham, MA
 Pastrana, Karla; Brighton, MA
 Patel, Snehal; Stoughton, MA
 Perry, Amy; South Easton, MA
 Pugh, John; Waterford, NY
 Rael, Efren; El Paso, TX
 Rajendran, Pam; Belle Glade, FL
 Ratush, Edward; Edison, NJ
 Raynor, Lynne; Decatur, GA
 Reichenberg, Jason; East Rockaway, NY
 Reiner, Marshall; Boston, MA
 Rich, Catherine; Boston, MA
 Risbano, Michael; Bronxville, NY
 Rung, Rebecca; Waltham, MA
 Rust, Daniel; Cambridge, MA
 Saff, Rebecca; Brighton, MA
 Samii, Jason; Johnstown, PA
 Savelyeva, Natalya; Brighton, MA
 Schindelheim, Rachel; Oceanside, NY
 Schnipper, Claudia; Newton, MA
 Sethi, Amanjot; East Meadow, NY
 Shaber, Justin; Woodbury, NY
 Shore, Karen; Wellesley, MA
 Shuker, Jason Moshe; Brookline, MA
 Shulman, Jill; Cambridge, MA
 Sleeper, Eric; Worcester, MA
 Slot, Franchot; Kingston, MA
 Smith, Shawn; Boston, MA
 Stark, Rachel; Brookline, MA
 Steiling, Katrina; St Louis, MO
 Stern, Eric; Washington, DC
 Stinchon, James; Cheshire, CT
 Stokes, Theophil; Plymouth, MI
 Su, John; Berkeley, CA
 Suliman, Ahmed
 Tannas, Henri; Brighton, MA
 Tavares, Anafidelia; Newton, MA
 Thoidis, Georgia; Boston, MA
 Vakili, Khashayar; Concord, MA
 Valente, Elisa; Austin, TX
 Visovatti, Scott; Evanston, IL
 Walcott, Monique; Boston, MA
 Wang, Lawrence; Boston, MA
 Whitlatch, Nicole; Brookline, MA
 Wieman, Matthew; Boston, MA
 Wise, Barton; Arlington, MA

Won, Sekon; Atlanta, GA
 Wong, Adam; Whittier, CA
 Yen, Shelley; Cortland, NY
 Young, Michael; Wellesley, MA

Division of Graduate Medical Sciences

MA Students

Agag, Richard L.; Wyckoff, NJ
 Ahmad, Tazeen; Staten Island, NY
 Alapatt, Michael F.; Warren, NJ
 Alfieri, Cristina; Lincoln, RI
 Ali, Alya; Washburn, IL
 Allen, Deborah M.; North Attleboro, MA
 Ambra, Gregory; Lindenhurst, NY
 Arilotta, Richard; Tenafly, NJ
 Armbruster, Edward J.; Linwood, NJ
 Arnold, Ryan C.; Glenolden, PA
 Augustine, Ann M.; Dix Hills, NY
 Ayyagari, Subhadra; Short Hills, NJ
 Baaj, Ali A.; Stoughton, MA
 Babb, Kimberly S.; Boston, MA
 Babson, Daniel; Plymouth, MA
 Bageris, Alexandra; Cambridge, MA
 Barbour, Sarah J.; Hanover, MA
 Bari, Ausaf A.; Berkeley, CA
 Behm, Ann M.; St. Louis, MO
 Beyda, Daniel E.; Beverly Hills, CA
 Blomquist, Carianne; Sparks, NV
 Brandenburg, Jaclyn L.; Assonet, MA
 Brenner, Daniel A.; Pittsburgh, PA
 Brill, Elliott R.; Santa Clara, CA
 Campbell, Wendy A.; Latham, NY
 Caplan, Jason P.; Boca Raton, FL
 Chakrabarty, Indraneel; Hemet, CA
 Chakravarthy, Bharath; Fremont, CA
 Chan, Derek V.; Sodus Point, NY
 Chang, Jin H.; Charlotte, NC
 Chang, Jason; Lexington, MA
 Chen, Eric C.; Upland, CA
 Chen, Steven Y.; San Mateo, CA
 Chen, Wen-che; Taiwan, ROC
 Cheng, Christopher H.; Berkeley, CA
 Cheng, Jerry C.; Hauppauge, NY
 Cheung, Yeukkei; Norwich, VT
 Chi, Dorcas; Santa Monica, CA
 Chitalia, Amit C.; Nashua, NH
 Cho, David H.; Cerritos, CA
 Chon, John T.; Diamond Bar, CA
 Choung, James K.; Newport News, VA
 Chung, Tzu-feng; Newton, MA
 Clark, Alexander P.; Cambridge, MA
 Coker, Jeffery G.; Lakemont, GA
 Constas, Luke P.; Vero Beach, FL
 Cunningham, Melissa A.; Hershey, PA
 Degen, Michael C.; Staten Island, NY
 Degnon, Christine A.; McLean, VA
 Dinh, Khoa N.; Simi Valley, CA
 Dipasquale, Sandra M.; Grosse Pointe Woods, MI

Donohoe, Terrence J.; Menlo Park, CA
 Doyle, Sinead M.; Boston, MA
 Dunbar, Kevin F.; Stanhope, NJ
 Dwyer, Danielle O.; Westwood, MA
 Ebrahimpour, Prouskh; Escondido, CA
 Favuzza, Joanne; Woburn, MA
 Fayed, Ramy; Miami, FL
 Fazelat, Ahad A.; Kansas City, MO
 Fitzgerald, Claudia; Derry, NH
 Fitzharris, Heather E.; Agoura Hills, CA
 Folek, Jessica; Brooklyn, NY
 Forrester, Glenn J.; Newburgh, NY
 Foster, Mark P.; Pacific Grove, CA
 Fung, Wing Kin; Braintree, MA
 Galifianakis, Alexander B.; Salisbury, MD
 Ganson, Jaime M.; Sacramento, CA
 Garg, Sumit; Valhalla, NY
 Gauthier, Mary B.; Boston, MA
 Gelston, Christopher D.; Skaneateles, NY
 Germani, Ross M.; Bloomfield Hills, MI
 Gibson, Leena C.; Woodland Hills, CA
 Givner, Andrew S.; Pacific Palisades, CA
 Gonzalez, David A.; Brookline, MA
 Gordon, Marc W.; Waban, MA
 Hagenbuch, Sean C.; Waltham, MA
 Hallaj, Mazin; Cambridge, MA
 Hammarlund, Erik; Groton, CT
 Hanify, Katherine A.; Belmont, MA
 Har, Delee K.; Corte Madera, CA
 Harrison, Daniel K.; Birmingham, AL
 Haverty, Michael G.; Canton, MA
 Hochstadter, Christopher M.; Switzerland
 Hong, Jane H.; Oakland, CA
 Hough, Heather L.; Albuquerque, NM
 Hugh, Brian W.; Chicago, IL
 Inscore, Patrick R.; Manhattan Beach, CA
 Jacobson, Sarah N.; Salinas, CA
 Jan, Mary M.; Newton, MA
 Jenkins, Todd A.; Martinsville, VA
 Kan, Timothy Y.; Bermuda Dunes, CA
 Kapasi, Sameer; Newton, MA
 Kato, Mio; Chiba, Japan
 Kaushik, Virendar K.; Shelton, CT
 Keane, Sheila R.; Huntington, NY
 Kerstetter, David L.; Bedford, PA
 Keyes, Colleen M.; East Lyme, CT
 Kharbanda, Samir; Gaithersburg, MD
 Kim, Andrew; Fairfax, VA
 Kim, Hahns Y.; Ashtabula, OH
 Kim, Susan J.; Castro Valley, CA
 Kim, So Mee; Irving, TX
 Kim, Min Kyung D.; Bronx, NY
 Kleber, Kristin A.; Brighton, MA
 Knight, Philip H.; Charlotte, NC
 Kostakis, Emmanuel; Athens, Greece
 Kroh, Matthew D.; Findlay, OH
 Kwak, Sandra S.; Moreno Valley, CA
 Lai, Kasey K.; Los Angeles, CA
 Lebow, Anat; Plantation, FL
 Lee, Richard J.; Palos Verdes Peninsula, CA

Lemieux, Nicole A.; Brookline, MA
 Levine, Saul D.; Aurora, CO
 Levy, Mary D.; Plainview, NY
 Liang, Michael D.; Monroeville, PA
 Lin, Hugh S.; Danville, CA
 Lok, Warren; Walnut, CA
 Longcor, Jarrod D.; Perkiomenville, PA
 Lou, David Y.; Rancho Palos Verdes, CA
 Louie, Nicole A.; Pleasant Hill, CA
 Louis, Elham; Los Gatos, CA
 Lu, Michael W.; Sunnyvale, CA
 Lugassy, Daniel M.; Bayside, NY
 Macdonald, Kristin L.; Hampstead, NH
 Macron, Donald S.; Fairfield, CT
 Maki, Turi K.; Orleans, MA
 Malgeri, Eric G.; Westfield, NJ
 Marley, Ciara S.; Boston, MA
 McClain, Ferrell A.; Asheville, NC
 McGregor, Alyson J.; North Quincy, MA
 McKeon, Kevin C.; North Dartmouth, MA
 Meszaros, Michael D.; Lynbrook, NY
 Migliore, Liboria A.; Glendale, NY
 Mohanty, Prasanna K.; Brighton, MA
 Montoya, Aime M.; Boston, MA
 Motarjem, Pejman M.; Tarzana, CA
 Murphy, Kristine E.; Burlington, MA
 Nagafuji, Joel T.; El Cerrito, CA
 Nguyen, Thomas T.; Revere, MA
 Norian, John M.; Beverly Hills, CA
 Norwood, Brian G.; Beverly, MA
 Obi-tabot, Eliot T.; Framingham, MA
 Oh, Pilsoo; Chicago, IL
 Pantazelos, Marion A.; Lincoln, MA
 Paquette, Justin D.; Albany, NY
 Park, Haejoe; Miami Shores, FL
 Park, James-sang Y.; La Mirada, CA
 Patel, Rupesh; Niles, IL
 Patel, Sunita R.; Orwigsburg, PA
 Patel, Utpal J.; Park Ridge, NJ
 Patterson, Shane M.; Glendora, CA
 Pearson, Bradley V.; Kailua, HI
 Peng, Henry; Camarillo, CA
 Penti, Brian R.; Billerica, MA
 Petraghani-Ciancarelli, Paolo;
 Washington, DC
 Phillips, John A.; Wales, WI
 Pligavko, Christina A.; Pittsfield, MA
 Rader, Christine M.; Brookfield, CT
 Rawji, Saima S.; Zanesville, OH
 Reed, Thomas D.; Fonda, NY
 Rich, David L.; Milford, DE
 Risbano, Michael G.; Bronxville, NY
 Robbins, Brian S.; Woodland Hills, CA
 Roberts, Mark J.; Honolulu, HI
 Rousou, Laki J.; Longmeadow, MA
 Ruidera, Julius D.; Glendale, CA
 Sadri, Ghazaleh; Novato, CA

Samuel, Sheelu; Philadelphia, PA
 Santos, Melanie R.; Martinez, CA
 Savelyeva, Natalya; Flint, MI
 Schwarsin, Alexandria J.; Douglas Manor,
 NY
 Sebastian, Shite; Readville, MA
 Sekiguchi, Mayu T.; Yokohama, Japan
 Shaber, Justin D.; Woodbury, NY
 Shapiro, Mark A.; Boston, MA
 Shenouda, Sherene M.; Hudson, MA
 Shpektor, Diana.; Medford, MA
 Shpilman, Alexander M.; Waltham, MA
 Shuker, Jason M.; Hampstead, Quebec,
 Canada
 Shulman, Eliza P.; Boston, MA
 Song, Jaekyung C.; Cambridge, MA
 Sreenivasan, Priya; Fair Oaks, CA
 Stavitski, Christina M.; Linden, NJ
 Stinchon, James F.; Cheshire, CT
 Sweeney, Sean L.; Dover, MA
 Taam, Jason E.; Ontario, Canada
 Tandon, Ramita; Toledo, OH
 Taylor, Kyle M.; Brookline, MA
 Teller, Paige.; Burlington, MA
 Thomas, Tanya L.; New Haven, CT
 Thorne, Tina M.; Medford, MA
 Tiaga, Ingerlisa W.; San Diego, CA
 Trainor, Amy L.; Springfield, IL
 Trinh, Chung Q.; Santa Ana, CA
 Turczyk, Brian M.; Cheshire, CT
 Tziros, Constantine J.; Manchester, NH
 Tziros, Peter D.; Manchester, NH
 Urdmark, Susanna H.; Sweden
 Vakili, Khashayar; Concord, MA
 Valleau, Robert M.; Summit, NJ
 Villarta, Michelle C.; Ann Arbor, MI
 Volpert, Amy R.; Rockwall, TX
 Vosganian, Gregory S.; Fresno, CA
 Wally, Jeremy L.; Waltham, MA
 Warnat, Mark R.; Newburyport, MA
 Webb, Heather R.; Columbia, CT
 Werbin, Tiffany J.; Quebec, Canada
 Werzanski, Daniel A.; Lynnfield, MA
 Wichman, Scott E.; Englewood, CO
 Won, Sekon; Atlanta, GA
 Won, Sonya; Pacific Palisades, CA
 Wong, Anthony K.; Londonderry, NH
 Wotkowicz, Chad; Allston, MA
 Yoburn, Joshua C.; Newton, MA
 Young, Gloria Q.; Newton, MA
 Young, Michael V.; Wellesley, MA
 Yu, Nicholas R.; New York, NY
 Zhao, Ying; Mansfield, CT
 Zweig, Bryan M.; Bloomington, IN

MA/MBA Dual Degree Students

Amiana, Alberto D.; Los Angeles, CA
 Angulo, Julie C.; Miami, FL
 Apazidis, Alexios; Randolph, MA
 Fan, Vincent C.; Rancho Palos Verdes, CA
 Georgakis, Alexander; Allentown, PA
 Ghaffari, Arshia; Pacific Palisades, CA
 Gupta, Sanjaya K.; Chesterfield, MO
 Janiec, Dorota J.; Amherst, MA
 Koo, David H.; Redlands, CA
 Meng, Cindy; Camp Hill, PA
 Que, Kendrick T.; Richmond, British
 Columbia, Canada
 Sauber, Jeffrey J.; Manhattan Beach, CA
 Sein, Alfred K.; Irvine, CA
 Shih, Betty P.; Los Angeles, CA
 Stone, Hilary R.; New City, NY
 Thompson, Vanessa L.; Boston, MA
 Trinh, Tuan Q.; Santa Ana, CA
 Yum, Robert Y.; New York, NY

MA/MPH Dual Degree Students

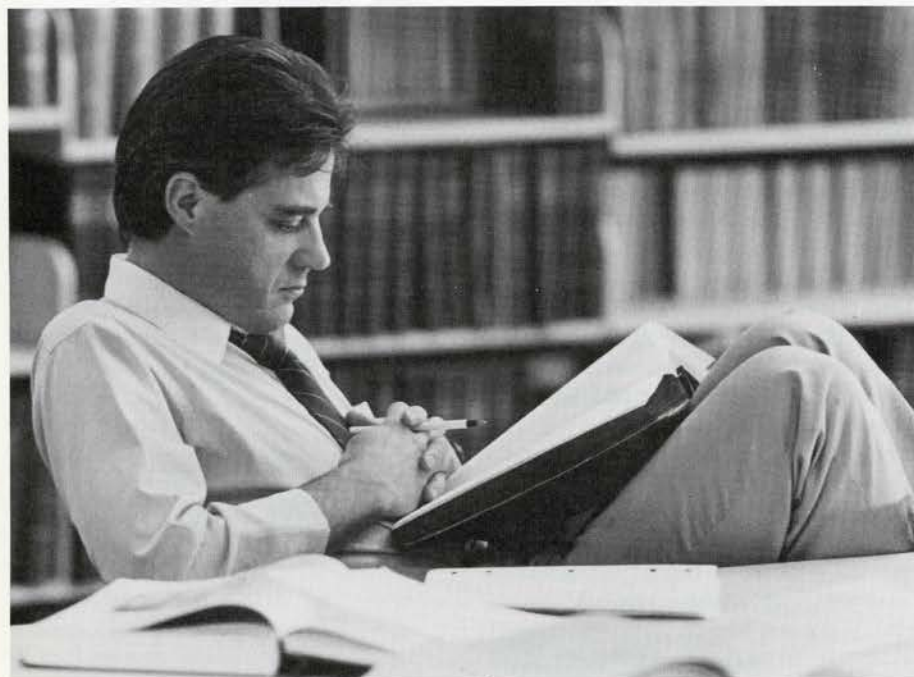
Agular, Stephanie E.; Belmont, MA
 Baker, Christopher W.; Ann Arbor, MI
 Bakhshali, Ali; Everett, MA
 Bullock, Caroline E.; Longmeadow, MA
 Cheng, George C.; Palos Verdes, CA
 Chiang, Stephanie C.; Bethesda, MD
 Cohen, Lisa G.; Brookline, MA
 Farra, Laura Ann M.; Mastic Beach, NY
 Galifianakis, Nicholas B.; Salisbury, MD
 Garges, Eric C.; Portland, OR
 Gonzalez, Jennifer M.; Brighton, MA
 Iodice, Mary A.; Bronx, NY
 Kadia, Chirag; East Meadow, NY
 Kang, Angela J.; Dorchester, MA
 Kemp, John G.; Stratham, NH
 Kwok, Amy M.; Montebello, CA
 Lee, John J.; Los Angeles, CA
 Lentnek, Ian A.; Atlanta, GA
 Martinez, Ofelia; Cambridge, MA
 McCloy, Sean; Barrington, RI
 Mehta, Bijal K.; Laguna Niguel, CA
 Munoz, Xiomara V.; North Miami, FL
 Munoz, Diana M.; Tustin, CA
 Ona, Mel A.; Pittsford, NY
 Parikh, Milind G.; East Meadow, NY
 Park, Helen S.; Danville, CA
 Park, Jennifer J.; Riverside, CA
 Roy, Donna; Somerville, MA
 Surapaneni, Krishna; Staten Island, NY
 Tang, Alice; Kirksville, MO
 Wachs, David M.; Port Washington, NY
 Ziyadeh, Najat J.; Northford, CT

PhD Students

Acehan, Devrim; Turkey
 Barstow, Karen; Lexington, MA
 Belmonte, Matthew K.; Yonkers, NY
 Beltz, Susan E.; Raymond, NH
 Berg, Eric A.; Watervliet, MI
 Bilica, Li, Michael D.; Bolingbrook, IL
 Bogdanova, Yelena; Newton, MA
 Boor, Susan E.; Hudson, NY
 Brothers, Theresa E.; Newton Highlands, MA
 Brown, Xin; China
 Cai, Dongpo
 Cammarato, Anthony R.; Milford, DE
 Carreras, Isabel; Cambridge, MA
 Cartwright, Mark J.; West Newton, MA
 Caughron, Mathew K.; Kansas City, MO
 Cermak, Jennifer M.; Union Bridge, MD
 Channavajhala, Padma L.; Malden, MA
 Chao, Yang; Beijing, China
 Chau, Anne N.; New York, NY
 Chen, Wei; Troy, MI
 Cheng, Kuang-hung; Taiwan, China
 Choi, Ji-kyung; Boston, MA
 Cosenza, Lawrence W.; Arlington, MA
 Coughlin, Sean M.; South Boston, MA
 Dagher, Zeina; Boston, MA
 Del Re, Elisabetta C.; Rome, Italy
 Di Sciullo, Gino J.; North Easton, MA
 Dombrowski, Stephen M.; Pittsburgh, PA
 Donahue, William F.; Braintree, MA
 Dumas, John J.; Arlington, MA
 Dutta, Shuchismita; Ranchi, India

Fan, Hong; Nanjing, China
 Fang, Yiling; China
 Fannon, Michael W.; Lynn, MA
 Fanton, Christie P.; Acton, MA
 Fiacco, Todd A.; Ridgefield, CT
 Fischer, Gavin M.; Berkeley, CA
 Fontanilla, Marta R.; Bogota, Colombia
 Freeman, Antoinette Y.; Houston, TX
 Gao, Qin Ying; China
 Gherson, Ingrid T.; Yorktown, NY
 Goerges, Adrienne L.; Crown Point, IN
 Grimsby, Jessica L.; Ringwood, NJ
 Gross, Danielle N.; Ontario, Canada
 Gu, Miaofen; Brookline, MA
 Gu, Ling; Shanghai, China
 Hafer, Laurie J.; Mansfield, MA
 Hamm, Jonathan K.; Schenectady, NY
 Hannigan, Sharon L.; Brookline, MA
 Hartman, Rose Y.; Wichita, KS
 Herne, Mose A.; Belmont, MA
 Hofmann, Claudia S.; Tübingen, Germany
 Hsiao, Hsiung; Taipei, Taiwan
 Hu, Hong-yu; Cambridge, MA
 Hurwitz, Amy S.; Somerville, MA
 Iskander, Yvette S.; Natick, MA
 Jackson, David M.; Dallas, TX
 Jagaroo, Vinoth; Pietermaritzburg, South Africa
 Jang, Ming-kuei; Lexington, MA
 Janis, Gregory C.; Newton, MA
 Jones, Matthew R.; Lancaster, PA
 Kaluzhny, Yulia; Newton, MA
 Karagiannides, Iordanis; Nashua, NH

Karthik, A.G.; Cranbury, NJ
 Khachfe, Hassan M.; Norwood, MA
 Kiefer, Heather L.; Brookfield, CT
 Kim, Sue Ju; Berkeley, CA
 King, Raymond S.; East Brunswick, NJ
 Kizilbash, Nadeem A.; Roslyn Heights, NY
 Kushner, Stephanie A.; Astoria, NY
 Kypreos, Kyriakos; Brighton, MA
 Landesman, Esther B.; Brookline, MA
 Lavrentiadou, Sophia; Kalamaria, Greece
 Leach, Martin D.; Orpington, England
 Leadbetter, Elizabeth A.; Arlington, MA
 Lee, Edward; Manhasset, NY
 Lee, He-jin; Chestnut Hill, MA
 Lee, Jiyoung E.; Los Angeles, CA
 Lee, Sun-hwa; Nam-gu Taegu, South Korea
 Lee, Margaret S.; Winchester, MA
 Li, Hanzhong; San Mateo, CA
 Licata, Stephanie C.; Cambridge, MA
 Lim, Chee Chew; Aruba, Dutch Caribbean
 Lin, Bao-zhen; Fargo, ND
 Lin, Yen-shou; Boston, MA
 Linnik, Konstantin M.; Russia
 Lodie, Tracey A.; Belmont, MA
 Lu, Bin; Denton, TX
 Lu, Jun; China
 Lynch, John A.; Jeremiah, KY
 Lyons, Helen; Dover, NH
 Macdonald, Douglas M.; Scotch Plains, NJ
 Mann, Koren K.; Omaha, NE
 Maravei, Daniel; Canada
 Marecki, Sylvia; Braintree, MA
 Mazurkie, Andrew S.; Hartford, CT
 McLean, Pamela J.; Renfrewshire, Scotland
 McManus, Debra M.; Cambridge, MA
 Means, Terry K.; Canton, OH
 Mellott, Tiffany J.; Mechanicsburg, PA
 Mendelsohn, Richard D.; New City, NY
 Modahl, Charlotte B.; San Clemente, CA
 Monahan, Kerryane T.; Cornwall, NY
 Moore, Tara L.; Canada
 Morais, Marc C.; Allston, MA
 Mukhtar, Abdu S.; Kano, Nigeria
 Murray, Stephen A.; Amesbury, MA
 Murray, Heather L.; Waltham, MA
 Ngampasutadol, Jutamas; Thailand
 Nielsen, Kirsten M.; Canastota, NY
 Niles, Robin A.; Commack, NY
 Obele, Ikenna U.; Roxbury, MA
 Ogle, Kathleen E.; Tiburon, CA
 Olken, Sarah K.; Jamaica Plain, MA
 Palumbo, Carole L.; Milton, MA
 Park, Jae-hong; Mapo-ku, Seoul, South Korea
 Park, Bae H.; Seoul, South Korea
 Pavao, Matthew; Newton, MA
 Paz-mejias, Nancy; Hato Rey, PR
 Perlman, David H.; Essex, MA
 Piccoli, Giuseppe; Italy



Pissios, Pavlos; Holargos-Attiki, Greece
 Plasterer, Thomas N.; Brighton, MA
 Ratcliffe, Elizabeth A.; Cambridge, MA
 Ratner, Marcia H.; Auburndale, MA
 Richard, Ann-Marie; Hyde Park, MA
 Richardson, Thomas P.; Chestnut Hill, MA
 Riendeau, Carrie J.; Barre, MA
 Roh, Cecilia; Brookline, MA
 Rosol, Michael S.; Quincy, MA
 Rushmore Iii, Richard J.; Hampden, ME
 Sabbagh, Elena; Brookline, MA
 Sau, Keya; Silver Springs, MD
 Schram, Brian R.; Oshkosh, WI
 Schwagerl, Anthony L.; Washington, DC
 Seah, Ching Ching; Boston, MA
 Sharma, Dayanand; New Delhi, India
 Shen, Jian; China
 Sidach, Serguei S.; Pushchino, Russia
 Siddiqi, Zaeem A.; Brooklyn, NY
 Silva, David A.; Amesbury, MA
 Smith, Alison P.; Allston, MA
 Sperinde, Gizet; Pacifica, CA
 Steiger, Janine L.; Parsippany, NJ
 Stieglitz-Joseph, Kimberly A.; Revere, MA
 Sullivan, Kelly L.; North Carver, MA
 Sullivan, Kimberly A.; Lowell, MA
 Sun, Xiaoguang; China
 Sun, Wei; Denver, CO
 Tahinci, Emilios; Athens, Greece
 Thakker, Paresh M.; Raleigh, NC
 Thompson, Alexander; Quincy, MA
 Tian, Xiao; China
 Tocco, Michael J.; St. Louis, MO
 Tortorella, Lori L.; Lindenhurst, NY
 Trbovich, Alexander M.; Boston, MA
 Trombino, Anthony F.; Brockton, MA
 Trucillo, Mario P.; Harrison, NJ
 Urbano, Alexander G.; Manila, Philippines
 Utheza, Didier P.; Boston, MA
 Vardar, Didem; Istanbul, Turkey
 Vavva, Fotini; Greece
 Wang, Shih-lien; Taiwan, ROC
 Wang, Zhengyu; Worcester, MA
 Ward, Susan M.; Acton, MA
 Williams, Brent R.; Mercerville, NJ
 Wisco, Jonathan J.; Seattle, WA
 Wu, Chuang-kuo; China
 Wu, Min; Shantou, China
 Wu, Heng; Waltham, MA
 Wu, Meiye; Downers Grove, IL
 Xiao, Sheng; Beijing, China
 Xu, Qian; China
 Xu, Ainan; East Lansing, MI
 Yang, William C.; Okemos, MI
 Yang, Xionghu; Brookline, MA
 Yao, Jun; China
 Yin, Aidi; China
 Youd, Michele E.; Panama City, FL

Yu, Jun; Beijing, China
 Zeng, Huiyan; China
 Zhao, Dezheng; Beijing, China
 Zhao, Di; Beijing, China
 Zheng, Hongwu; China
 Zhong, Xuemei; Quincy, MA
 Zhou, Min; Boston, MA
 Zhou, Xiaofeng; Malden, MA
 Zhu, Bangmin; Boston, MA

Division of Graduate Medical Sciences

Fall 1998

MD/PhD Students

Arakawa, Gordon K.; Hull, MA
 Bailey, Gerald P.; Wollaston, MA
 Battinelli, Elisabeth M.; Somerville, MA
 Belfort, Gabriel M.; Slingerlands, NY
 Bierl, Charlene M.; West Chester, PA
 Branch, Steven K.; Cambridge, MA
 Bremer, Andrew A.; St. Louis, MO
 Burch, William L.; West Roxbury, MA
 Cap, Andrew P.; Brookline, MA
 Chang, Albert J.; San Francisco, CA
 Chen, Billy S.; Baldwin Park, CA
 Chen, Kent Y.; Nashville, TN
 Chen, James S.; Wappingers Falls, NY
 Chua, Ceres C.; Duluth, GA
 Chung, Connie M.; Chantilly, VA
 Cote, Gregory; Worcester, MA
 Donohoe, Terrence J.; Menlo Park, CA
 El Jack, Amr K.; Glendale, CA
 El Kouni, Mustapha; Birmingham, AL
 Ellenstein, Aviva; Evansville, IN
 Fisher, Caroline E.; Portland, OR
 Fitzgerald, Tamara N.; Fairfield, CA
 Fleischmann, Arnold W.; Honolulu, HI
 Frank, Benjamin S.; Glencoe, IL
 Gaitatzes, Chrysanthé G.; West Lafayette, IN
 Gaposchkin, Daniel P.; Lexington, MA
 Hayne, Cynthia C.; Cambridge, MA
 Ho, Jet K.; Hillsborough, CA
 Husni, Nicholas R.; Gates Mills, OH
 Jain, Mohit; Hillsdale, NJ
 Kaczka, David W.; Dorchester, MA
 Kaufman, Milissa L.; Jamaica Plain, MA
 Kavanagh, Kathryn T.; Providence, RI
 Khidhir, Besam A.; Boston, MA
 Kim, Dong W.; Highland Park, NJ
 Klein, Autumn M.; Towson, MD
 Klepeis, Veronica E.; New Fairfield, CT
 Lau, Garrick C.; San Diego, CA
 Lee, John S.; Nashville, TN
 Liang, Michael D.; Monroeville, PA
 Liou, James S.; Egg Harbor, NJ
 Liu, Yu; Brighton, MA
 Loeber, Russell T.; Glenville, NY
 Lou, David Y.; Rancho Palos Verdes, CA

Love, John F.; Pittsburgh, PA
 Mansour, Michael K.; Westwood, MA
 Nakajima, Hideko H.; Cambridge, MA
 Nicolaou, Michael S.; Nicosia, Cyprus
 O'Loughlin, Terence J.; South Portland, ME
 Paine, Rainer W.; Brighton, MA
 Pak, John; Del Mar, CA
 Pavlovich, Ryan P.; Belle Vernon, PA
 Poulos, George W.; Canton, MA
 Prusty, Deepannita; Brookline, MA
 Pugh, John A.; Clifton Park, NY
 Ratts, Ryan C.; Los Altos, CA
 Saff, Rebecca R.; College Station, TX
 Siparsky, Nicole F.; Denver, CO
 Sloane, Jacob A.; Brookline, MA
 Slot, Franchot; Allston, MA
 Smith, Jason A.; Newport News, VA
 Sovak, Mika A.; Rancho Santa Fe, CA
 Stice, Ligaya L.; Honolulu, HI
 Torchinsky, Cyrus; Bloomington, IN
 Vavvas, Demetrios; Montreal, Quebec
 Canada
 Weber, Stephen M.; Fullerton, CA
 Whitlatch, Lyman W.; Visalia, CA
 Woldin, Christine N.; La Jolla, CA
 Yaar, Ron; Brookline, MA
 Yaghoubi, Nader; Tucson, AZ
 Zai, Adrian H.; Antwerpen, Belgium
 Zimmet, Jeffrey M.; Rockville, MD

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 University traces its roots to a school founded in Vermont in 1839, which moved to Boston in 1867 to become the first American university to be modeled on the European system. Today the University retains its dual character: Yankee independence combined with a cosmopolitan outlook. 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.

Boston University is coeducational and nonsectarian. Its campus extends over 71 acres from the historic Back Bay section of Boston westward along the south bank of the Charles River. From the townhouses of Bay State Road to state-of-the-art laboratories and classrooms, and from peaceful parks and esplanades to the city life of Commonwealth Avenue, the University offers a clean, safe, and attractive environment in which students live and study. A separate medical campus in the South End of Boston is home to world-renowned medical researchers and teaching physicians.

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, and education. 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. Individual Schools and programs are accredited by other professional associations. Please see School bulletins for information.

An urban institution from its inception, Boston University has always recognized that its future is linked with the future of its city. The University fosters programs that promote the well-being of Boston's citizens and improve its environment. Major undertakings such as the Chelsea Schools initiative illustrate the University's commitment to the community.

RESOURCES AND SERVICES

Laboratory and Research Facilities

The University provides laboratories for research and training in disciplines ranging from the physical sciences to the dramatic arts. These include an engineering laboratory; science laboratories for biology, chemistry, health sciences, and physics; and laboratories and other facilities for study in the humanities, languages, mental health, psychology, social sciences, and the per-

forming arts. The Boston University Theatre, a full-sized professionally equipped facility on Huntington Avenue, serves as a workshop for the dramatic arts. Medical science laboratory facilities are found on the Medical Center Campus.

Office of Information Technology (IT)

Students and faculty at Boston University have access to a wide variety of computing resources for communication, coursework, instruction, and research. The Office of Information Technology provides general-access facilities for the entire University community, including ACS, a shared-access UNIX cluster of IBM RS6000s; public computing clusters equipped with workstations, terminals, and laser printers; a high-speed campus network interconnecting these resources and linking them to the Internet; training facilities; the Personal Computing Support Center; and a sophisticated scientific computing and visualization laboratory.

All students and faculty may open accounts on ACS free of charge. ACS offers a variety of e-mail programs, World Wide Web browsers, word processors, a standard complement of programming languages, a variety of statistical packages, mathematical subroutine libraries, graphics packages, and a spreadsheet program. Help and training are always available at the Office of Information Technology.

Boston University's campus network employs the latest technology to route communications among computing systems throughout the Charles River Campus. Thousands of ports supporting communications rates up to 100 million bits per second are interconnected via fiber optics and high-speed routers. Hundreds of dial-in modems provide faculty and students with remote access to the campus network at speeds comparable to those offered by commercial Internet Service Providers. The campus network provides direct connections to the Internet, providing students and faculty with electronics access to people and facilities throughout the world.

Information Technology's Consulting Services department provides consulting support in most areas of computing. Consulting Services maintains a help desk at the public cluster located in the basement of 111 Cummington Street. Information Technology staff present a comprehensive series of free training sessions each semester. Topics range from general "getting started" sessions for the computing novice to in-depth sessions on specific application software packages.

Information Technology's Personal Computing Support Center (PCSC) is dedicated to helping Boston University students, faculty, and academic staff use their Windows- and Macintosh-based computers effectively. The PCSC provides consulting, hands-on training for many popular applications, technical support, file recovery, text and graphics scanning, and file translation. Reference and software evaluation libraries are also maintained by the PCSC.

ACS and the campus network are available 24 hours a day; schedules of other facilities vary. Direct any questions regarding computing services to the Office of Information Technology. The main office, at 111 Cummington Street, is open Monday through Friday, 9 a.m. to 5 p.m.; 617/353-2780. The PCSC is open Monday, Tuesday, and Wednesday, 9 a.m. to 7:30 p.m.; Thursday and Friday, 9 a.m. to 4:30 p.m.; 617/353-7272.

George Sherman Union

The Boston University George Sherman Union (GSU), located at the center of campus, is headquarters for student activities and services. The Student Center, on the lower level of the GSU, has a lounge, student organization offices, the Terrier CardOffice, and a vending area. On Friday and Saturday evenings, the lounge is often transformed into a club featuring coffeehouses, comedy nights, and social activities sponsored by student organizations.

In addition to the Student Center, the GSU offers a variety of services, including the Games Area, the Ziskind Lounge on the second floor, a U.S. Post Office, a bank, several dining areas, meeting rooms, a quiet study lounge on the third floor, an art gallery, and the GSU Information Center. The GSU Information Center, located on the second floor, supplies information on Union activities and sells candy, gum, and sundries.

The GSU Student Activities Office, located on the fourth floor, coordinates the activities of over 300 student organizations,

student governments, and the fraternity and sorority system. In addition, the office sponsors several all-University programs, such as Homecoming, Senior Week, and Summerfest. The Student Activities Office is also responsible for providing professional services and resources on all aspects of program planning and development to student organizations. It directs the Student Leadership Development Program, which offers training workshops, educational courses, and seminars addressing leadership issues.

For further information regarding these and other George Sherman Union activities, stop by 775 Commonwealth Avenue, or phone the GSU Information Center at 617/353-2921. The Office is also responsible for providing professional services and resources on all aspects of program planning and development to student organizations. It directs the Student Leadership Development Program, which offers training workshops, educational courses, and seminars addressing leadership issues.

For further information regarding these and other George Sherman Union activities, stop by 775 Commonwealth Avenue, or phone the GSU Information Center at 617/353-2921.

Boston University Music Organizations

Boston University Music Organizations (BUMO) provides opportunities for students to participate in musical groups while attending any of the Schools and Colleges at Boston University. These groups offer a creative outlet for students of all levels and abilities. Groups include the Marching Band, which performs at many fall events, including soccer games, the Pep Band, the All-University Orchestra, the Concert Band, the Jazz Ensembles, and the Symphonic Chorus. BUMO provides music and a limited number of loan instruments. The Boston University Music Organizations office is located at 855 Commonwealth Avenue, Room 213, Boston, MA 02215; 617/353-3358.

Shops and Supplies

Barnes & Noble at Boston University

Barnes & Noble at Boston University, the University's official bookstore, offers an extensive selection of text, reference, and general reading books, insignia merchandise, computer software, and supplies. The third floor carries a wide variety of household furnishings and appliances, as well as greeting cards, school supplies, and electronics.

Garber Travel is housed on the fifth floor; and the Café on the first floor serves Starbucks coffee, as well as many different kinds of beverages, pastries, and sandwiches.

The bookstore also hosts a year-round Author Series, featuring an array of well-known authors. Call 617/267-8484 for a monthly schedule of author events or 617/236-7421 to be added to the mailing list.

Barnes & Noble at Boston University is located at 660 Beacon Street in Kenmore Square, hours are Monday–Friday, 10 a.m.–9 p.m.; Saturday, 10 a.m.–6 p.m.; and Sunday, noon–6 p.m. Rush hours at the beginning of each semester supplement the regular opening and closing times; 617/267-8484.

Charlesbank Health Sciences Bookshop

Located in the new Center for Advanced Biomedical Research at 700 Albany Street, Charlesbank Health Sciences offers a wide array of books on health and dental topics as well as course and reference materials for the medical, dental, and public health programs. Recently expanded, the store also provides medical instruments, study aids, emblematic sportswear, and school and office supplies. Store hours are Monday through Friday, 8:30 a.m.–7 p.m.; Saturday, 10 a.m.–6 p.m. Phone 617/638-5496.

Campus Convenience—Union Court

775 Commonwealth Avenue
Open Monday through Friday, 7 a.m. to 11 p.m.; Saturday, 9 a.m. to 11 p.m.; Sunday, 11 a.m. to 11 p.m. 617/353-3680

Campus Convenience—Warren Towers

700 Commonwealth Avenue
Open seven days a week, 6 a.m. to 4 a.m. 617/353-5305

Campus Convenience—Kenmore Square

541 Commonwealth Avenue
Open seven days a week, 6 a.m. to 12 a.m. 617/353-2284

Campus Convenience—Sleeper Hall

275 Babcock Street
Open seven days a week, 6 a.m. to 1 a.m. 617/353-6640

Campus Convenience—Medical Center

700 Albany Street
Open weekdays 6 a.m. to 8 p.m. 617/638-5695

Campus Convenience stores are full-service convenience stores carrying grocery items, insignia gifts, health and beauty aids, school supplies, newspapers, magazines, sundries, and much more.



Office of Public Information

Public Information is the direct connection between students and the University. Information Services knows which office or person to contact for the answers to questions and solutions to problems. The office publishes the University directory and campus map, and operates the Information Center which is described below. The office also publishes the calendar of University events, which appears in each issue of *Boston University Bridge*. For more information about the office, call 617/353-2752.

Boston University Information Center

The Information Center provides accurate information on such topics as events, University services, resources, office locations, personnel, procedures, deadlines, and hours of operation. The center posts the Master Calendar of University Events, a computerized listing of all events sponsored by the University on and off campus, as well as events taking place in University facilities. The calendar is updated daily.

Hours during the academic terms are 8:30 a.m. to 8 p.m. weekdays; 9 a.m. to 8 p.m. Saturday; and 12 noon to 8 p.m. Sunday. Summer hours are 9 a.m. to 6 p.m. Monday through Friday. It is located at 771 Commonwealth Avenue; 617/353-2169.

Tel Info

Information is available to you 24 hours a day through TelInfo. To find out about University services, offices, events, and dead-

lines, call 353-4000 and follow the instructions. For a brochure with listings of topics and information available, visit the University Information Center at 771 Commonwealth Avenue.

The Martin Luther King Jr. Center

The King Center celebrated its twenty-fifth anniversary in 1994. Dedicated to the values and memory of alumnus Martin Luther King Jr. (1929-68), the King Center addresses the personal, educational, and career development needs of Boston University's students. The center is a centralized source of comprehensive professional services and programs for undergraduate and graduate students seeking counseling, career planning, or placement assistance. These services, as well as those provided by the center's Multicultural Affairs and Disability Services Offices, can help students gain the maximum benefit from their academic efforts. Information and appointments can be obtained by telephoning or visiting the second floor reception desk at 19 Deerfield Street (in Kenmore Square).

Office of Career Services

The office is a resource center designed to help students obtain career and internship information, clarify short- and long-term goals, and develop and implement their career plans. The internship program can assist students in finding learning and working opportunities in the community that will also help them academically. On-Campus Recruiting offers assistance in the job search

when a student has selected a probable career path and is within an academic year of graduation. The Credentials Service lets the student establish a file for potential employers that contains letters of recommendation and unofficial copies of transcripts. The Career Resource Library maintains current job listings and a collection of books and literature on a wide variety of careers and employers. For further information, please call 617/353-3590.

The Counseling Center

Individual and group counseling is offered to students who have personal, interpersonal, career, or life-decision concerns. Testing Services, in conjunction with counseling, enables students to obtain information about personality, styles and interests as well as to use this information in exploring their career options. In addition, the Class of '93 has contributed to the establishment of a Rape Awareness and Response Program. Services are short-term-based and strictly confidential. For more information, please call the center at 617/353-3540.

Disability Services

Boston University is committed to maximizing the academic, social, and cultural integration of individuals with disabilities. This means that students with physical, learning, and psychological disabilities can expect to use the same campus facilities and University programs (in some cases with enabling accommodations) as students who are not disabled. Therefore, most of the facilities and programs described in this bulletin make no mention of separate services for the disabled. Consultations with the Disability Services staff are available to individuals or groups requesting assistance or having questions or concerns about programmatic, architectural, or communication accessibility. Auxiliary aids such as sign-language interpreters or readers are available for all of the University's educational programs. Disability Services may be reached at 617/353-3658 (Voice) or 353-7790 (TDD only).

Disability Services also provides expanded services to students with documented learning disabilities (LD). Students are able to choose between two levels of LD support services. Students who need extensive support and would like to meet with a learning specialist on a regular basis for up to two hours a week may opt for "comprehensive" services, which carry an additional charge. Extended financial aid packages are available to students who meet the University finan-

cial aid guidelines. Students with learning disabilities who do not need individual support may seek "basic" support services such as taped textbooks, additional time on exams, or assistance in arranging for other reasonable accommodations, at no charge. Another aspect of such services is an optional six-week summer orientation program for students who will be attending Boston University in the fall. All students enroll in a 4-credit course, participate in a daily learning strategies seminar, and attend workshops on self-advocacy, library use, and word processing with Macintosh computers. Enrollment is limited. For more information, contact the Office of Disability Services.

Multicultural Affairs

Boston University's ethnically diverse community includes African American, Hispanic American, Asian American, and Native American (AHANA) students at both the graduate and undergraduate levels. They are the primary beneficiaries of Multicultural Affairs' efforts, although the office serves the entire campus community on issues of diversity and multiculturalism. The mission of Multicultural Affairs is to enhance the quality of life and to monitor students' academic and career success. This is accomplished by cooperating with Schools, Colleges, and the University Student Affairs offices.

Through effective planning and coordination with graduate and undergraduate student organizations, Multicultural Affairs facilitates and encourages students' personal and educational development. This goal is accomplished through implementing academic, educational, cultural, and social programs. Among them is Common Ground, a component of Summer Orientation that introduces the issue of diversity awareness to incoming students and their parents. This program serves to empower its participants by moving through stages of recognition, tolerance, acceptance, internalization, and celebration of the unity and beauty of diversity. Celebrating Diversity is a Multicultural Orientation program designed to acquaint students and parents with Boston University, the city of Boston, and the richness of its diversity. The program, which occurs annually during opening weekend, includes panels and workshops that address student life issues along with a number of social activities to foster community spirit among incoming freshmen, transfer students, and family members. In Search for Common Ground is a lecture series that enhances the collective understanding of issues that are important

and timely to further understanding of diversity and multiculturalism. Through the AHANA Empowerment Council, mentoring programs are available that enable participating students to meet with students, faculty, and staff who have ethnic or cultural backgrounds similar to their own. The office also sponsors an annual Martin Luther King, Jr., holiday observance and houses a collection of materials documenting the AHANA experience. Multicultural Affairs can be reached at 617/353-3791.

Religion

Boston University recognizes that spiritual development is as vital to its community as academic, cultural, physical, and social development. The University actively sponsors a wide variety of programs and options to help facilitate that development. A few of these programs are outlined below. For a more comprehensive list of religious programs and denominations served on campus, please consult the *Lifebook*.

Marsh Chapel, in the heart of the Charles River Campus, 735 Commonwealth Avenue, offers programs of Christian worship, Bible study, counseling, music, and educational and outreach programs. An all-University service of worship is held each Sunday morning at 10:45 a.m. and is broadcast over WBUR-FM (90.9). The Chapel is generally open from 7 a.m. to 10 p.m. The Chapel office is open from 9 a.m. to 10 p.m. on weekdays. The Dean of the Chapel, Robert Watts Thornburg, and other campus ministers in the Marsh program are available daily. Feel free to contact them or obtain further information by calling Marsh Chapel at 617/353-3560.

Hillel House, located at 233 Bay State Road, is the center for Jewish life at Boston University. Students, faculty, and staff are involved in the cultural, religious, and social activities sponsored by Hillel throughout the year.

Hillel is one of the largest programmers on campus and has over 20 different interest groups, including the Holocaust Education Committee, Boston University Students for Israel, a community service group, a graduate student group, a theatre group and an *a cappella* group, a Latin American Jewish student group, an Israeli student group, a Russian Jewish group, and more.

There are Reform, Conservative, and Orthodox Shabbat services every Friday night, as well as Shabbat morning and daily services for the Orthodox *minyan*. All Jewish

holidays are celebrated during the course of the year.

A wide variety of programs relating to Israel and contemporary moral issues take place weekly. Various minicourses—Jewish Thought, Basic Judaism, and Jewish Medical Ethics—are taught throughout the year.

In addition, counseling by the rabbi and the director of student activities is available. Boston University maintains a kosher dining facility at Hillel, with two meals served on most days. For further information about kosher dining, call 617/353-2947. For further information about Hillel, call 617/353-7200 or visit the Boston University Hillel Web site at www.bu.edu/hillel.

The Catholic Center, at Newman House, 211 Bay State Road, is the office of Roman Catholic campus ministry for the Boston University community. Sunday liturgies are celebrated in Marsh Chapel at 12:30 p.m. (traditional music), 6 p.m. (contemporary music), and 10 p.m. (instrumental music). Weekend retreats, evenings of reflection, prayer groups, Bible study, RCIA classes, and social events are offered throughout the academic year. Chaplains serving the community are Father Chuck Cuniff, CSP, and Dr. Jane LaMarche. For further information, call 617/353-3632.

Other Protestant Campus Ministries Individuals to contact and their phone numbers include: the Episcopal Ministry, the Rev. Margaret Schwarzer, 617/277-5523; the Lutheran Ministry, the Rev. Joanne Engquist, 617/353-5269; the Baptist Ministry, Ms. Peggy Peek, 781/899-0779; and the Boston/Cambridge Ministry in Higher Education, 617/353-4275. A number of Evangelical churches are also affiliated with the campus ministries. For general information or guidance relating to these or other religious groups at Boston University, call 617/353-3560.

Student Health Services

General Information Quality health care is available to all full-time students at Student Health Services, located at 881 Commonwealth Avenue, West Entrance. Student Health Services consists of the Medical Walk-in Clinic, the Mental Health Clinic which includes a Crisis Counselor, and the 14-bed Infirmary. In general, there is no charge to full-time students for services provided at Student Health Services by staff physicians, psychiatrists, psychologists, and nurses, or for staying at the Infirmary. However, students must pay for certain tests

and medications provided at either the Infirmary or the Medical Clinic. The cost of services obtained outside the Medical Clinic, such as doctors' bills, X rays, lab tests, ambulance services, hospitalization, and surgery, is the student's responsibility.

Massachusetts law requires students at institutions of higher education in the state to have adequate health insurance. Those persons affected by this law include full-time students and part-time students who participate in at least 75 percent of the full-time curriculum. The student health insurance plan offered through the University is a qualifying insurance program. Students who do not accept the school health insurance must certify in writing before each academic year that they are participating in a comparable health insurance program.

In order to be officially registered, all full-time undergraduate and graduate students must submit to Student Health Services a Medical History and Physical Examination form and an immunization form that have been filled out and signed by a physician. Massachusetts law also requires all part-time health science students and students attending an institution of higher education in Massachusetts while on a student or other visa, including a student attending or visiting classes or programs as part of a formal academic visitation or exchange program, to show proof of immunization. The immunization form must include the day, month, and year of the following required immunizations: tetanus, diphtheria, measles (two shots), mumps, and rubella. This form is sent to each student who has been accepted for admission and may also be obtained at Student Health Services.

Medical Walk-in Clinic Medical consultation is available for diagnosis and treatment on a walk-in basis with staff physicians and nurses. At its discretion, the clinic may administer allergy shots for a fee of \$150 per year to students who supply their vaccine with clear, typed instructions by their physicians. Hours: the clinic is open year-round, Monday through Friday, 9 a.m. to 4:30 p.m. It is closed on University holidays. For further information, call 617/353-3575.

Mental Health Clinic Consultation with either a psychologist or a psychiatrist is by appointment and confidential. Hours: the Mental Health Clinic is open from 9 a.m. to 5 p.m. during the academic year, and closed on University holidays. Emergency mental health care is available 24 hours a day during the academic year by calling 617/353-3569

or 617/353-3575, and during the summer (commencement through September school opening) by calling 617/353-2121.

Infirmary The Infirmary admits students who are too ill to care for themselves properly in their dormitories or apartments, but who are not ill enough to be hospitalized. Hours: visiting hours are from 1 to 8 p.m.; the Infirmary is open 24 hours a day during the academic year, and provides emergency treatment by nurses during non-Clinic hours. Please call 617/353-3578 for further information.

Crisis Intervention A crisis intervention counselor is on call to help students with serious problems that arise at any time. These problems may include emotional stress, alcohol or drug abuse, crime, or any other crises that a student may encounter. The counselor can be contacted on an emergency basis 24 hours a day, including weekends, by telephoning the University Police at 617/353-2121.

Boston University Rehabilitation Services

Boston University Rehabilitation Services (formerly the Sargent Clinic) provides services in audiology, occupational therapy, physical therapy, speech-language pathology, and vocational rehabilitation for clients from the Boston University community and the Greater Boston area. The clinic also offers comprehensive cardiovascular fitness testing through its Fitness Evaluation Center. The staff is made up of certified clinicians licensed by the Massachusetts Department of Public Health. The clinic is located at 635 Commonwealth Avenue, 6th floor, Boston, MA 02215; 617/353-8383.

Alcohol, Drugs, and Narcotics

Massachusetts law provides, in general, that no alcoholic beverages can be sold, delivered, or given in any way to a person under 21 years of age. State law neither permits nor condones the possession, use, transfer, distribution, dealing, or sale of illegal drugs and narcotics. The University supports these laws without exception.

In addition, University policies restrict the quantity of alcoholic beverages that may be brought into residences and provide for sanctions against students who violate these policies. While students 21 years or older may bring limited quantities of alcoholic beverages into residences, the University strongly encourages students not to do so.

Recreation

Facilities and Programs The Department of Physical Education, Recreation, and Dance offers a broad spectrum of programs to interested students, alumni, faculty, and staff.

Physical Education (PDP) credit courses provide a structured experience in more than 80 activities, ranging from swimming and aerobics to rock climbing and downhill skiing. Noncredit instruction is also available through the Fitness, Lifestyle, Exercise, and Dance (FLEXD) Program.

Intramural sports, club sports, workshops, special events, and open recreation are offered to provide opportunities involving different levels of participation and commitment. Students are encouraged to pursue fitness activities in formats that meet their interests, abilities, and schedules.

Facilities for informal recreation are located at the Case Physical Education Center, 285 Babcock Street; the Sargent Gymnasium Building, 1 University Road; and The Shed, located at the end of Harry Agganis Way in West Campus. The Case Center includes a Cybex and free-weight room, a fitness room with cardiovascular exercise equipment, gymnasias, saunas, locker rooms, a swimming pool, a dance studio, and an ice-skating rink. Adjoining the center are tennis courts, a quarter-mile tartan track, and Nickerson Field (AstroTurf). The Sargent Gymnasium facility contains a gymnasium, a fitness center with weight training machines and cardiovascular conditioning equipment, a dance studio/theatre, and locker rooms. The Shed features a beach/sand volleyball court, three basketball courts, a wiffleball park/multi-purpose court, cardiovascular fitness room, rock-climbing wall, and a complete stereo sound system. Sailing and canoe docks are located on the Charles River.

For more information about the Department of Physical Education, Recreation, and Dance, stop by the administrative offices at 300 Babcock Street, or call 617/353-2748.

Sargent Camp Sargent Camp is a University facility located in the beautiful Monadnock region of southwestern New Hampshire, only 90 minutes from the main campus. The camp covers 850 acres of forest and fields, including the 60-acre Halfmoon Pond that features a floating glacial bog, and 25 miles of trails for hiking and ski touring. Facilities include two lodges (with dining), comfortable, rustic, winterized cabins, and recreational equipment. Sargent Camp offers orientation, team-building, and lead-

ership development programs for students, faculty, and staff on a year-round basis, as well as an open-enrollment Adventure Fest for students every spring. The facility is also available for retreats and conferences. For more information, contact Sargent Camp at 603/525-3311 or e-mail rubendal@bu.edu.

International Student Services

The International Students and Scholars Office (ISSO) advises students and staff on regulations concerning U.S. immigration, employment, and taxes. The office provides a variety of services to more than 4,500 international students and 500 international faculty members and scholars.

Special orientation programs are conducted every September and January to assist new students in adjusting to the University, the city of Boston, and life in the United States. Other services include an International Hospitality Program, a Spouse Program, intercultural programs, and a World Fair each spring.

The ISSO serves as a source of information for the entire international population at Boston University. It coordinates an emergency loan fund and sponsors numerous activities to promote intercultural awareness. The office is located on the second floor of 19 Deerfield Street. Telephone: 617/353-3565; Fax: 617/358-1170; E-mail: ISSO@bu.edu.

Center for English Language and Orientation Programs (CELOP) The center offers intensive noncredit English as a Second Language courses for international students who wish to improve their English proficiency for business, scientific, academic, or personal reasons. In addition, the faculty and staff at the center prepare qualified, academically admissible participants to enter Boston University and other institutions of higher learning in the United States.

Twelve-week courses are offered in both September and January. During the summer four separate courses are available, each lasting 4, 6, 9, or 12 weeks. Classroom instruction consists of work in all skill areas of language learning, including speaking, listening, analytical reading, writing, grammar, and vocabulary. Besides coursework, some programs include monitored computer laboratory, language laboratory, and reading laboratory. In most programs students also choose from a variety of elective skill courses, such as business, TOEFL preparation, research, writing, American culture, and others. In the most advanced English language section, students may receive permission to visit a regular University course while attending CELOP.

Students enrolled at CELOP are considered regular full-time Boston University students and, as such, enjoy the use of all University library and athletic facilities, as well as all medical and counseling services. Through a variety of school activities, projects, trips, clubs, and volunteer opportunities, participants are integrated into daily University life. During fall and spring semesters students may also participate in the Conversation Partners program, in which there is a language exchange between CELOP students and American university students who are studying a foreign language.

All CELOP programs are considered full-time programs of study and a Certificate of Eligibility (Form I-20) is sent to each applicant so that a Student Visa (F-1) may be obtained from the U.S. Consul in his or her home country. Housing and dining arrangements are available on campus for all summer programs, and for the 24-hours-per-week fall and spring programs. Students who wish to enroll at the Center should apply directly to: CELOP/Boston University, 890 Commonwealth Avenue, Boston, MA 02215. For more information call 617/353-4870; fax: 617/353-6195; E-mail: celop@bu.edu; CELOP Web site at www.bu.edu/celop.

Study Abroad and Internship Programs

International Programs coordinates overseas study, work, and scholarship programs for students in all the University's Schools and Colleges. Students may study overseas through a Boston University program, through one of the many programs sponsored by other American institutions, or by enrolling directly in a foreign institution. Programs sponsored by Boston University allow students to study language, liberal arts, and the social sciences in Belize, Ecuador, England, France, Germany, Israel, Italy, Niger, and Spain; to intern in Australia, China, England, France, Ireland, Russia, Spain, and the U.S.; to enroll in a professional study abroad program in Australia, China, England, France, Italy, Peru, Scotland, Spain, and the U.S. Students in most disciplines—from the humanities to the natural sciences, communications, and business—should be able to study abroad if they plan ahead. Students who wish to study overseas should consult an advisor at the Division of International Programs, 232 Bay State Road, Boston, MA 02215; 617/353-9888; fax: 617/353-5402; E-mail: abroad@bu.edu; Web site: www.bu.edu/abroad.

Fellowships

The Boston University Office of Fellowships coordinates student and faculty fellowship and scholarship applications requiring University nomination or endorsement. Faculty opportunities are announced through the Office of Sponsored Programs, and student competitions are publicized in the *Daily Free Press* and on the Boston University Office of Fellowships Web site at www.bu.edu/bufellow.

Students are invited to apply for scholarships and fellowships appropriate to their year of matriculation (application materials available as indicated in parentheses):

Undergraduates

Sophomores and Juniors: Goldwater Scholarship in sciences, engineering, and mathematics (fall); Morris K. Udall Scholarships in environmental public policy (spring); Sophomore Trustee Scholarship in all fields (spring)

Juniors: Truman Scholarship for public service careers (fall); Harold E. Case and Dean Elsbeth Melville Scholarships in all fields (spring); Julian M. Sobin Summer Travel Grants (spring); Morris K. Udall Scholarships in environmental public policy

Seniors: Rhodes Scholarship and Marshall Scholarships for study in the United Kingdom (spring of junior year); Luce Scholars Program to Asia (fall); Fulbright Grants for Research/Study Abroad (spring of junior year); Wiesel Prize Essay Contest (fall); Carnegie Endowment for International Peace

Graduate Students

Fulbright Grants for Research Abroad (spring—one year prior to desired departure)

DAAD Annual Grant Program for Study in Germany (spring—one year prior to desired departure)

Luce Scholars Program to Asia (fall)

IWM Vienna Program (fall)

Information about fellowships, scholarships, and grants is also available at the reference desk at Mugar Library and through your dean's office. Students may reach the Office of Fellowships at 145 Bay State Road; 617/353-2200; E-mail: bufellow@bu.edu.

Gerontology Center

The University's commitments to research, education, and service in the field of aging are coordinated by the Boston University Gerontology Center. For those who wish to document a focus in gerontology, the center awards the Louis Lowy Certificate in

Gerontological Studies to students in any Boston University degree program who have completed a specified number of approved courses (24 credits for bachelor's degree students, 16 credits for graduate degree candidates). For nondegree students and working professionals, a 20-credit Certificate of Recognition for the Study of Aging is available. The annual Summer Institute in Gerontology offers a variety of academic courses, continuing education workshops attended by faculty, staff, students, and community service providers, and a Certificate of Continuing Education in Gerontology. The Gerontology Center Library, with over 3,000 books, journals, government publications, and bibliographies, is open to the public for research needs. Contact the Gerontology Center at 53 Bay State Road, Boston, MA 02215; 617/353-5045.

Medical Center

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 School of Medicine, including the School of Public Health, located at 715 Albany St., Boston; the Goldman School of Dental Medicine located at 100 E. Newton St., Boston; Boston Medical Center, located at 715 Albany St., Boston, and units such as the Humphrey Cancer Research Center and the Cardiovascular Institute. More than twenty New England health institutions are affiliated with the Medical Center. Boston University Medical Center was established with the belief that by combining resources and activities, the basic objectives of patient care, teaching, and research of its constituent institutions could be more effectively met.

Admissions Reception Center

The Admissions Reception Center coordinates a variety of programs for visitors to the campus, including personal interviews, tours, lunches with currently enrolled undergraduates, and Meet Boston University programs. For more information, visit 121 Bay State Road or call 617/353-2318; E-mail: visit@bu.edu.

Orientation and Off-Campus Services

Information about new student orientation and Parents Weekend can be obtained at 775 Commonwealth Avenue, 617/353-3555, or by viewing the Orientation and Off-Campus Services Web site at

www.bu.edu/orientation. Services, programs, and other information are provided for commuting and off-campus students, as well as listings for off-campus housing. For more information, call 617/353-3523.

Office of the University Registrar

This office, located at 881 Commonwealth Avenue, maintains student records; issues transcripts, verifications of attendance, diplomas, and ID cards for students not on the University food plan; produces the class schedule; supervises registration and veterans' affairs; and records grades and withdrawals.

Student Accounting Services

This office addresses inquiries regarding billing and payment and/or settlement of tuition, fees, residence, and other applicable charges. If a student's account reflects a valid credit balance not resulting from financial aid, he or she may apply for refunds here. Student Accounting Services is located on the fourth floor of 881 Commonwealth Avenue, and can be reached at 617/353-2264; Fax: 617/353-3313.

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 Boston Garden, or the endless diversions of the restored Faneuil Hall market area. 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.

Calendar 1999/2000

First-Year Class August 30, 1999–June 12, 2000

Semester I 1999

August

30 Mon Orientation begins

September

3 Fri Orientation ends
7 Tues Instruction begins

October

11 Mon Columbus Day:
classes suspended

November

11 Thurs Veterans Day: classes
suspended
25 Thurs Thanksgiving: classes
suspended
26 Fri Classes suspended
29 Mon Instruction resumes

December

24 Fri Christmas recess
begins

Semester II 2000

January

3 Mon Instruction resumes
17 Mon Martin Luther King,
Jr., Day: classes
suspended

February

21 Mon Presidents Day: classes
suspended

March

13 Mon Exams begin: classes
suspended
16 Thurs Match Day
17 Fri Exams end
20 Mon Spring recess begins
24 Fri Spring recess ends
27 Mon Instruction resumes

April

17 Mon Patriots Day: classes
suspended

May

29 Mon Memorial Day: classes
suspended

June

9 Fri Instruction ends

Second-Year Class August 30, 1999–May 5, 2000

Semester I 1999

August

30 Mon Instruction begins

October

11 Mon Columbus Day:
classes suspended

November

11 Thurs Veterans Day: classes
suspended
25 Thurs Thanksgiving: classes
suspended
26 Fri Classes suspended

December

10 Fri Classes end
13 Mon Exam period begins
18 Sat Christmas recess
begins

Semester II 2000

January

3 Mon Instruction resumes
17 Mon Martin Luther King,
Jr., Day: classes
suspended

February

21 Mon Presidents Day: classes
suspended

March

13 Mon Spring recess begins
17 Fri Spring recess ends
20 Mon Instruction resumes

April

17 Mon Patriots Day: classes
suspended

May

5 Fri Instruction ends

Third-Year Schedule 1999/2000

Short Blocks (6 weeks each): Pediatrics, Obstetrics/Gynecology, Psychiatry, Family Medicine

Block 1 June 28–August 8
Block 2 August 9–September 19
Block 3 September 20–October 31
Block 4 November 1–December 12
Block 5 December 13–January 30
Block 6 January 31–March 12
Block 7 March 13–April 23
Block 8 April 24–June 4

Long Blocks (11 weeks each): Medicine and Surgery

Block A June 28–September 19
Block B September 20–December 12
Block C December 13–March 12
Block D March 13–May 28

Fourth-Year Schedule 1999/2000

Block 1 July 5–August 1
Block 2 August 2–August 29
Block 3 August 30–September 26
Block 4 September 27–October 24
Block 5 October 25–November 21
Block 6 November 22–December 19
Block 7 December 20–January 23
Block 8 January 24–February 20
Block 9 February 21–March 19
Block 10 March 20–April 16
Block 11 April 17–May 14

Please note: The academic calendar is subject to change.

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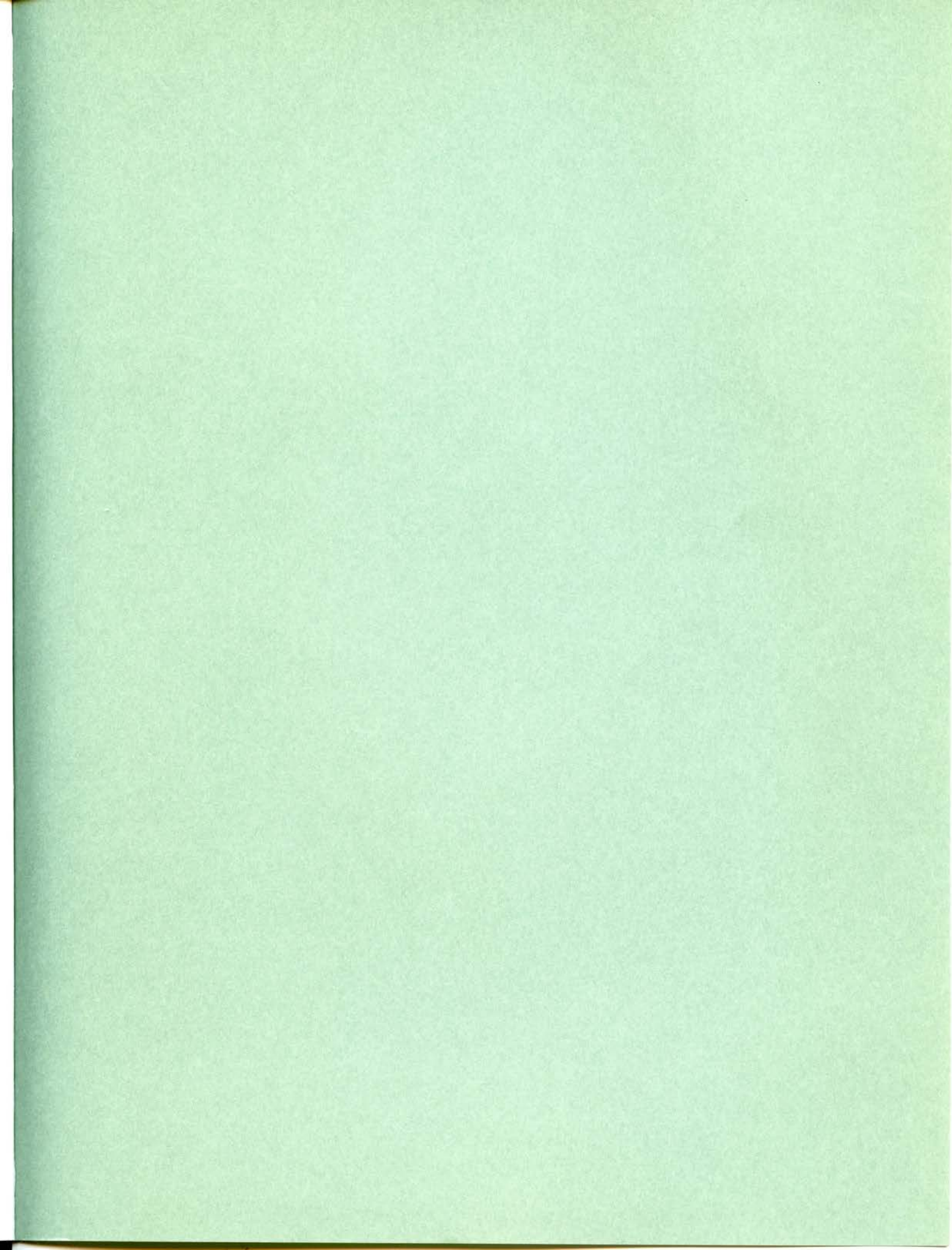
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