Student Resources

Office of Student Affairs
The Office of Student Affairs provides advocacy for and support to medical students in pursuing their major role, which is to learn both the science and the art of medicine. Medicine is one of the most interesting, responsible, and complex professions to enter. The office helps medical students to develop into empathic, compassionate, knowledgeable physicians who have a lifelong enthusiasm for their profession and who reflect the goals and ideals set forth in the mission statement for the school.

Student Affairs strives to be a supportive and responsive place where students can find help in coping with the academic and personal demands of medical school. The Associate Dean for Student Affairs shares these roles with the assistant deans for Advising and Diversity/Minority Affairs, faculty members, advisors and the Student Counseling Service. The office seeks to be sensitive to the needs of all majority and minority students, including married students; students challenged by learning, physical, emotional or economic issues; students who have had prior careers or advanced degrees; gay, lesbian, bisexual and transgendered students; MD/PhD students, and students who are also parents.

Student Affairs also provides support for a variety of student activities, such as administration of the national Residency Matching Program, electronic Residency Application Service (eRAS), MSPE/Deans’ letters, orientations, commencement and graduation, the Basic Science and Clinical Science Academic Evaluation Boards, student-run groups/organizations (see list on page 26) and the Student Body Committee. In these roles, Student Affairs acts as an advisor both to students and faculty, to help facilitate and carry out timely and informed decisions.

Student Affairs works closely with the Office of Medical Education, which shares administrative responsibility for the undergraduate medical curriculum with the Educational Policy Committee of the Medical School faculty, and with the Office of Graduate Medical Education and training directors. This association with the larger educational effort of the school encourages the interdigitation of support, curriculum, and educational issues in medical student education.

Diversity and Minority Affairs
This office helps minority medical students enjoy rewarding academic, professional and social experiences while at UMMS. In addition to individual guidance for academic and personal issues as well as career counseling and mentoring, events organized with the help of other minority faculty and the Office of Diversity and Equal Opportunity offer opportunities to socialize and network. The office also assists in supporting gay, lesbian, bisexual and transgendered students.

In addition, the assistant dean provides advocacy for under-represented students at the Basic and Clinical Science Academic Evaluation Boards.
Student Advising/Career Counseling

Each UMMS student is assigned to a faculty advisor who provides mentorship on academic achievement, career guidance, professionalism, lifestyle and personal issues. The assignment typically remains in place until graduation. At least two to three meetings each year between the student and his/her faculty advisor are recommended. Copies of the student’s evaluations, grade reports, and administrative letters are sent to the faculty advisor. The responsibility of the faculty advisor includes general support, periodic review of the student’s academic performance and assistance/advice in developing the student’s education plan. The student’s advisor also offers guidance in career choice and residency selection, including the provision of letters of recommendation.

Academic Resources

Office of Medical Education

The Office of Medical Education (OME)—a division of the Office of Educational Affairs—is the center for academic life at the School of Medicine, where students meet with faculty and peers, plan activities, develop ideas for curricular enhancement and innovation, and learn about the latest advances in medical education, including research, technology and curriculum development. In essence, the OME serves as the hub for the numerous spokes that represent UMMS undergraduate medical education, providing access to the resources needed for curriculum development, implementation and evaluation and ensuring a rich educational program of courses and electives throughout the four years of medical school.

The quality and diversity of our curricular programs reflect our educational model of collaboration with a broad range of partners including students; campus and community-based faculty; the leadership and guidance of the Educational Policy Committee (EPC) and its curriculum committees; UMMS offices, programs and departments; and educational affiliates based locally, regionally and statewide. The School’s resources in support of education are comprehensive and provide full-service support to all facets of the educational program, including curriculum development, faculty development, research and evaluation, academic computing, community-based education, educational grants, the state-of-the-art UMMS Simulation Center, and our nationally recognized Standardized Patient Program.

Student Activities and Organizations

A number of activities and organizations take place or have been formed to reflect UMass Medical School students’ commitment to a complete educational experience. Activities and organizations include:

- Access to Essential Medicine Group
- Adolescent Medicine Interest Group
- American Medical Student Association
- American Medical Women’s Association
- American Sign Language Group
- Asian Community Outreach Organization
- Big Brothers/Big Sisters
- Center for Healthy Kids
- Christian Medical and Dental Association
- Complementary & Alternative Medicine Interest Group
- Dermatology Interest Group
- Disability Interest Group
- Emergency Medicine Interest Group
- Epworth/St. Anne’s Free Clinics
- Family Medicine Interest Group
- Food/clothing/gift drives
- Flu Shots
- Generalist Physician Program
- Geriatrics Interest Group
- Health Professionals for Human Rights
- Health Policy and Advocacy Interest Group
- Hudson Free Clinic
- Internal Medicine Interest Group
- International Federation of Medical Students Association
- International Health Interest Group
- Jewish Medical Student Association
- Juvenile Health
- Know Your Status—Worcester
- Malaika Project
- Marrow for Tomorrow
- Massachusetts Medical Society
- Medical Interviewing in Spanish
- Medical Mission to the Dominican Republic
- Medical Students for Choice
- Mentoring Program at Lakeview Elementary School
- Mustard Seed
- OB/GYN Interest Group
- Ophthalmology Interest Group
- Patches of Love
- Pediatric Book Buddies
- Pediatric Interest Group
- Physicians for Human Rights
- Physicians for Social Responsibility
- Psychiatry Interest Group
- QMass
- Radiology Interest Group
- Serving the Underserved
- Seven Hills Symphony
- Student Body Committee
- Student Interest Group in Neurology
- Student National Medical Association
- Surgery Interest Group
- UMass Outdoor Experience
- Well Being Newspaper
Curricular Programs and Educational Resources

The OME sponsors interdisciplinary courses across all four years of the curriculum. In the preclinical years, these include the Physician, Patient and Society Course (PPS), a two-year comprehensive introductory clinical skills course, which includes the following course components: PPS Small Groups, Longitudinal Preceptorship Program (LPP), Physical Diagnosis, Epidemiology, and the Community Health Clerkship. The OME supports the innovative Intercerclerkship Program, a series of one-day interdisciplinary educational programs for third-year medical students, which address important contemporary issues in medicine through a cross-disciplinary model of teaching across the basic, clinical, behavioral and social sciences. Intercerclerkships combine classroom teaching, workshops, and interactions with standardized and real patients. Topics include: end-of-life care; pain management; multiculturalism; domestic violence; medical error/ patient safety; geriatrics; health policy and the practice of medicine; oral health; and disabilities.

Supplementing and enriching the required curriculum, the OME also sponsors an extensive menu of elective courses and programs, developed in partnership with faculty and students to meet the individualized learning needs and interests of our diverse student body. The fourth-year Mini-selective Elective, a month-long elective, features a series of week-long experiences targeted at preparing students for their roles as interns, covering such topics as emergency medicine, urgent medical problems, laboratory medicine for the clinician, and teaching and learning in residency. The OME also sponsors Optional Enrichment Electives, providing a plethora of enrichment opportunities for credit across all four years in diverse areas of interest.

In partnership with the Office of Educational Affairs, the OME sponsors the following educational initiatives: the Integrated Geriatrics Curriculum, a four-year curriculum initiative funded through a grant from the Donald W. Reynolds Foundation, which supports the integration of teaching about geriatrics and aging throughout the medical school curriculum; and the Generalist Physician Program, which supports student-led activities in primary care.

Optional Enrichment Electives

- Adoption and Foster Care: Considerations for Medical Practice
- American Sign Language
- Basic Skills for Working with Smokers
- Care of the Seriously Ill
- Clinical Therapeutics
- Clinical/Translational Research Pathway
- Complementary and Alternative Medicine
- Emergency Therapeutics
- Exercise Medicine
- History of Medicine
- Law, Ethics and Medicine
- Maternal/Child Health
- Medical Creative Writing
- Medical Interviewing in Spanish
- Money, Power and Medicine
- Pathway Program: Serving Underserved and Multicultural Populations
- Pediatric Advocacy
- Rural Health Scholars
- Students as Educators
- Teen Pregnancy: Medical and Psychosocial Perspectives
- The Bigger Picture: Health Issues Affecting the Community of Worcester
- Understanding and Improving Our Health Care System
- Wilderness Medicine and Recreational Emergencies

International Medical Education Program

This program adds a global dimension to the Medical School curriculum with the goal of developing students’ linguistic and cultural competence and interest in serving underserved and multicultural patients both locally and abroad. Within the program, students have an opportunity to pursue clinical and language programs abroad in the longitudinal Pathway on Serving Multicultural and Underserved Populations. Twenty first-year students are selected annually through a formal application process into this pathway, providing them with priority for placements in curricular opportunities including: a preclinical Longitudinal Preceptorship Program with a physician serving underserved multicultural populations; an assignment to a local immigrant family; a summer abroad experience; the family medicine clinical clerkship in a site serving underserved cross-cultural populations; and international clinical electives emphasizing primary care. Each year approximately 35 percent of clinical-year students and 35 percent of preclinical students, including Pathway students, choose to participate in our international health opportunities in countries such as Guatemala, Honduras, Costa Rica, the Dominican Republic, Nicaragua, Ecuador, Brazil, India, Uganda, Zambia and South Africa.

Research Programs

Through the Clinical/Translational Research Pathway, the School of Medicine offers the opportunity to participate in a longitudinal, structured program throughout the four years of the medical school curriculum. A minimum of 10 first-year students are selected annually through a formal application process into this pathway, providing them with an introduction to methods and concepts in clinical/translational research, and a training platform in the basics of clinical/translational research. In addition to the Pathway, all
students have the opportunity to participate in two key elective programs: the Summer Research Fellowship Program, which provides first-year students with stipend support to participate in a biomedical or behavioral research project working with a faculty mentor; and the fourth-year Senior Scholars Program, which provides students the opportunity to work one-on-one with an assigned faculty research mentor on a capstone research project.

Service-Learning Programs
For students interested in service-learning opportunities, the OME sponsors two programs in partnership with the Department of Family Medicine & Community Health. The Community Service Assistantship Program places students in agencies, community health centers and advocacy programs that serve diverse communities, with a particular focus on underserved populations in Massachusetts. During the summer vacation period, students receive up to eight weeks of stipend support for their community service work. In addition, students may elect to apply to the Albert Schweitzer Fellowship Program which provides an opportunity to develop and implement a year-long community service project to meet the needs of underserved communities, working under the guidance of an assigned faculty mentor.

Center for Academic Achievement
The center is open to all students at UMMS. Services include academic counseling, tutoring and a series of learning seminars which focus on test-taking, reading, memorization, communication and synthesizing information. The assistant dean and staff of the center work with individual students to identify learning needs which can be met through tutorials designed with learning specialists, educational psychologists and graduate students. The academic achievement program at UMMS is oriented toward prevention of academic problems through systematic needs assessment, mobilization of resources and continuity of the support experience.

Other Support Services
In addition to direct sponsorship of required and elective courses and programs through the Office of Medical Education, the UMMS Office of Educational Affairs provides general support for curricular needs and enrichment, through a wide range of services supporting scholarship, innovation and national recognition for our educational programs.

Educational Grants provide valuable resources to faculty and students for the advancement of teaching in a variety of subjects. Our most recent award is the Donald W. Reynolds Foundation Comprehensive Programs to Strengthen Physicians Training in Geriatrics (2009-2012), which will support the implementation of a comprehensive geriatrics curriculum as a longitudinal theme across all four years of the school’s educational program. In the past ten years, grant-funded initiatives have enhanced curriculum innovation in health communication, geriatric medicine, human sexuality, professionalism, pain management, substance abuse, complementary and alternative medicine, and cultural competence.

Community-based Education supports UMMS and educational affiliates in the recruitment, training and retention of community-based faculty, providing the infrastructure support needed to effectively create a “Commonwealth as classroom” outreach effort, with quality clinical training experiences for our students in various community medical settings such as outpatient offices, ambulatory care clinics and physician’s offices.

Research & Evaluation services support student assessment, curriculum evaluation and medical education research.

Standardized Patient and Medical Simulation Programs
The Standardized Patient Program (SPP) and the UMMS Simulation Center provide UMMS students with state-of-the-art technology in support of the development, advancement and assessment of their clinical skills.

UMMS has long used patient simulation as an essential component of its academic and clinical training. Established in 1982, the Standardized Patient Program (SPP) provides evaluative and instructional services that have evolved into integral and mandatory components of medical education. Through the use of highly trained lay people who simulate medical conditions realistically and consistently, the SPP is renowned for its technologically advanced, culturally sensitive medical training and evaluation of students and health care providers from academic and clinical programs across New England. Our standardized patients number over 100, and represent some of the best in the country.

The SPP reputation for excellence led to its selection as one of a handful of programs to serve as a pilot site for evaluating the National Board of Medical Examiners USMLE Step II Clinical Skills licensure exam. This standardized patient performance-based, clinical skills assessment measures clinical competency and since 2004, has been a mandated component of the USMLE licensure exam. At UMMS, all six clerkships in the third year include a required “end of clerkship” Standardized Patient Objective Structured Clinical Examination (OSCE), as well as a comprehensive clinical skills assessment at the end of Year 3. These assessments utilize standardized patients to evaluate student performance in the essential clinical skills and competency areas covered in the core clerkships, providing a high-level of preparation for the required Step II Clinical Skills licensure examination.
Electronic patient simulators offer a complementary opportunity for students to build skills, practice common medical procedures, and sharpen their decision making. Simulation technology allows students to practice, in the safety of the classroom, the clinical skills that are essential for patient care in the real world. The UMMS Simulation Center is a multi-school resource established in 2006 to support and develop medical simulation in our educational programs. The 1,500-square-foot facility is equipped with the full range of simulation technology, including task-trainers, high-fidelity full-body mannequins and computers with screen-based, virtual simulation, for interactive case scenarios, performance debriefing, procedure training, and independent learning.

The Office of Educational Affairs and the Office of Medical Education are conveniently located in the student wing. The OME shares a suite of offices with Student Affairs. Students are encouraged to interact with the staff and to participate in the continuous improvement of the Medical School’s educational programs.

Office of Ethics
The mission of the Office of Ethics is to foster an environment in which all members of the UMMS community are encouraged to recognize the values embedded in human interactions and to develop the skills necessary to respond appropriately. The office is committed to providing high quality ethical consultation and educational programming. The primary goal of an integrated curriculum in ethics is for students to build the skills required to recognize and respond to the ethical issues that arise in their professional work. The office provides a variety of opportunities to practice these skills, beginning with sessions during the first-year orientation, continuing throughout the Physician, Patient and Society course during the pre-clinical years and culminating with conference sessions in many of the clerkships.

Educational Technology
Academic & Research Computing Services—a division of Information Services which provides e-mail accounts, network storage and desktop software packages to medical students—works closely with faculty, staff and students to evaluate, acquire, implement and support educational technologies for the Medical School. The division offers a number of services to students including:

- Learning Management System: UMMS currently uses Blackboard Vista to host all Medical School courses and Academic & Research Computing Services (ARCS) provides support and training for the development and delivery of courses in Vista. An around-the-clock help desk is available for Vista.
- PDA Requirement: UMMS has a PDA requirement for all third- and fourth-year medical students. In collaboration with the Library and the Clerkship Years Committee, ARCS coordinates licensing for required software packages and maintains a list of currently supported hardware.
- UMEDS: The UMass Medical Encounter Documentation System is a Web- and PDA-accessible system used by students to record clinical patient encounters.
- Digital Lecture Archive: Most medical school lectures are captured digitally and available to students for review on the Web.
- Virtual Microscopy: ARCS provides a Virtual Microscope technology that enables students to view and manipulate digitized microscope slides via the web.
- Audience Response System: ARCS provides and supports an Audience Response technology in the classroom.
- Curriculum Management System: The data from this Web-based system for viewing course scheduling information can be downloaded to PDA devices for off-line access.
- Informatics and Statistics Support: Consulting services are available to students.

Beginning with the incoming class of 2010, medical students will be required to use a certified laptop in the classroom.

Academic & Research Computing Services is working closely with the Office of Medical Education to develop and support this new program.

Lamar Soutter Library
The Lamar Soutter Library serves as the National Library of Medicine’s New England Regional Medical Library, one of eight such regional libraries nationwide, exhibiting medical information products offered by the National Library of Medicine and providing training seminars and presentations that teach students, faculty, researchers, health professionals and consumers how to gain access to useful information. The library provides many opportunities to learn about utilizing databases and other computer-based resources through free classes offered in the library’s computer training lab.

The library’s computer area includes over 100 workstations for computer-assisted instruction, interactive programs, educational databases, desktop productivity tools and Internet browsing. In turn, access to the library is available off campus via the Internet for UMW students and faculty. The library provides access to over 200 electronic books and subscribes to many electronic databases. MEDLINE, PsycINFO, and many evidence-based medicine databases are available through Ovid. In addition, the library subscribes to MDConsult, UpToDate, Web of Science, Micromedex, CINAHL, and Harrison’s Online. The library’s membership in the Boston Library Consortium and the Academic and Research Collaborative of the Central Massachusetts Regional Library System expands student access to academic and medical libraries throughout the state.
The library is continually expanding its outreach to the public and affiliated health care organizations in Worcester and around the commonwealth. This outreach is accomplished in part by grant-funded special projects and by extensive off-campus teaching programs. For example, in 2005, the library launched a new consumer health-oriented project, Go Local Massachusetts, providing access to information about a wide variety of local health care services and agencies, all linked to the more than 700 health topics covered in MedlinePlus, the National Library of Medicine’s Web site for consumer health information.

**School Services**

**Office of School Services**

The office serves students in the three schools of the UMMS campus and is responsible for matriculation services and pre-matriculation programs. Matriculation services include: Financial Aid, Registrar/Student Record, Student ADA Support and Weather Watch. Pre-matriculation programs include outreach programs for minority and disadvantaged students (High School Health Careers Program and the Summer Enrichment Program), the Worcester Pipeline Collaborative, the Regional Science Resource Center and the Undergraduate Summer Research Fellowship Program.

**Americans with Disabilities Act**

According to the Americans with Disabilities Act (ADA), a disability is defined as an impairment that substantially limits one or more of the major life activities of an individual; a record of such an impairment; or, the perception that one has such an impairment. UMMS is firmly committed to providing full access to individuals with disabilities. In so doing, UMMS intends to fully comply with the Americans with Disabilities Act (ADA) of 1990 and Equal Employment Opportunity Commission guidelines. Students who avail themselves of the ADA will not be treated with prejudice or adversity. The Office of School Services, working in collaboration with the Diversity and Equal Opportunity Office, coordinates all student disability issues.

“UMass Medical School promotes a natural synergy between research, health care and education. It maintains the strength of its reputation in primary care, while placing our students on the cutting-edge of research and innovation.”

James L. Young
MD/PhD student

As a former medical device entrepreneur, James has added research to his repertoire as an author of several peer-reviewed papers and a book chapter in the widely used *Pathophysiology of Heart Disease*, and as an invited speaker at international conferences from Rome to Sweden. “UMass provides the perfect balance of personal expertise and unparalleled camaraderie. That is how we will best serve our patients and society.”
The Vice Provost for School Services serves as the ADA Student Coordinator. Once admitted, the student is responsible for notifying the ADA Student Coordinator of his/her disability, requesting academic accommodations in writing and providing appropriate documentation of the disability. A student may request accommodations at any time during matriculation. All requests for accommodations are reviewed and acted on by the Academic Accommodations Committee. It is always the student’s choice whether or not to accept any recommended accommodation. Confidentiality is a strict practice of the Academic Accommodations Committee. Students may be referred to the Academic Accommodations Committee by course coordinators or Academic Evaluation Boards for analysis of the academic difficulty and its possible relationship to a disability. All students are expected to satisfy the Technical Standards of the Medical School. Accommodation under ADA will not be in conflict with the fundamental nature of the academic programs of UMMS.

**Appropriate Treatment of Students**

In 2001, UMMS developed a policy and complaint procedure to help ensure the appropriate treatment of students (ATS) in the School of Medicine, Graduate School of Biomedical Sciences, and Graduate School of Nursing. Students should expect to be treated with respect and to learn and work in a safe environment. All individuals who interact with students are expected to behave in accordance with the ATS policy, which applies to faculty, administrators, nurses, house staff, postdoctoral students, technicians, other learners, and other volunteer or paid staff. Inappropriate treatment occurs when behavior shows disrespect for the dignity of others and unreasonably interferes with the learning process. It can take the form of physical punishment or threat, sexual harassment, psychological cruelty, and discrimination based on race, color, national origin, religion, gender, sexual orientation, age, disability or veteran status. Please note that separate school-wide policies are in place covering sexual harassment, consensual amorous relationships, and discrimination based on protected-class status.

For more information, including definitions, policies and procedures for reporting suspected inappropriate treatment, students are encouraged to contact the Office of Medical Education or the Diversity and Equal Opportunity Office. The policy and procedure is also available in the Office of Student Affairs. The DEOO is responsible for coordination and monitoring of all ATS complaints and for training faculty members to serve as resource persons for students with ATS-related inquiries and concerns, and for ongoing oversight and periodic review of the training process.

**Student Counseling Service**

The Student Counseling Service (SCS) provides counseling, psychotherapy, assistance with stress management, and educational programs on emotional well-being for students. Students may receive individual or couples’ therapy. The SCS maintains strict standards of privacy and confidentiality. The service cost is covered by the prepaid Student Health Plan fee.

**Student Health Service and Student Health Plan**

The Student Health Service (SHS) seeks to preserve and enhance students’ well-being at UMMS by providing programs that effectively respond to students’ health care needs. Students are required to undergo a pre-matriculation health history and medical examination. The form to document this process is available through the SHS and must be completed by students’ health care providers prior to registration, effectively putting the SHS on notice of students’ pre-existing health conditions for which they may require ongoing medical care.

The Student Health Plan (SHP) is the administrative entity funded by the mandatory student health fee, providing routine primary health care coverage to students under the direction of physicians or nurse practitioners. With an additional fee, students may elect to have their immediate family members (i.e. spouse, children) covered under the SHP. Students are covered by the SHP during their period of enrollment, from registration through August 31 of the following school year. A brochure describing the plan and its services is available through the Student Health Service.

The University requires all students to carry supplemental insurance to cover specialty consultations, diagnostic evaluations and inpatient services. Such a policy may be purchased either through the University or privately.

**Food Services**

The cafeteria and dining room are located on the first floor of UMass Memorial Medical Center–University Campus, which is contiguous to UMMS. The menu features a variety of selections, including a large salad bar, deli bar, grill, soups, entrees, snacks, pastries and beverages. In addition, a cafeteria is located in the Aaron Lazare Medical Research Building.

**Campus Bookstore**

Located in the UMMS lobby, the campus bookstore is open Monday through Friday from 8:30 a.m. - 5 p.m. for students, faculty, staff and the general public. The bookstore offers all required text and reference books (at a five percent discount with no tax charged) for the School of Medicine, Graduate School of Biomedical Sciences and Graduate School of Nursing. Books not in stock may be ordered through the store or via the UMMS Web site. Trade books, school clothing, school insignia items, medical instruments, school supplies, magazines and a variety of snack foods are also available.

**Housing and Transportation**

School of Medicine students reside in the local community or commute, as housing facilities are not available on campus. Bus transportation to the campus is available via several routes. Those who wish to park on campus are required to register with the Office of Public Safety and pay an annual parking fee. While public transportation is generally available within the local Worcester area, educational sites for the
longitudinal preceptorship program and clerkships are generally dispersed across the greater Worcester and Central Massachusetts area, requiring transportation by car. Students are expected to provide their own transportation to any assigned site. Given the breadth of our community-based teaching affiliates, students should be prepared to travel as far as Boston or western Massachusetts for certain rotations.

### Academic Policies and Procedures

#### Advanced Standing

In consideration of the varied backgrounds of students and to allow some flexibility in programming, there are many courses in which students may apply for advanced standing. The decision to grant advanced standing in a course is the responsibility of the department teaching that course. In some courses, conferring advanced standing constitutes certification that the student has fulfilled all requirements for that course. Alternatively, the department may require another experience within that discipline as more appropriate than taking the prescribed course.

#### Grading System

The faculty believes that a system of periodic evaluation is essential to enable students to identify their strengths and deficiencies and to permit instructors to evaluate student progress and their own teaching efforts. It is the intent of the faculty that all students successfully complete their course of study. Early on, through frequent and personal contact with students, faculty members identify any difficulty a student may be having in understanding a topic.

At the end of each pre-clinical course, the course coordinator submits a grade of Honors, Credit, No Credit or Incomplete; some courses are given on a basis of Credit/No Credit. A low passing grade of CR/M (“internal marginal”) is also retained, if appropriate, for internal tracking purposes. In some cases a written narrative may also be included. For clinical clerkships and electives, the ratings given are Outstanding, Above Expected Performance, Expected Performance, Below Expected Performance or Failure, and a written narrative is also included. The purpose of the narrative is to aid students in evaluating individual ability and performance, to aid the academic evaluation boards in making recommendations concerning the student’s subsequent education, including graduate medical (residency) training and to aid in preparation of the Medical Student Performance Evaluation (MSPE or dean’s letter).

The faculty members of each course determine specific methods of evaluation, which may, for example, include examinations, case-based exercises, papers or observed structured clinical interactions. Examinations are conducted and graded consistent with the school’s philosophy of emphasizing learning through self-motivation rather than through competition. Post hoc curving is not allowed except in instances where it has been determined that the grades on a particular exercise are unreasonably low, in which case the evaluations can be upgraded. There is no public listing of letter grades or class rank.

The grade of Incomplete indicates that completion of examinations or other course requirements has been postponed because of the student’s illness or other extenuating circumstances.

All records used by the faculty as a basis for recommendations for promotion or graduate medical training of a student are available to that student upon request.

Students are required to take Steps 1 and 2 (Clinical Knowledge “CK” and Clinical Skills Examination “CSE”) of the U.S. Medical Licensing Examination (USMLE) and to have their scores reported to UMMS. The CK components of USMLE are computerized examinations which students schedule at a time convenient to them, usually following the second year (Step 1) and some time during the fourth year (Step 2). The CSE is a performance-based examination scheduled by the student some time after completing required third-year clerkships. Passing this examination is not a requirement for promotion or graduation, but is required for licensure.

Prior to graduation, students are required to become certified in Advanced Cardiac Life Support and to satisfactorily complete an end-of-third-year clinical skills performance assessment.

The purpose of the narrative is to aid students in evaluating individual ability and performance, to aid the academic evaluation boards in making recommendations concerning the student’s subsequent education, including graduate medical (residency) training and to aid in preparation of the Medical Student Performance Evaluation (MSPE or dean’s letter).
Monitoring Student Progress

The progress of first- and second-year students is monitored by the Basic Science Academic Evaluation Board, while the progress of third- and fourth-year students is measured by the Clinical Science Academic Evaluation Board. These boards meet regularly throughout the academic year.

In the event of a less-than-satisfactory grade in any course, the appropriate evaluation board determines the course of action the student must follow to qualify for promotion or graduation. The Associate Dean for Student Affairs notifies, in advance of each board meeting, any student for whom an “adverse action” is likely to be considered, so that the student can provide additional information and appear at the meeting in person if he or she chooses.

Promotion from the first year to the second year and from the second year to the third year of the medical curriculum, and progress during this period, is monitored by the Basic Science Academic Evaluation Board. It is expected that student performance in all first- and second-year courses will be at least at the satisfactory (CR) level. During this period, however, one rating of internal marginal (CR/M) will be allowed without remediation. Any student receiving more than one rating of CR/M or any rating of no credit (NCR) is reviewed by the Basic Science Academic Evaluation Board and actions are prescribed to ensure remediation. Such actions include, but are not limited to, re-taking of examinations, repetition of the course(s) or repetition of an entire year. Other possible outcomes include program extension and, in rare cases, dismissal.

The predominantly clinical curriculum of the third and fourth years is treated as a continuum by the Clinical Science Academic Evaluation Board. This board also assesses qualifications for graduation. Any rating of less than Expected Performance in required clerkships must be remediated. Remediation may take the form of repetition of an examination, repetition of part or all of the clerkship in question, or repetition of an entire year. Students will, however, be allowed one rating of Below Expected Performance in a clinical elective without remediation. Any rating of Failure or any Below Expected Performance rating beyond the one permitted must be remediated.

Withdrawals, Leaves of Absence and Readmission

Students may withdraw voluntarily from the School of Medicine at any time upon written request to the Associate Dean for Student Affairs. Readmission after voluntary withdrawal is not guaranteed. Reinstatement requires application in writing to the Committee on Admissions at least two months prior to the date of requested readmission. If the readmission is approved by the Committee on Admissions, the appropriate academic evaluation board will determine the level at which the student will be reinstated within the curriculum and the courses that will be required.

Students in good academic standing may request a leave of absence for a specified period of time not to exceed one year. In such cases, the appropriate academic evaluation board determines whether such a leave of absence is to be granted and sets any conditions for readmission. Readmission after a leave of absence does not require action by the evaluation boards (unless specifically stated) or by the Committee on Admissions.

Students who fail to attend class regularly or fail to return from a leave of absence, in spite of notification by the Associate Dean for Student Affairs, will be considered to have withdrawn voluntarily from the School of Medicine, and cannot be reinstated without positive action of the Committee on Admissions.

Graduation

Regularly matriculated medical students who have fulfilled all requirements of the University, as certified by action of the Clinical Science Academic Evaluation Board, will be recommended by the Dean of the Medical School to the president and trustees of the University of Massachusetts for the degree of Doctor of Medicine. Requirements include satisfactory completion of four years of study of not less than 32 weeks each year, satisfactory completion of an end of third year clinical skills performance assessment, successful completion of a course in Advanced Cardiac Life Support, and a passing score on Step 1 of the U.S. Medical Licensing Examination (USMLE) and a recording of scores on Step 2 of the USMLE.
Admission

The School of Medicine’s admission policy promotes the UMMS mission by offering a high-quality, accessible medical education to those qualified residents of the state who will best serve the Commonwealth’s health care needs through medical practice, public service, education and research.

A committee composed of representative faculty members and medical students determines selection for admission. A number of factors are carefully considered in the committee’s review of each applicant’s qualifications and in the selection of a matriculating class that will represent a broad and diverse spectrum of individuals, backgrounds and interests. These factors include, but are not restricted to, the following:

- prior academic performance;
- content and breadth of scholastic preparation;
- standardized test performance (MCAT);
- service activities which indicate an ability to work with people in a “helping” role;
- a baccalaureate degree;
- certified legal residency in the Commonwealth of Massachusetts (application to the MD/PhD Program is not restricted to residents of Massachusetts);
- diversity of experience in a variety of areas, including professional or educational experience, family or cultural background and avocation activities;
- extracurricular accomplishments;
- oral communication and interpersonal skills as documented in letters of support and in the interview;
- written communication skills as determined by academic performance, standardized testing and materials submitted in the application package;
- achievement in scientific research and/ or medically related service;
- evidence of motivation and preparedness for medicine; and
- attributes and values deemed necessary for physicians, including: honesty, altruism, compassion, flexibility, maturity, intellectual curiosity, self-awareness, ability for self-directed learning and ability to work as a member of a team.

In consideration of the factors described above, UMMS encourages students to pursue a pre-medical education of considerable breadth, including such coursework as English literature and composition, foreign languages, history, economics, ethics and the fine arts. In addition, all students must complete the coursework identified in Admission Requirements, demonstrating strong performance in the biological and physical sciences as a sound foundation for pursuing further study in the medical sciences.
No single program can be recommended as the “best” or “preferred” plan of study. Candidates are, therefore, encouraged to select educational programs that best reflect individual interests and aptitudes. Whenever possible, advanced study in a field of interest is encouraged, with particular emphasis on activities involving independent study.

Students who are granted advanced placement credits on their college transcripts for coursework taken in secondary school are advised to take additional college-level programs in these subject areas.

Admission Requirements
Described below are the specific course requirements. Coursework in these areas must be completed within the last six years, and CLEP credit may not be used to satisfy these requirements. All required courses must be evaluated by traditional grading and not by a pass/fail system.

Prerequisite courses must be taken at accredited colleges or universities in the U.S. or Canada. Applicants who have graduated from foreign colleges must have completed a minimum of one full year of study in an American or Canadian college/university, prior to submitting their application. The following courses are required:

• Biology: A one-year general biology or zoology course, with a laboratory component. Students wishing to pursue additional coursework in the biological sciences should consider genetics, embryology, cell biology or comparative anatomy.

• Chemistry: One year of inorganic and one year of organic chemistry, each with a lab. Students interested in advanced courses are advised to consider biochemistry or physical chemistry.

• Physics: A one-year course in general physics, with a lab.

• English: At least one year of college-level English literature or composition. Applicants must demonstrate proficiency in the three domains of the English language, including reading, writing and oral communication. The rapid expansion of the volume of medical literature and published research requires the ability to read rapidly with sound comprehension. Reading aptitude is essential, therefore, for learning as a student, as well as for lifelong learning as a medical professional. Future physicians must also be able to write clearly, accurately and efficiently. In addition, the fundamental relationship between doctor and patient requires an ability to communicate verbally with empathy, clarity and respect. Finally, in professional relationships, the physician must communicate orally with other members of the health care team in a clear, concise, accurate and effective manner.

Additional Recommended Courses:
• Calculus: As the role of mathematics in the medical sciences continues to expand, a one-year introductory-level course in calculus is strongly advised.

• Sociology/Psychology: Applicants will find that the study of sociology and psychology provides important perspectives on human behavior, the interface between medicine and society, and an understanding of individuals as part of communities and populations. As our nation’s population is becoming increasingly diverse, the cultural, demographic, linguistic, socioeconomic and ethnic backgrounds of patients are also changing. Courses that develop social awareness and an ability to constructively address societal variables will promote the attitudes and skills required to deliver culturally sensitive care to a diverse patient community.

• Statistics: There has been a rapid expansion of the volume of medical literature and published research. Students will find that an understanding of statistical methods and terminology is essential in critically analyzing these studies, and constructively applying the findings to the study and practice of medicine.

• Computer Literacy: As electronic technology expands, medical information will be universally transmitted and managed through computerized systems. In order to learn and use the technological advances in medical documentation and information systems, applicants must have a working knowledge of desktop systems, common software packages (word processing, spreadsheets and databases) and educational informatics.

Prospective applicants are advised to consult the AAMC Medical School Admission Requirements that can be purchased through the Association of American Medical Colleges. This publication provides general recommendations concerning preparation for the study of medicine as well as specific information about the University of Massachusetts Medical School and other accredited American and Canadian medical schools.

Application Process
Applications for admission to UMMS must be made through the American Medical College Application Service (AMCAS). Applications are accepted between June 15 and November 1 of the year prior to admission. The deadline for completion of the application is December 15.

All applicants are required to take the Medical College Admissions Test (MCAT). Arrangements for taking the MCAT, requesting test reports, and questions concerning administration, scoring and processing of the test should be directed to the MCAT office.

Applicants are also required to complete a UMMS supplementary application, as well as a certification form documenting residency status in Massachusetts.
Admission Policy and Acceptance Procedure

The Committee on Admissions will review an application only when complete, with all supporting documents, as described below:

- The completed AMCAS and supplemental application forms.
- Transcripts of courses taken after completion of AMCAS application. Once the verified application has been processed by AMCAS and received by UMMS, any additional transcripts for subsequent coursework should be forwarded directly to the UMMS Admissions Office for as long as the application remains active.
- Letters of Recommendation. Applicants should have all letters of recommendation sent directly to the associate dean for Admissions. If available to the applicant, an official recommendation from his/her school’s pre-medical advisory committee is required. In the event that such documentation is not provided by the applicant’s school, two letters of reference must be provided from instructors in the prerequisite science courses. Letters of recommendation from commercial advisors are discouraged and are not substitutes for this requirement.
- MCAT. Applicants must have taken the MCAT within the three years prior to application.
- Residency Validation Form. Applicants must declare Massachusetts as their state of legal residence on their AMCAS application. Anyone seeking to enroll in the University of Massachusetts Medical School who has not graduated from a Massachusetts high school is required to provide proof of continuous residency for a period of not less than five years. This form is not required for non-Massachusetts resident applicants to the combined PhD/MD Program.
- Non-refundable application fee. Applicants to the MD/PhD program are not required to pay an application fee. Receipt of the AMCAS application will be acknowledged promptly by the UMMS Admissions Office. Thereafter, the office...
will inform the applicant on an individual basis if the application is otherwise incomplete. It is the applicant’s responsibility to ensure that all required documents are received. It is recommended that application materials be submitted as early as possible.

Once complete, each application is reviewed by the Committee on Admissions and a decision is made regarding the offer of an interview. An interview is required for acceptance, and interviews are conducted in Worcester at the invitation of the committee.

With the exception of the Early Decision Plan (see below), acceptances will be offered beginning in October and thereafter until May. Applicants selected for admission will be notified by a letter from the Committee on Admissions and will be expected to either accept or reject this offer within two weeks. In exceptional circumstances, applicants may be granted an additional two weeks to respond to the committee’s offer of acceptance. Applicants are offered a provisional acceptance and are subject to a criminal background check (CBC). If the CBC reveals some prior contact with the criminal justice system, the applicant will be offered a full opportunity to respond. Provisional acceptances may (or may not) be withdrawn pending the school’s review of that history and the applicant’s response. The school has a process which governs these matters. Massachusetts law requires that all accepted students provide proof of immunity to rubella (German measles), mumps, measles, tetanus and diphtheria and have a PPD skin test for tuberculosis. The school provides Hepatitis B immunization after enrollment.

Once the class has been filled, the remaining applicants will be notified. Thereafter, a list of alternates will be prepared. In the event that an enrolled student withdraws prior to matriculation, a replacement will be selected from the list of alternates. Applicants placed on the alternate list will be so informed and asked to indicate whether they wish to remain on the list.

An applicant who initially accepts a place and later decides to withdraw will be expected to inform the Admissions Office promptly in writing so that another candidate may be offered a position.

**Early Decision Plan**
A strong applicant who is interested in applying only to UMMS may wish to submit an Early Decision application. An applicant who does not receive an offer of acceptance under the Early Decision Plan will automatically be considered for possible acceptance at a later date with the general pool of candidates.

Early Decision applications must be received by AMCAS by August 1 of the year prior to matriculation. Applications, including supplementary materials and fees, must be complete in the admissions office by 9/1. Final decisions regarding acceptance will be made by October 1.

**Evaluation of Applicants**
The Committee on Admissions is composed of faculty members representing various disciplines from the basic and clinical sciences, and two medical students. Committee members carefully review each application and all enclosed information provided by or on behalf of the applicant.

The University adheres strictly to all applicable state and federal regulations relating to non-discrimination and equal opportunity. The decision to grant an interview is determined by committee members and is guided by the qualification standards previously described, as well as by the merits of the applicant in comparison to the rest of the candidate pool. Due to the large number of applications submitted each year, it is not possible to interview all applicants. The Admissions Office will notify those applicants who are selected for an interview. The interview provides an opportunity for direct exchange of information between the applicant and the School of Medicine faculty and Committee on Admissions. It also offers the applicant an introductory exposure to the learning environment and educational philosophy of UMMS, as well as direct contact with students who actively participate in the interview day program.

**Deferral Policy**
UMMS discourages granting of deferrals except in cases of medical emergency or events of comparable significance.

**Transfers and Advanced Standing**
Only transfer students with advanced standing at an AAMC accredited medical school are accepted to fill the few vacancies resulting from the withdrawal of previously enrolled students. Students interested in the possibility of transferring to UMMS should direct inquiries to the Admissions Office. Information regarding current policy on transfers and, when appropriate, application forms and instructions for applying, will be sent to all potential applicants. It should be noted that the same residency requirements must be met as for those students entering the first year.

**Technical Standards for Medical School Admission, Continuation and Graduation**

**Introduction**
The mission of the University of Massachusetts Medical School is to graduate skilled and effective physicians. It is the responsibility of the faculty to select applicants from among residents of the Commonwealth who are best qualified to complete the required training and most likely to become the best possible physicians. Applicants are selected for admission to the school based not only on their scholastic achievement and ability, but also on their intellectual, physical and emotional capacities to meet the requirements of the school’s curriculum and of a successful career in medicine. The faculty recognizes that academic competency is essential for success in medical school. Such things as intellectual curiosity, undergraduate grades, and the MCAT examination help to demonstrate academic competency. The Admissions Committee is instructed to exercise its judgment on behalf of the faculty in selecting the entering class. The committee is asked to consider not only academic ability but also character, integrity, extracurricular achievement, commitment to service, ability to
contribute to the advancement of medical knowledge and biomedical research, the likelihood of providing primary care in the Commonwealth, serving the health care needs of our underserved communities, and overall suitability for the medical profession based upon information in the application, letters of recommendation, and personal interviews.

The Liaison Committee on Medical Education, which accredits the medical school, requires that the curriculum provide a general professional education, enabling each student to pursue graduate training in a variety of disciplines. Also, one of the missions of University of Massachusetts Medical School is to graduate a significant number of generalist physicians. This requires the development of broad knowledge, skills and behaviors, enabling ongoing self-directed learning, further training and delivery of competent medical care. The faculty believes that such a broad based and patient oriented curriculum is best suited for future generalists, specialists, and physician investigators. The basic sciences curriculum includes anatomy, biochemistry, histology, pathology, pharmacology, and physiology and is designed to establish a core of knowledge necessary for clinical training. The clinical curriculum begins early in the first year and includes diverse experiences in primary care, family medicine, and ambulatory patient care. The third and fourth year include in-depth experiences in primary care, family medicine, internal medicine, obstetrics and gynecology, pediatrics, psychiatry, surgery, diagnostic imaging, pathology, emergency medicine, geriatrics, and rehabilitation medicine in ambulatory and in-patient settings. These experiences provide a broad basis for the practice of medicine, regardless of the future choice of specialty. Each student is required by the faculty to successfully complete each required course and clinical rotation to graduate.

The following technical standards specify those attributes the faculty considers necessary for completing medical school training, enabling each graduate to subsequently enter residency and clinical practice. These standards describe the essential functions students must demonstrate in order to fulfill the requirements of a general medical education, and thus, are pre-requisites for entrance, continuation, promotion, retention, and graduation from medical school.
The University of Massachusetts Medical School will consider for admission any applicant who meets its residency requirement, academic criteria, and demonstrates the ability to perform or to learn to perform the skills listed in this document, with or without reasonable accommodations consistent with the Americans with Disabilities Act. Any applicant with questions about these technical requirements is advised to discuss the issue with the ADA Student Coordinator prior to the interview process.

Certain chronic or recurrent illnesses that interfere with patient care or safety are not compatible with medical practice or training. Any student who is a carrier of a blood borne pathogen (including but not limited to Hepatitis B virus, Hepatitis C virus, and Human Immunodeficiency virus, HIV) will not be permitted to perform some invasive procedures. This will restrict the student’s ability to perform fully in some clinical clerkships and to meet the requirements of some specialties; therefore, the student will possibly be prohibited from future training and practicing in those fields. Other conditions that may lead to a high likelihood of debilitating student illness should also be carefully considered before committing to a clinical career. Deficiencies in knowledge base, judgment, integrity, character, or professional attitude or demeanor, which may jeopardize patient care, may be grounds for course/rotation failure and possible dismissal.

A student must possess aptitude, abilities, and skills in five areas: 1) observation; 2) communication; 3) sensory and motor coordination and function; 4) conceptualization, integration and quantitation; and 5) behavioral and social skills, abilities and aptitude. These are described in detail below. Students must be able to independently perform the described functions.

1. Observation
Students must be able to observe demonstrations and conduct experiments in the basic sciences, including, but not limited to: anatomic dissection of preserved tissues and cadavers, physiologic and pharmacologic demonstrations in animals, microbiologic cultures, microscopic studies of microorganisms and animal and human tissues in normal and pathologic states. A student must be able to observe patients accurately at a reasonable distance and close at hand, noting non-verbal as well as verbal signals. Specific observational requirements include, but are not limited to the following abilities: detecting and identifying significant changes in colors of fluids, skin, culture media, and dipstick tests; perceiving with acuity and accurately discriminating findings on x-rays and other imaging tests; efficiently reading written and illustrated material; observing intracellular details through a microscope; observing demonstrations in the classroom, including projected slides, films, videos and overheads; observing and differentiating changes in body movement; observing anatomic structures; discriminating numbers and patterns associated with diagnostic instruments and tests, such as sphygmomanometers and electrocardiograms, and using instruments competently, such as the otoscope, ophthalmoscope, microscope, and stethoscope.

2. Communication
Students must be able to relate effectively and sensitively with patients of all genders; as well as all ages, races, life-styles, sexual orientations, and cultural backgrounds, and be able to convey a sense of compassion and empathy. A student must be able to communicate clearly with and observe patients in order to elicit information, accurately describe changes in mood, activity, and posture; and be able to perceive verbal as well as nonverbal communications. Communication includes not only speech but also reading and writing. Medical education presents exceptional challenges in the volume and breadth of required reading and the necessity to impart information to others. Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the health care team. Specific requirements include but are not limited to the following abilities: communicating rapidly and clearly with the medical team on rounds; eliciting a thorough history from patients; and communicating complex findings in appropriate terms to patients and to various members of the health care team (fellow students, physicians, nurses, nurses’ aides, therapists, social workers,
performing basic obstetrical maneuvers. Examples of such emergency treatment must be able to respond promptly to medical emergencies, including hospitalizations. Students must be able to complete forms according to directions in a complete and timely fashion. Students must be able to access patient records and medical information with facility.

3. Sensory and Motor Coordination or Function

Students must be able and willing to perform with acuity, accuracy, and facility, a complete physical examination on any patient of all genders, utilizing palpation, auscultation, percussion, and other diagnostic maneuvers. In general, this requires sufficient ability to observe with acuity and to process accurately: visual, auditory, exteroceptive (smell, touch, pain and temperature) and proprioceptive (position, pressure, movement, stereognosis, and vibratory) phenomena, as well as the ability to manipulate with precision, at a fine level of movement, patients, and medical instruments and equipment. Methods of surgical instruction include practice on living or preserved animal tissues. A student must be able and willing to provide general care and emergency treatment to any patient of all genders in a timely manner. Furthermore, a student must be able to respond promptly to medical emergencies within the hospital, and must not hinder the ability of co-workers to provide prompt care. Examples of such emergency treatment reasonably required of physicians include arriving quickly when called and initiating cardiopulmonary resuscitation, administering intravenous medication, applying pressure to stop bleeding, opening obstructed airways, suturing wounds, and performing basic obstetrical maneuvers.

Cardiopulmonary resuscitation may require moving an adult patient, repeatedly and rapidly applying considerable chest pressure, delivering an adequate volume of artificial respiration, and calling for help. A student must be able to learn to perform basic laboratory tests, e.g., urinalysis, completed blood count, and diagnostic and therapeutic procedures, e.g., phlebotomy, arterial blood gas drawings, lumbar puncture, arthrocentesis. Students must be able to measure angles and diameters of various body structures using tape measure and goniometer, measure blood pressure and pulse, and interpret graphs describing biologic relationships.

Clinical rotations in ambulatory care settings require the ability to transport oneself to a variety of ambulatory settings in a timely manner, and inpatient rounds require prolonged and rapid movement.

4. Intellectual-Conceptual, Integrative and Quantitative Abilities

These abilities include measurement, calculation, reasoning, analysis, judgment, and synthesis. The student must also be able to recognize letters and numbers quickly and accurately. Clinical reasoning and problem solving are critical skills demanded of physicians requiring all of these intellectual abilities, and they must be performed quickly, especially in emergency situations. Moreover, the effective physician often must deal with several tasks or problems simultaneously (“multi-tasking”). Students must be able to identify significant findings from history, physical examination, and laboratory data, provide a reasoned explanation for likely diagnoses, construct a reasoned and cost-effective diagnostic plan, and prescribe medications and therapy, recalling and retaining information in an efficient and timely manner. Students must be able to identify and communicate the limits of their knowledge to others when appropriate. The ability to incorporate new information from peers, teachers, and the medical literature in formulating diagnoses and plans is essential. Good judgment in patient assessment, diagnostic and therapeutic planning is essential.

5. Behavioral and Social Attributes

Empathy, integrity, honesty, concern for others, good interpersonal skills, interest and motivation are all personal qualities that are necessary for any physician. Students must be able in all clinical and academic settings to fully utilize their intellectual abilities, to exercise good judgment, to promptly complete all responsibilities attendant to the diagnosis and care of patients. They must be able and willing to develop mature, sensitive, professional and effective relationships with patients of all genders, ages, races, life-styles, sexual orientations, and cultural background, as well as with their families, with other health care providers, and with all members of the learning and working community. At times this requires the ability to be aware of and appropriately react to one’s own immediate emotional responses: e.g., students must maintain a professional demeanor, and be able to function at a high level in the face of personal fatigue, dissatisfied patients and their families, and tired colleagues.

Students must be able to develop professional relationships with patients and their families, providing comfort and reassurance when appropriate while protecting patient confidentiality. Students must be able to maintain professional conduct when interacting with patients and the families of patients suffering from catastrophic illness, trauma, and death. Students must possess adequate endurance to tolerate physically taxing workloads and to function effectively under stress. All students must be able and willing to work on any day of the week and on any day of the year when called upon to serve in scheduled clinical activities or learning opportunities. All students are at times required to work for extended periods, occasionally with rotating and overnight shifts. Students must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Students are expected to accept appropriate suggestions and criticism and, when necessary, to respond by modifying their behavior.
Tuition and Fees

Full tuition for the 2008-2009 academic year is $8,352. Two-thirds tuition subject to the Learning Contract is $5,568. Students enrolled for school courses for credit are assessed the full tuition for each semester of enrollment. The first semester after a student has completed eight full semesters of Medical School tuition payments, excluding prior semesters of compensation-based tuition waiver was received, the student’s status will change to extended student program fee status. The student is not assessed tuition, but is assessed the extended student program fee of $90 per semester, plus all other student fees.

Students who register late and/or who are delinquent in the valid repayment of bills will be assessed a late registration fee of $50 and/or a late payment fee of $50. Tuition and fees may be changed at any time without prior notice.

For additional information on tuition and fees visit www.umassmed.edu/som/tuition.

Learning Contract

The School of Medicine offers matriculated students, whether or not they apply for other types of financial aid, a Learning Contract. The Learning Contract is a financial instrument that defers two-thirds of tuition and functions in the manner of an eight percent loan that can be repaid with either money or certain legislated service. Interest will accrue at the rate of eight percent beginning the latter of six months after ceasing enrollment at UMMS or the end of the first year of residency. There is a six-month grace period after completion of medical residency or fellowship or six months after graduating from the School of Medicine if one does not enter a residency. To pay with service, a graduate needs to work the equivalent of full time for 48 consecutive months in Massachusetts. The service payback must meet one of three criteria: a primary care practice anywhere in the Commonwealth; any other practice in an underserved area, if one exists; or in community or public service of particular benefit to the Commonwealth.

Those seeking to pay with service must gain prior approval from the Learning Contract Advisory Group. Additional information about the Learning Contract can be found at http://www.umassmed.edu/financialaid/learn_contract/index.aspx

Refund Policy

Refunds are calculated when students do not register for the academic term for which they are charged, take an approved leave of absence or otherwise fail to complete the program on or after the first day of class of the period of enrollment for which charges are assessed.

Students who cease enrollment after 60 percent of the term has elapsed receive no refund and are not required to refund any federal aid received for the term. Students who cease enrollment before 60 percent of the term has elapsed receive a refund for the percentage of the term remaining after the last date of attendance. The percentage is calculated by dividing the number of calendar days elapsed between the beginning of the term and the date the individual ceases enrollment by the number of calendar days in the term. For example, a student who withdraws 57 percent of the way through the first term of enrollment receives a refund of 43 percent of tuition and fees (100 percent minus 57 percent).

If a student received Title IV funds, this refund must be returned to the Title IV program. Additionally, according to federal rules, the student is also required to refund 43 percent of aid received as cash or from a credit balance. Failure to return unearned Title IV aid may result in ineligibility for future federal aid.

Allocation of Refunds

A share of the refund will be returned to the financial aid programs that funded students. Refunds and recovered overpayments are allocated to the programs from which an individual received aid in the following order:

- Federal Unsubsidized Stafford Loan
- Federal Stafford Loan
- Federal Perkins Loan
- Other Federal Student Aid Programs
- Institutional Student Aid Programs
- State Student Aid Programs108
- Private Student Aid Programs
- Student

Students must notify the Dean of the respective graduate school and the Registrar in writing of their intent to withdraw. Students who withdraw without notifying the Dean and Registrar of their status will be considered withdrawn as of the last recorded date of class attendance as documented by the University.
Upon request, the School Bursar will provide examples of the application of these policies. Any withdrawn student who believes that individual circumstances warrant exceptions from published policy may make a written appeal to:

Nancy E. Vasil,
Director of Financial Services
University of Massachusetts Medical School
55 Lake Avenue North
Worcester, MA 01655

Note: This policy is subject to change at any time without prior notice if necessary to comply with Federal law.

Financial Aid

Students and their families, i.e., parents, stepparents and spouses, share the major responsibility of financing undergraduate medical education. Because the majority of financial assistance available to medical students is loan aid, UMMS encourages only those students who are unable to fund their own education to apply for financial aid. Furthermore, UMMS encourages loan recipients to plan for repayment of their student loans before borrowing their first loan. Descriptions of all federal student financial aid programs are subject to legislative and regulatory changes without prior notice.

To be eligible for financial assistance, students must be accepted for admission or enrolled in good standing and making satisfactory academic progress. In addition, they must neither owe a repayment on a Federal Pell Grant, Federal Supplemental Educational Grant, or State Student Incentive Grant, nor be in default on a Federal Perkins Loan (formerly National Direct Student Loan), Federal Stafford Loan (formerly Guaranteed Student Loan), Federally Insured Student Loan, Federal Supplemental Loan for Students, Federal PLUS or Federal ALAS loan received for study at any post-secondary institution. Furthermore, students must demonstrate either federal eligibility or financial need to be eligible for most, although not all, financial aid programs. Because financial aid is awarded annually, all financial aid recipients need to reapply each year.

The Financial Aid Office will process applications for students who apply for only Federal Stafford Loans and Unsubsidized Federal Stafford Loans as soon as they are complete. The Financial Aid Office can award its limited institutionally based funds only after the majority of applicants for institutional aid complete their applications. Each year an individual student’s financial aid package is a mathematical function of the total institutionally based gift aid available and the need-after subtracting the calculated parental contribution, whether or not it is actually provided to all students applying for institutionally based funds. Awards may vary by students’ length of enrollment and vary annually depending on available funds.

It is the responsibility of students to read all directions and make certain that all required forms are received by the Financial Aid Office by published deadlines. Students who submit application materials after deadlines have passed may be ineligible for institutionally controlled funds. Information and application materials can be found at the Financial Aid Office’s Web site at www.umassmed.edu/financialaid/.

Gift Aid

Students applying for institutional aid must complete the entire financial aid application, including questions about parental income and assets. Forms of gift aid include:

**Alumni Association Scholarship**

Each year, the UMMS Alumni Association grants several scholarships of either $1,500 or $2,500 to students with financial need.

**Anonymous Scholarship Fund**

In July 1971, an anonymous donor created an endowment fund at UMMS. When income from this endowment fund is sufficient, scholarships are granted to medical students with financial need.

**Parking Violation Scholarship**

The Parking Violation Scholarship Fund receives revenue from parking fines attributable to violations on the University campus. Gift aid from this fund is awarded to students with financial need at UMMS.

**Alfred M. Rothschild Scholarship Fund**

The family of Alfred M. Rothschild, MD, established an endowment fund in August 1984 for the purpose of student support. When sufficient income from the fund is available, gift aid is awarded to medical students with financial need.

**Scholarships for Disadvantaged Health Professions Students (SDS)**

SDS funds, which were first authorized in 1991-92, are allocated to the University from the federal government. Scholarship recipients must be both disadvantaged and demonstrate financial need.

**Walter N. Secord Endowment Fund**

The Secord Endowment Fund was established in 1980 in memory of Walter N. Secord, MD. When sufficient income from the fund is available, gift aid is awarded to medical students in financial need.

**Student Support Fee Scholarship**

Each year a portion of the student support fee paid by students is made available for scholarships for students with documented need for institutional aid.

**Tuition Waiver (Need-Based)**

The Board of Trustees of the University of Massachusetts approves an annual dollar amount of need-based tuition waivers for medical students. Eligibility for tuition waivers is limited to students who complete institutional financial aid applications and who have documented need. Need-based tuition waivers do not reduce tuition deferred by the Learning Contract.

**UMass Memorial Physicians Group Scholarship**

Established in 1988 by the UMass Memorial Physicians Group, these scholarships are awarded annually to students with financial need based on the income available from the endowment.
Worcester District Medical Society Scholarships
During 2006-07, the Worcester District Medical Society awarded ten scholarships of between $1,500 and $3,000 each to UMMS students. UMMS does not administer this fund. These scholarships are awarded to medical students with financial need who are residents of Central Massachusetts. Other District Medical Societies across the Commonwealth offer similar programs to students that are residents of towns within their district. Students are encouraged to contact these Societies directly for further information.

Loan Programs
Alternative Education Loan Programs
In addition to the major federal and institutional loan programs, several privately sponsored alternative loan programs may be used to meet need and/or replace calculated family contributions. Examples of these programs include the Total Higher Education (THE) Alternative Loans, Access Group’s Medical Access Loan and Chase Bank Alternative Loan. Common elements shared by these loan programs include variable interest rates that accrue from the date the loan is disbursed, insurance fees that are deducted from loan proceeds and the requirement that borrowers be credit-worthy.

The maximum annual and cumulative loan, specific interest rate, provisions for deferment and frequency and compounding of accrued interest and other fees, vary by program and may vary from year to year. Only participating lenders provide these loans; the lender and guarantor may change during the course of a borrower’s enrollment in medical school.

Emergency Loan
Interest-free, short-term emergency loans are available to students who have unanticipated, bona fide financial emergencies; have not been delinquent on a previous emergency loan; and do not owe past-due tuition, fees or other charges to the school. Loans less than $101 are due in 30 days; loans between $101 and $300 are due in 60 days; and loans between $301 and $500 are due in 90 days. The maximum loan is $500. Applications are available in the Financial Aid Office. Failure to repay emergency loans on time leads to suspension of eligibility for future emergency loans and possible administrative withdrawal.

Federal Perkins Loan (formerly National Direct Student Loan)
Federal Perkins Loan funds are allocated to the University from the federal government. The annual federal allocation is supplemented with institutional matching funds and collections from previous borrowers. Students who provide parental information on the FAFSA and CSS Profile, as well as parental tax returns, are considered for Federal Perkins Loans. Eligible students must demonstrate federal eligibility and satisfactory academic progress. Depending on the availability of funds, professional students may borrow an annual maximum of $6,000. The total outstanding balance on all undergraduate and graduate Federal Perkins Loans may not exceed $40,000. Federal Perkins Loans carry five percent interest. Loans for borrowers with outstanding balances disbursed before July 1, 1987, have a six-month grace period; loans for first-time borrowers as of July 1, 1987, have a nine-month grace period.

Borrowers may receive deferrals during periods of at least half-time student status, graduate fellowship, or rehabilitative study for the disabled, excluding a medical internship or residency program; for a maximum of three years during which the borrower seeks, but is unable to find, full-time employment; for a maximum of three years during which, according to federal regulations, repayment would present a financial hardship; or if the borrower is engaged in service eligible for partial cancellation of the loan.

Federal (Subsidized) Stafford Loan
Federal Stafford Loans (formerly Guaranteed Student Loans, or GSL) are federally insured educational loans made to students by banks and other eligible lending institutions. Federal Stafford Loans are guaranteed by various guarantee agencies, including American Student Assistance and Great Lakes Higher Education Corporation (GLHEC), and are reinsured by the federal government. Eligible applicants must maintain satisfactory academic progress in a program of study leading to a degree, demonstrate eligibility as defined by federal regulations and file appropriate financial aid applications. In an academic year, an eligible student may borrow a maximum that is the lesser of $8,500, or the cost of education, minus the sum of other financial aid received and an expected family contribution. A medical student’s cumulative principal balance on all Federal Stafford Loans, including subsidized and unsubsidized, may not exceed $189,125. The maximum amount of subsidized Stafford loans is $65,500.

The interest rate as of July 1, 2006 is fixed at 6.8% per year. All loans are disbursed twice during the loan period, one-half at the beginning and one-half midway through the loan period. The government pays the interest on subsidized Stafford loans as long as the student is enrolled at least half time in a degree granting program of study.

Two fees, a three percent origination fee and a one percent guarantee fee, may be deducted from loan proceeds. Some guarantee agencies or lenders may pay some or all of the fees for borrowers.

First-time borrowers after June 30, 1993, may receive deferrals during periods of at least half-time student status, graduate fellowship or rehabilitative study for the disabled; for a maximum of three years during which the borrower seeks, but is unable to find, full-time employment; and for a maximum of three years during which, according to federal regulations, repayment would present a financial hardship. Borrowers with outstanding balances on Stafford Loans made before July 1, 1993, should check their promissory notes to see the additional deferrals to which they are entitled.
Lenders must grant forbearance to any medical intern or resident who requests it. Forbearance is defined as the cessation of scheduled payments for a proscribed period of time. Interest continues to accrue, and may be capitalized, during periods of forbearance. The lender will require documentation of internship or residency.

**Federal (Unsubsidized) Stafford Loan**
This loan parallels the subsidized Stafford Loan, but interest accrues and is not paid by the government during periods of enrollment. In an academic year, an eligible student may borrow a maximum that is the least of $38,500, the cost of education minus other financial aid, or $38,500 minus eligibility for a subsidized Stafford Loan. A medical student's cumulative principal balance on all Federal Stafford Loans, including both subsidized and unsubsidized, may not exceed $189,125.

**Federal Graduate PLUS Loan**
Graduate students may borrow up to the cost of attendance minus any other aid. The interest rate is fixed at 8.5 percent and interest accrues during periods of enrollment. Borrowers must pass a credit check to be eligible for these loans. There is no cumulative principal balance maximum on these loans. Two fees, a three percent origination fee and a one percent guarantee fee, may be deducted from loan proceeds. Some guarantee agencies or lenders may pay some or all of the fees for borrowers.

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**Loans for Disadvantaged Health Professions Students (LDS)**
First authorized in 1991-92, LDS funds are allocated to the University from the federal government. The annual federal allocation is supplemented with institutional matching funds and collections from previous borrowers. Only medical students with financial need who complete the entire financial aid application and submit parental income tax returns and parental information on the FAFSA and CSS Profile may be considered for this program. LDS loans have a five percent simple interest rate and a one-year grace period. No interest accrues on loans during in-school periods, grace periods and authorized periods of deferment. Deferments are granted for residency training and for service in the National Health Service Corps, military or Peace Corps.

**Massachusetts Medical Society Loan**
Every year the Massachusetts Medical Society makes loans that have interest rates that vary from one percent to six percent during the life of the loans available to third- and fourth-year students with financial need at UMMS. Although UMMS does not administer this loan fund, the Financial Aid Office awards MMS loans as if they were institutionally controlled funds. During academic year 2006-07, UMMS was authorized to make 60 loans at $5,000 each.