

# OFFICE OF MEDICAL EDUCATION ANNUAL REPORT - FY 06

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UNIVERSITY OF MASSACHUSETTS  
MEDICAL SCHOOL  
OME ANNUAL REPORT FY 06

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## DEPARTMENT OVERVIEW & GOALS

In FY 06 the Office of Medical Education (OME) continued to meet and in some cases surpass its anticipated goals for undergraduate medical education at UMMS, as measured by a number of performance indicators. First and foremost, graduating UMMS students continued to demonstrate high levels of overall satisfaction as assessed in the AAMC 2006 Graduation Questionnaire, in which 58 percent of UMMS students “Strongly agreed” that they were satisfied overall with their medical education compared to 40 percent nationally (Table 1).

In supporting the quality of undergraduate medical education at UMMS, the founding mission of the OME is to serve as the hub for the undergraduate medical education curriculum, including its leadership, curriculum innovation and development, evaluation, and administrative oversight.

In FY 06, the OME’s activities and achievements included a variety of new initiatives and grants, as well as support for a number of school-wide projects:

- Implementation of the required, High Stakes **End of Third Year Assessment (EOTYA)** in May and June 2006.
- The expansion of **technology and simulation capacity** for teaching and assessment initiatives, featuring the establishment of the **UMMS Simulation Center**.
- Launching of comprehensive plan to support implementation of the **Clinical Logs Project** within clerkships to meet LCME accreditation requirements.
- Roll out and migration of curriculum content for courses and clerkships from the Courses website to the new **WebCT learning management system**.
- Provision of administrative and resource support to advance the roll out of the **Competency Implementation Project (CIP)** under the leadership of the EPC.
- Integration of the **Objectives Project** goals with the CIP competencies and related efforts, including curriculum databases project, school of medicine competencies, and clinical logs project.
- Under the sponsorship of the OME, UMMS was awarded an **AMA Medical Education Research Consortium grant**, serving as lead school for a collaborative initiative involving all four medical schools in Massachusetts.

As shown on the organizational chart (Appendix A), the OME oversees 17 divisions and programs which include: Division of Research and Evaluation; Division of Curriculum and Faculty Development; Physician, Patient and Society Course; Interclerkship Program; Division of Community-Based Education; Division of Grants and Special Projects; End of Third Year Assessment; Objectives Project; Integrated Geriatrics Program; Senior Scholars Program; Summer Research Fellowship Program; International Medical Education Program; Generalist Physician Program; Community Service Assistantship Program; Central Massachusetts Schweitzer Fellowship Program; Office of Admissions; and Standardized Patient Program.

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## **Major Accomplishments of the OME Overall in FY 06**

Several major curricular initiatives launched in FY 05 – the School of Medicine’s Objectives Project, the Clinical Logs Project, and roll out of WebCT migration for course and clerkship curricula – continued to be critical priorities for the OME in FY 06. All these efforts were integrated with the goals and objectives of the medical school’s Competency Implementation Project (CIP) initiative, which made significant progress in FY 06 in setting priorities for 18 pilot projects to be implemented in FY 07.

Two major accomplishments of the OME in FY 06 place UMMS at the cutting edge of standards in medical education: implementation of the required High Stakes End of Third Year Assessment (EOTYA) in May and June 2006; and establishment of the UMMS Simulation Center.

### **The Required, High Stakes End of Third Year Assessment (EOTYA)**

Consistent with our new competency-based curriculum, all UMMS students must now fulfill competency performance standards on a clinical skills assessment as a graduation requirement. This new requirement, which became effective with the AY 04-05 EOTYA conducted for all students completing year three, was refined during AY 05-06 and established as a required, “high stakes” clinical skills assessment. Under the leadership of the EOTYA director, the 2006 EOTYA was jointly administered through the Standardized Patient Program and the Division of Research and Evaluation, in close collaboration with the clerkship directors. The successful implementation of the AY 05-06 High Stakes EOTYA involved 94 students, 25 SP’s and 29 faculty facilitators. The seven-hour assessment consisted of eight different stations; this included piloting of simulation in three cases, utilizing a pediatric mannequin, a pelvic model, and an adult mannequin.

### **UMMS Simulation Center**

The UMMS Simulation Center was established in 2006 to support and develop medical simulation in our educational programs for all of our learners: medical students, nursing students and residents. This multi-school resource is managed by the Office of Medical Education, which serves as the hub for providing faculty with the resources needed for curriculum development, implementation and evaluation, and ensuring a rich educational experience for students. The UMMS Simulation Center is located on the first floor of the medical school in 1,500 square feet of space designed to support state-of- the-art simulation technology including task trainers, screen-based simulation, and full body mannequins.

The center comprises five rooms: two Task Trainer Rooms; Scenario Room designed for interactive, group learning using high-fidelity mannequins in an environment that recreates the look and feel of a clinical setting; Control Room for one-way viewing of scenario room activities and remote control of high-fidelity mannequin scenarios; and Debriefing Room, providing conference-type environment with plasma screen to view and debrief activities recorded in the scenario room. In FY 06, the OME focused on development of this new resource, through oversight of facility design; hiring of staff to manage the day-to-day operations of the center; and procurement of high fidelity equipment. In addition, through the IMEG Grants Program, the OME supported three innovative curriculum development projects designed to utilize the resources of the UMMS Simulation Center.

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### **Other highlights of OME activities in FY 06 included:**

#### **Curriculum Development**

- Under the leadership of the EPC and with administrative and resource support from

OME staff and its Division leadership, the advancement of the roll out of the Competency Implementation Project (CIP), which included identification and prioritizing areas for curricular change and enhancement.

- In collaboration with the Division of Curriculum and Faculty Development, the CIP, UMMS curriculum committees, and individual course and clerkship directors, the Objectives Project initiative continued to move forward to establish a standardized format for learning objectives to enable mapping of these objectives to the six competencies as well as our Clinical Logs Project and online preclinical and clinical curriculum databases.
- Ongoing curriculum development and innovation in response to national standards established by oversight bodies such as the AAMC and LCME, with particular emphasis on underrepresented topics in medical education, and technology and patient simulation resources to support teaching and learning across all four years of the undergraduate curriculum (Tables 30-35).
- Significant contribution to the teaching of medical students with courses and programs which provided an estimated 570 contact hours of required course time, over 220 hours of optional course time, and 16 weeks of elective time across all four years of the curriculum (Table 31).
- Enhancement of curriculum and educational resources through grant support with five externally-funded educational grants housed in the OME in FY 06, including 1) Macy Mentorship Program in Health Communication Education; 2) AMSA-NCCAM Educational Development of Complementary and Alternative Medicine (EDCAM) Grant; 3) Edward J. Stemmler Medical Education Research Grant; 4) AAMC Caring for Community Grant—Marrow for Tomorrow; and AMA Medical Education Research Consortium Planning Grant (Table 12).

### **Medical Education Research**

- Enhancement in productivity related to medical education research through peerreviewed publications and presentations at the Association of American Medical Colleges (AAMC) Annual Meeting, in Academic Medicine, and other leading fora for medical education (Tables 13A, 13B).
- Collaborations to support research through grant sponsorship with the following OMEbased grant initiatives: Macy Mentorship Program in Health Communication Education; Educational Development in Complementary and Alternative Medicine (EDCAM) Grant; Edward J. Stemmler Medical Education Research Grant. Additional support provided to other UMMS' grant initiatives (e.g., CTSA, Attorney General Consumer & Prescriber Education Grant), currently in the development stage, to include evaluation data collection and management, outcomes analysis, and dissemination activities.
- UMMS ranked second among all medical schools in the number of AAMC Research In Medical Education (RIME) and Group on Educational Affairs (GEA) presentations at the 2005 AAMC Annual Meeting (Table 11).
- Continued enhancement of OME-sponsored elective offerings involving research (Table 18-20, 36, 38, 42).

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### **Technology Resource Development**

- In collaboration with IS and our curriculum committees, continued implementation for the migration and redesign of core curriculum offerings in the WebCT learning

management system.

- Advancement of an ongoing and robust collaboration with Information Services, to offer over 15 annual workshops and workshop series on using technology and WebCT in pedagogically sound ways, featuring Best Practices for Online Teaching.
- Supported technology-based curricular enhancements, developed by 19 faculty for use in over 60 courses, program and events, utilizing laptop resources.
- Continued migration to the AAMC's new electronic admissions application e-system (AMCAS-E), and integration with Peoplesoft database.

### **Faculty Development**

- Implementation of fourth full year of operation of the Division of Community-Based Education to serve as a resource base for recruiting and retaining community-based faculty.
- Continued coordination of the school-wide effort, in collaboration with departments and Faculty Administration for securing faculty appointments for 100 percent of UMMS community-based educators, as required by the LCME.
- Continued collaboration with individual faculty on design, development and implementation of curricular innovations with support from curriculum development funds, IMEG grants, and other school-wide initiatives, including IS, Faculty Administration, Graduate School of Nursing, Graduate School of Biomedical Sciences, Office of Graduate Medical Education and clinical and basic science departments.
- Continued collaboration with the Office of Faculty Administration and the Office of Graduate Medical Education to provide expanded faculty development program offerings.

### **Primary Care and Serving the Underserved**

- Consistent with UMMS's long-standing mission of primary care service, continued strong record of quality performance in primary care, including #4 ranking in U.S. News and World Report in 2006 (Table 10).
- Consistent with UMMS's long-standing mission of community service, a high level of student commitment to community-based service-learning initiatives and service to underserved populations (Tables 16, 17, 21, 22, 37, 39, 40).
- Provided programs and services to promote collaborative educational programs and innovations with key educational partners.

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## **Goals for FY 07**

### **OME Divisions, Sponsored and Affiliated Programs**

#### **Division of Research and Evaluation**

- Enhancement of the quality of examination results to faculty, promoting increased use of item-analysis reports including distracter analysis to improve the quality of exam items.
- Ongoing identification, development, and implementation of web-based evaluation tools and surveys that yield a relational database containing information about survey features and respondent data.
- Expansion of division services to meet the augmented requirements for the Graduate School of Nursing and the Graduate School of Biomedical Sciences, as their programs and class sizes continue to grow. This will include exam scoring as well as course and program evaluation.
- Provision of support to the OME's major grant initiatives (e.g., Macy, EDCAM), and to

UMMS' grant initiatives currently in development (e.g., CTSA, Attorney General Consumer & Prescriber Education Grant) through evaluation data collection and management, outcomes analysis, dissemination and publication activities.

- In collaboration with Information Services, continue to implement, trouble shoot, and monitor Peoplesoft with a particular focus on the Gradebook module.
- Successful implementation of the new performance standards and execution of the data analyses and reports required for the High Stakes EOTYA, including the EOTYA Preparation Program, and EOTYA Retest.
- Participation in WebCT migration with a leadership role in the area of assessment, including course and clerkship evaluation and computer-based testing.
- Participation in the UMEDS/Clinical Logs Project, with a leadership role in the area of institutional reporting, and cross-clerkship and cross-site data tracking, in collaboration with Information Services.
- Provision of ongoing evaluation support for the Competency Implementation Project.
- Participation in UMMS Simulation Center Project with leadership role in the area of evaluation including use of BLine as an evaluation tool.

#### **End of Third Year Assessment (EOTYA)**

- Continued development, refinement and implementation of Individualized Educational Plans with the Center for Academic Achievement for students not meeting competency standards on the AY 05-06 High Stakes EOTYA.
- Continued development and enhancement of the EOTYA Retest with Clerkship Directors, Standardized Patient Program, and Division of Research and Evaluation with an increase in the number of SP cases from 5 to 7.
- Revision of the piloted post encounter paperwork from the AY 05-06 EOTYA.
- Enhancement of the faculty holistic rating utilized as part of the AY 05-06 EOTYA
- Continued use and improvement of integration of simulation with the EOTYA.

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#### **Objectives Project**

- Ongoing progress in the roll out of the Objectives Project with a specific focus on performance-based measures to support learning objectives, in partnership with the leadership of the curriculum committees, the leaders of the Clerkship Directors Group and the Clinical Years Committee.

#### **Division of Curriculum and Faculty Development**

- Continued expansion and strengthening of collaborations with other UMass campuses and other medical schools to design, implement, and assess new courses and curricula, innovative teaching methods, leadership and change strategies, and online learning and educational technology initiatives.
- Expanded service to the Office of Faculty Administration to strengthen existing programs, and design and implement new faculty development initiatives.
- Continued development and integration of the month-long 4<sup>th</sup> year mini-selectives elective, including an increased online presence and increased participation of medical students and residents.
- Ongoing quality enhancement and coordination of the Optional Enrichment Electives courses, including increased communication with and among course directors, and an expanded online presence.
- Design and implementation of faculty development initiatives within the UMMS Simulation Center, including individualized work with faculty and programs seeking to

develop programs specific to their learners' needs within the center.

- Expand ongoing collaborative projects with Academic Computing/Information Services to develop a web-based presence for the faculty development arm of the UMMS Simulation Center.
- Continued collaboration with Information Services to develop and offer workshops on using technology and WebCT in pedagogically sound ways, as well as consultations with individual faculty looking to improve their online teaching.
- Ongoing individualized and intensive faculty and curriculum development with the Year 2 Pharmacology Course, its director and faculty.
- Continued advancement of a learning portfolio initiative, which brings together students, faculty and administrators across undergraduate and graduate programs in the development of student portfolios at our institution.
- Ongoing one-on-one work with faculty in years 1-4 to revise course objectives as part of the Objectives Project, and mapping of those objectives to the medical school's education competencies.
- Continued collaboration with OME-based grant initiatives.
- Ongoing service to the Offices of Faculty Administration and Graduate Medical Education to expand and strengthen existing programs, and develop new initiatives as appropriate.
- Continued collaboration with the Graduate School of Nursing to enhance joint programming with the School of Medicine.

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### **Physician, Patient and Society Course**

- Effective integration of the School of Medicine's new competencies into the PPS course framework.
- Continued collaboration with the OME and its grant initiatives, including Macy and EDCAM, to further strengthen the curriculum.
- Development of an evaluation plan to monitor student progress throughout the two years of the PPS course through checklist assessment, and use of student learning portfolio.
- Development of evaluation and research plan for LPP 1 and 2 reflective write-ups.
- As the High Stakes EOTYA requirement is implemented, enhancement of End of Year 2 PPS exam.
- Participation in the Competency Implementation Project, and support for integration of new competencies into the PPS Curriculum.
- Participation in the roll out of WebCT with migration of PPS course components (PPS 1 and 2 small groups, Epidemiology, Physical Diagnosis 1 and 2, and the Longitudinal Preceptorship Program 1 and 2) with a focus on multi-media resources to support clinical skills teaching and assessment.

### **Interclerkship Program**

- Development of WebCT resources to support the Interclerkship Program. Optimally, this will include access to resources made available to students during each interclerkship. Online registration and online pre/post testing may be a longer term goal.
- Participation in the Competency Implementation Project (CIP), and support for integration of new competencies into the Interclerkship curriculum, with a focus on advocacy across interclerkships in the coming year.
- Organization of a formal meeting of Interclerkship Course Directors to discuss issues

and concerns common to all programs: emerging themes, scheduling and resource issues, evaluation, and peer-reviewed publications.

- Continuation of the current slate of Interclerkships as required programs for all thirdyear students.

#### **Division of Community-Based Education**

- Continue partnership with departments to promote faculty appointments for eligible community-based educators, with the goal of 100 percent of all eligible communitybased educators holding an appropriate faculty appointment.
- Ongoing liaison with administration, faculty and staff from Berkshire Medical Center, the Milford Regional Medical Center/Tri-River Family Health Center and St. Vincent Hospital to facilitate action on areas of identified need.
- Ongoing sponsorship of annual educational summits for each of our major clinical teaching affiliates: Berkshire Medical Center, and Milford Regional Medical Center/Tri-River Family Health Center.
- Continue to facilitate outreach and programming, including: library presentations, faculty development sessions, educational affiliate and community-based education site visits, and development of a mechanism of off-site support.

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- Continue to exercise quality control as it applies to the integration of the Longitudinal Preceptorship Program honorarium payment process to assure timely and efficient compensation to preceptors.

- Maintain an active role with ongoing SOM technical support as it relates to ETAC including:

Ongoing migration of courses and clerkships re: WebCT: e.g. OME-based courses (PPS, interclerkship) and electives (optional enrichment, mini-selectives and senior scholars); use of WebCT and other technology tools for online testing, and expanding online course evaluations; continued support to assist IS/Registrar with enrollment and curriculum data needs.

Clinical Logs Project roll out to all clerkships; progress and refinement of reporting and submission of UMEDS status as part of LCME interim report due in 2007.

#### **Division of Grants and Special Projects**

- Leadership in the solicitation of new grants, providing awards that benefit curricular advancement, innovation and national visibility for the School of Medicine.
- Completion of final year (June 2006) and final grant report for Macy Mentorship Program in Health Communication Education Grant.
- Provision of administrative oversight for implementation of UMass's involvement as lead school for multi-school Massachusetts consortium participation in AMA Medical Education Research Consortium Planning Grant.
- Ongoing implementation of the Educational Development for Complementary and Alternative Medicine (EDCAM) grant initiative.
- Ongoing implementation of integrated sexual health curriculum, to sustain curricular innovation achieved through Pfizer Sexual Health Curriculum Initiative.
- Administrative oversight and support for implementation of student-led AAMC Caring for the Community Grant, Marrow for Tomorrow.
- Completion of final year and final grant report for Stemmler Grant.
- Participation in the UMMS Simulation Center project with leadership role in supporting three innovative curriculum initiatives that utilize the center's simulation resources,

through IMEG grant award program.

- Ongoing leadership in Interdisciplinary Projects and school-wide medical humanities initiatives.
- Ongoing efforts to support mission-critical school-wide projects.

### **Integrated Geriatrics Program**

- Facilitation of interested medical student applicants to the American Federation of Geriatrics Research (AFAR) Summer Internship program at Boston University.
- Redesign of Geriatrics Interclerkship using FY 06 evaluation comments; design FY 07 session with continued emphasis on more advanced level of clinical care content.
- Launch Geriatrics Longitudinal Integrated Theme (LITs) website once construction of interrelated sites are completed and courses are successfully transferred and operational on WebCT.
- Development of key words related to geriatric medicine to be used for searching interactive curriculum database.

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- Work with Nutrition course faculty on integration of geriatrics content; create lecture on Elders and Nutrition to be integrated in future academic years.
- Explore viability of greater integration of geriatrics course content with Pharmacology course director.

### **Senior Scholars Program**

- Increase enrollment of students in the Senior Scholars Program; goal set at approximately 20 percent of the senior class.
- Enhance diversity in project opportunities by including clinician-scientist mentors on the Memorial Campus and departments that have not been well-represented in prior years.
- Continue to increase the scope of committee membership to include representation of all major departments, through direct contact with departmental chairs and center directors.
- Continue recruitment efforts among students in Years 1 and 2 of medical school, especially among those who participated in the Summer Research Fellowship Program as well as among third-year students during the annual Career Day.
- Augment student dissemination of research activity through peer-reviewed publications and presentations at national meetings.
- Collaboration with school-wide initiatives in grant development targeted at promoting recruitment, training and retention of clinician-scientists.
- Participation in the roll out of the Competency Implementation Project, through interface/integration with "Physician as Scientist" competency efforts.

### **Summer Research Fellowship Program**

- Collaboration with school-wide initiatives in grant development targeted at promoting recruitment, training and retention of clinician-scientists.
- Participation in the post-retreat roll out of the Competency Implementation Project, through interface/integration with the "Physician as Scientist" competency efforts.

### **International Medical Education Program**

- Implementation of Healy and Public Service Endowment grants.
- Advise the UMass Rotaract Club and their implementation of service projects locally and abroad.
- Collaboration with the POLUS Center on projects in Nicaragua and an evolving relationship with the National Autonomous University of Nicaragua.

- Collaboration with school-wide initiatives in grant development targeted at promoting advocacy, service-learning, and cross-cultural educational programs.
- Participation in the Competency Implementation Project, including interface/integration with the "Physician as Advocate" competency efforts.
- Conduct a qualitative study on the effect of the Pathway program on students.
- Add GSN students to the Pathway program.

#### **Generalist Physician Program**

- Maintain activity in the areas of primary care and community service to meet the needs of underserved communities, to preserve UMMS's consistently high performance indicators in these areas.

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- With leadership provided by two second year medical students, continue to collaborate with other UMMS student groups who share an interest in expanding learning opportunities related to generalism in medical education.

#### **Community Service Assistantship Program**

- Maintain or increase the number of first-year students participating in the Summer Community Service Assistantship Program, contingent upon securing additional funding.
- Maintain activity in the areas of community service, service-learning, and meeting the needs of underserved communities, to preserve UMMS's consistently high performance indicators in these areas.
- Participate in the Competency Implementation Project through interface/integration with "Physician as Advocate" competency efforts.

#### **Central Massachusetts Schweitzer Fellowship Program**

- Maintain the current level of medical student participation in the Schweitzer Fellowship Program.
- Expand the program scope to include other schools and professions.
- Secure financial support for the program, through collaboration with school-wide initiatives targeted at promoting advocacy, service-learning, and community service opportunities.
- Participate in the Competency Implementation Project through interface/integration with "Physician as Advocate" competency efforts.

#### **Office of Admissions**

- Implementation of a totally paperless online medical school application process.
- Continued training of applicants, committee members and interviewers in the use of the electronic application system.
- Support of UMMS educational programs through proactive communication and dissemination to the UMMS applicant pool.
- Continued development and expansion of the pool of out-of-state MD/PhD applicants.
- Addressing space and other infrastructure needs to support and facilitate the migration to the totally electronic application.
- Selection of the best possible class for entering UMMS in August 2006.

#### **Standardized Patient Program**

- Continued growth and expansion of Standardized Patient Program services to the UMMS community, including the School of Medicine, Graduate School of Nursing, and Graduate Medical Education.
- Continued collaboration with and expansion of SP services to Harvard University, Boston University, Brown Medical School, Tufts University, Northeastern University,

University of New Hampshire, Harvard Vanguard and Harvard Medical International.

- Implementation of AY 06-07 High Stakes End of Third Year Assessment (EOTYA).
- Continued refinement and implementation of remediation and retest program for High Stakes EOTYA in collaboration with Clerkship Directors and Division of Research and Evaluation.

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- Ongoing expansion and refinement of SP programming to support the EOTYA, all clerkships, and the PPS course, in order to best prepare UMMS students for USMLE Step 2 clinical skills assessment.
- Participation in the Competency Implementation Project through interface/integration with efforts related to clinical skills teaching and assessment.
- Continued collaboration with new grant initiatives housed in the OME as well as schoolwide.

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## **OFFICE OF MEDICAL EDUCATION DIVISIONS**

### **DIVISION OF RESEARCH AND EVALUATION**

MARY L. ZANETTI, EDD, DIRECTOR

#### **Mission and Goals**

The goal of the Division of Research and Evaluation is to provide direction and support to faculty and administrators in the areas of student assessment, curriculum evaluation, and medical education research. The division serves the research and evaluation needs of the School of Medicine, Graduate School of Nursing, Graduate School of Biomedical Sciences, Office of Graduate Medical Education, and a number of other school offices including Equal Opportunity Office and Human Resources. The division is responsible for gathering, analyzing, and reporting the data which supports a number of critical functions outlined in the medical school's mission including student exams and grading, administrative reporting (e.g. educational performance measures and quality indicators for mission-based management), course evaluation, accreditation for LCME and NEASC, and outcomes to support grants and scholarly activity. In the area of assessment the division provides consultation on test construction, scores examination data, conducts item and test analyses, and produces reports for students and faculty. In the area of curriculum evaluation, the division provides instrument design and production services, data analysis, evaluation, interpretation of results, and reporting. The division conducts research in medical education, providing consultation on and assistance with research design, instrument design, data collection and analysis, interpretation of results, and preparation of abstracts and papers for submission to peer-reviewed journals and conferences.

#### **Performance Indicators**

- The division was exceptionally productive in medical education research, resulting in a significant number of publications, presentations and submissions.
- UMMS ranked second in a three-way tie among all medical schools in the number of AAMC Research In Medical Education (RIME) and Group on Educational Affairs (GEA) presentations at the 2005 AAMC Annual Meeting (Table 11).
- The reputation and visibility of UMMS as an institution of national distinction was promoted through over 20 peer-reviewed publications and presentations at regional, national and international meetings (Table 13A and B).

## **FY 06 Summary**

### **Quality Assurance for School of Medicine Educational Program**

- Continued data collection for the longitudinal student database which brings together information from multiple sources, including student demographic data, admissions data, MCAT scores, UMMS grades, course and clerkship evaluation results, Association of American Medical Colleges (AAMC) Matriculation and Graduation Questionnaires, National Board of Medical Examiners (NBME) Step 1, 2, and 3 scores and residency match information reporting. This comprehensive database provides information necessary to evaluate the impact of curricular and policy changes.

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- Continued expansion and shortened turnaround time connected to administration of all end-of-course, clerkship, and elective evaluations in web-based delivery format and maintenance of procedures for protecting the security and integrity of data. Several new evaluations were created including Walk in my Shoes, Family Medicine Subinternship and Medicine Subinternship with corresponding reports as well as new Aggregate Subinternship and Cross-Site Elective reports.

- Expanded evaluation of Optional Enrichment Electives to include all AY 05-06 courses.

- Comprehensive monitoring of students' perceptions of the quality of medical education at UMMS through self-report evaluation of skills at the end of second, third, and fourth years. In collaboration with the Office of Graduate Medical Education, continued implementation of a survey of post-graduation plans with fourth year students to gather objective data on rates of student acceptance into first-choice residencies and assess student perceptions of UMMS residency programs.

- Continued updating and tracking of long-term outcomes to assess student performance and educational quality measures beyond graduation. Now in its sixth year, this tracking system consists of a survey of UMMS graduates at the end of their internship year to assess satisfaction with their medical education and preparedness for residency, and a survey of residency program directors at the end of the PGY1 year to obtain objective measures of UMMS graduates' preparedness for residency (Tables 3, 4).

- Successfully recruited and retained an Administrative Assistant and an Evaluation Coordinator.

### **Report on behalf of UMMS to Accrediting and Oversight Bodies and Other External**

#### **Entities (LCME, AAMC, NBME, U.S. News & World Report)**

- Division responsible for the preparation of various annual reports (e.g., LCME Annual Survey, U.S. News & World Report) including retrieval from national and institutional databases, interpretation of results, and report writing.

#### **Grant and Scholarly Activity**

- Promotion of the reputation and visibility of UMMS as an institution of national distinction by supporting medical education research and scholarly activity in publications and through peer-reviewed presentations at national meetings.

- Provision of ongoing essential support for the research and evaluation component of OME's grant-funded projects, including the Stemmler grant, the AMSA EDCAM grant, and the Macy Mentorship Program in Health Communication Education through online survey development, focus group sessions, telephone interviews, evaluation data collection and management, and outcomes analysis. Ongoing maintenance and dissemination of Macy Authorship and Publication Subcommittee materials for 8 Macy

teams including school-specific and multi-institutional tracking of grant publications and presentations. Development and implementation of one-day publication workshop for Macy participants.

### **Edward J. Stemmler Medical Education Research Grant**

The Edward J. Stemmler, MD Medical Education Research Fund of the National Board of Medical Examiners (NBME) awarded UMass a 2-year grant in support of the research project entitled 'Using Standardized Patients to Assess Professionalism: A Comparative OME ANNUAL REPORT FY 06

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Analysis of Two Approaches." The purpose of the study is to investigate the usefulness of Standardized Patients (SP) in the assessment of unprofessional behavior. The Stemmler initiative is integrated within the infrastructure of the Office of Medical Education, with Michele Pugnaire, MD, serving as Principal Investigator, and Mary Zanetti, EdD, Director of Research and Evaluation Division, providing oversight and leadership of this project. Other key personnel include Drs. Eric Alper and Kathy Mazor as Co-Principal Investigators, and Emily Ferrara, MA, Director of Grants and Special Projects, Wendy Gammon, MEd, Director of Standardized Patient Program; and David Hatem, MD, Director of the PPS Course. Highlights of FY 06 Stemmler Grant activities, undertaken by the division included:

- Coordination and facilitation of several meetings to finalize the completion of the study.
- Final data collection and analyses of student performance outcomes.
- Preparation of Final Report for submission to NBME.

### **Student Performance Assessment for School of Medicine**

- Construction of checklists and completion of scanning, scoring, and reporting for the High Stakes End of Third Year Assessment (EOTYA) in May and June 2006. In addition, continued the task of scheduling faculty facilitators for EOTYA training sessions, mock exam, and the annual performance assessment.
- Construction of checklists and completion of scanning, scoring, and reporting for the EOTYA Retest, which occurred in January, May, and June, 2006. In addition, continued the task of scheduling faculty facilitators for EOTYA Retest.
- Ongoing development and implementation of an annual Standard Setting procedure for the EOTYA and the EOTYA Retest.
- Construction of OSCE checklists and completion of scanning, scoring, and reporting for each of 4 blocks in Medicine and Surgery Clerkships (new for AY 05-06). Frequent meetings were conducted to develop scoring rubrics and to review results with Surgery Clerkship Director.
- Ongoing use of LXR6 exam software to continue efforts to produce score reports more efficiently and consistently in a user-friendly manner. Facilitated the development and dissemination of new student Exam ID codes warranted by increase in identity theft (related to use of SSN) concerns.
- Continued improvement of the quality of examination results to faculty. The division worked with faculty to further promote use of item-analysis reports including distractor analysis and showed how these analyses may be used to improve the quality of exam items. An additional measure of item quality, the Index of Discrimination (D), was calculated and dissemination was expanded to two School of Medicine courses to determine if this statistic would increase utilization of the item-analysis reports. The division continued to promote the use of the two recent additions to the item-analysis report entitled "Description of Terminology used in the Item Analysis Report on Exam Scoring" and "Summary of Challenge Items."

- Analyzed results and prepared a report based on a survey administered to first and second year faculty which measured their use and views of services relating to item analysis and test scoring reports. The survey included a variety of questions about the usefulness of the item analysis report and the impact that the item analysis had on their test construction and teaching methods. In addition, prepared manuscript based on results and submitted for publication.

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- Continued to prepare a Final Course Grade Report for Year 1 and 2 Curriculum Committees with dissemination occurring in Fall 2006. A formal presentation of AY 04-05 Final Course Grade Reports occurred in September 2005. In addition, based on feedback from the first annual meeting with course representatives, continued to develop materials and scheduled second annual meeting to address needs, with focus on exam procedures for AY 06-07.
- Continued expansion of analyses and reporting of Multi-Systems II sessions to include long-term effects of the first session as well as the combined effects of both sessions on student confidence.

#### **Administrative Service to UMMS**

- Ongoing activities to continually develop, implement, maintain, and monitor web-based evaluation tools and surveys that yield a relational database containing information about survey features and respondent data. This permits the establishment of a library of evaluation instruments and items from which new tools can be constructed. A Sequel database continues to be successfully utilized with ongoing cross training of division personnel.
- Continued expansion and refinement of the current dissemination process in which evaluation results are delivered (now in PDF format) to faculty and administration within the School of Medicine with new components added regularly to this well-established process.
- Ongoing maintenance to the Grade Book component of the Student Administration Module with specific attention given to aligning the batch uploading of exam scores with Peoplesoft 8.0.
- Developed new online admissions applicant survey to assist in tracking matriculation decisions of accepted medical students with analysis and reporting occurring on an annual basis.
- Participated in the WebCT migration including assessment and course and clerkship evaluations. All R & E personnel successfully completed Part 1, Part 2, and Assessment tool training. R & E development of exam/assessment for Biochemistry occurred in June 2006 with planned student use in August 2006. Participated in ongoing feasibility study regarding the use of WebCT for course and clerkship evaluations. Participated in multiple Webinars which discussed various computer-based testing issues.
- Refined and pilot tested UMEDS/Clinical Logs Project, with ongoing development and expansion planned including institutional reporting, and cross-clerkship and cross-site data tracking.
- Provision of ongoing evaluation support for the Competency Implementation Project, including development of survey tools, data collection, analyses, and preparation of reports (e.g., faculty and student surveys, individual curriculum projects, retreats) with several presentations made to institutional committees.
- Provision of ongoing evaluation support for activities occurring in the UMMS

Simulation Center including early discussions about use of BLine as an evaluation tool.

• All R & E personnel participated in Adobe Acrobat training.

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### **Research and Evaluation Services to Other Schools and Offices**

**Office of Student Affairs:** Provision of services connected to web-based First Year Orientation Evaluation and ongoing refinement of web-based survey and collection procedures for students and faculty regarding the medical school Honor Code.

**Human Resources (HR):** Transitioned to a more uniform evaluation form for specific courses in 3 HR programs (including a new HR Orientation survey). Analyzed and reported on 13 sets of certification program course evaluations for HR Workplace Learning. Created sample Excel spreadsheet and corresponding graphs for HR use in tracking certification program course evaluation responses with remaining reporting processes still to be determined. Developed a comprehensive online competency survey. After pilot testing this survey, dissemination occurred to a wide range of HR employees. The statistical analysis and creation of individual and aggregate reports were developed and disseminated in February 2006 with the same services continuing on a quarterly basis.

**Graduate School of Biomedical Sciences (GSBS):** Provision of services in preparation of

online evaluation forms including respective analyses and reports for the First Year Core Curriculum. Consulted with Dean to develop, disseminate, analyze, and report on 3 pilot online program evaluation surveys to all faculty, teaching faculty, and students, with plans to disseminate final version during FY 07.

**Graduate School of Nursing (GSN):** Successfully converted from 3 semesters to 2 semester schedule while continuing expansion of services in preparation of evaluation 'bubble' forms, web-based surveys, and respective analyses and reports, including 65 course, teacher, and clinical site evaluations as well as GSN alumni surveys for 2 cohorts. In addition, further expanded LXR6 exam services to Graduate School of Nursing (including new GEP program) to include scanning, scoring, and analysis of exams with an individualized item-analysis report prepared for exams in both GSN and GEP. In addition, rescoring of exams is now available, which increased the number of total GSN exams processed. Facilitated the development of new student Exam ID codes warranted by increase in identity theft (related to use of SSN) concerns. Conducted an Item Writing Workshop for GSN faculty. Constructed new checklists and scanned, scored, and analyzed multiple OSCE's for GSN.

**Office of Graduate Medical Education:** Preparation of Graduate Medical Education Core

Curriculum Conference evaluation 'bubble' forms and newly created Program Directors' Retreat paper evaluation, in addition to analysis of results and preparation of reports.

**Brown University:** Construction of checklists for OSCE's occurring at Brown University, coordinated by the UMMS Standardized Patient (SP) Program.

**Northeastern University:** Construction of checklists, analysis of results, and preparation of multiple reports for multiply OSCE's occurring at Northeastern University, coordinated by the UMMS SP Program.

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### **FY 07 Goals/Objectives**

- Enhancement of the quality of examination results to faculty, promoting increased use of item-analysis reports including distracter analysis to improve the quality of exam items.
- Ongoing identification, development, and implementation of web-based evaluation tools and surveys that yield a relational database containing information about survey features and respondent data.
- Expansion of division services to meet the augmented requirements for the Graduate School of Nursing and the Graduate School of Biomedical Sciences, as their programs and class sizes continue to grow. This will include exam scoring as well as course and program evaluation.
- Continued provision of support to the OME's major grant initiatives (e.g., Macy, EDCAM), through evaluation data collection and management, outcomes analysis, dissemination and publication activities.
- Provision of support to UMMS' grant initiatives (e.g., CTSA, Attorney General Consumer & Prescriber Education Grant), currently in development stage, to include evaluation data collection and management, outcomes analysis, and dissemination activities.
- In collaboration with Information Services, continue to implement, trouble shoot, and monitor Peoplesoft with a particular focus on the Gradebook module.
- Successful implementation of the new performance standards and execution of the data analyses and reports required for the High Stakes EOTYA, including the EOTYA Preparation Program, and EOTYA Retest.
- Participation in the WebCT migration with a leadership role in the area of assessment, including course and clerkship evaluation and computer-based testing.
- Participation in the UMEDS/Clinical Logs Project, with a leadership role in the area of institutional reporting, and cross-clerkship and cross-site data tracking, in collaboration with Information Services.
- Participation in ongoing evaluation support for the Competency Implementation Project.
- Participation in the UMMS Simulation Center project with leadership role in the area of evaluation including use of BLine as an evaluation tool.

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### **END OF THIRD YEAR ASSESSMENT (EOTYA)**

SARAH MCGEE, MD, MPH, DIRECTOR

#### **Mission and Goals**

The goal of the End of Third Year Assessment (EOTYA) is to assess students' clinical skills competencies and assure that students achieve competency standards as a requirement for graduation from UMMS. The new 'high stakes' requirement for the EOTYA was established in March 2005 and implemented with the AY 05-06 EOTYA, conducted in May and June 2006. The major goals during AY 05-06 were to: develop and roll out the EOTYA Retest for those students who did not meet competency standards in the pilot EOTYA administered in May and June 2005; and refine the 8-station EOTYA for the inaugural year of implementation as a 'high stakes' requirement in May and June 2006.

Clinical skills competencies evaluated as part of the EOTYA include: history taking, physical assessment, interviewing and communication skills, clinical problem-solving, and professionalism. This important educational activity allows students to self assess their

clinical skills as well as to prepare them for the USMLE Step 2 Clinical Skills Exam. Additionally, clerkship directors are provided with feedback regarding the effectiveness of the third year curriculum in developing students' clinical skills competency and their performance preparedness for clinical skills assessments.

### **Performance Indicators**

- Percentage of UMMS students passing USMLE Step 2 Clinical Skills Exam in AY 05-06 was 100 percent.
- 100 percent of participating faculty agreed or strongly agreed that the EOTYA was a reasonable test of students' ability to obtain a focused history and communicate with patients. 91 percent of participating faculty agreed or strongly agreed that the EOTYA was a reasonable test of students' ability to perform a relevant physical exam.
- All students completing the newly developed "Individualized Educational Plan" process successfully met competency standards on the EOTYA Retest, administered January-May 2006.

### **FY 06 Summary**

- In order to address the needs of students who did not meet competency standards on AY 04-05 Pilot EOTYA, an "Individualized Educational Plan" process was developed and implemented in partnership with the Center for Academic Achievement during the fall of 2005. Students expressed general satisfaction with the structure and content of this inaugural program. All students completing the IEP process successfully met competency standards on the EOTYA Retest, administered January through May 2006.
- In collaboration with the Standardized Patient Program, the Division of Research and Evaluation, and the Clerkship Directors, a 5-station EOTYA Retest was developed during the fall of 2005, and piloted during January-May 2006 for the 25 students who did not meet competency standards in the AY 04-05 Pilot EOTYA. The EOTYA Retest

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involved development of 5 new clinical skills assessment stations, and participation by 11 faculty facilitators.

- New cases for the AY 05-06 High Stakes EOTYA. were developed by Clerkship Directors and the Standardized Patient Program. Major case enhancements were achieved through the development of a standardized format to establish uniform expectations and tasks for students across all 8 cases in the following areas: history taking, physical assessment, medical interviewing and clinical problem solving.
- In order to enhance the quality of the EOTYA for its inaugural year as a 'high stakes' assessment, a mock EOTYA was conducted to promote consistency of SP performance, and to fine-tune checklists and documents. The mock EOTYA was held May 9, 2006 prior to the AY 05-06 High Stakes EOTYA, utilizing 14 SP's and 8 fourth year students. Participants included 5 clerkship directors, 6 case authors and 2 other faculty who observed the encounters and provided feedback to SP's regarding their portrayal of each case.
- Formal faculty development sessions were offered in small group format to prepare faculty facilitators to serve as observers in the AY 05-06 High Stakes EOTYA. Those faculty unable to attend small group sessions were offered individual preparation sessions.
- The AY 05-06 High Stakes EOTYA was conducted in May and June 2006; (12 sessions, each session was six hours in length) participants included 94 students, 25 SP's and 29 faculty facilitators.

- Simulation technology was incorporated into three cases of the AY 05-06 High Stakes EOTYA utilizing a pediatric mannequin, a pelvic model and an adult mannequin.
- A new holistic rating of students' performance completed by faculty and a new format for post encounter paperwork for students was piloted during the AY 05-06 High Stakes EOTYA.

#### **FY 07 Goals/Objectives**

- Continued development, refinement and implementation of Individualized Educational Plans with the Center for Academic Achievement for students not meeting competency standards on the AY 05-06 High Stakes EOTYA.
- Continued development and enhancement of the EOTYA Retest with Clerkship Directors, Standardized Patient Program, and Division of Research and Evaluation with an increase in the number of SP cases from 5 to 7.
- Revision of the piloted post encounter paperwork from the AY 05-06 EOTYA.
- Enhancement of the faculty holistic rating utilized as part of the AY 05-06 EOTYA
- Continued use and improvement of integration of simulation with the EOTYA.

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## **OBJECTIVES PROJECT**

SARAH MCGEE, MD, MPH, DIRECTOR

### **Mission and Goals**

The goal of the Objectives Project is to comprehensively review, revise and update the learning objectives for all courses and clerkships to be consistent with the new competencybased

curriculum and with LCME standards. Learning objectives need to include evaluation to ensure that the objectives are measurable. Use of performance-based assessments is encouraged. Learning objectives will be mapped to the six UMMS competencies as well as the Clinical Logs database, and the preclinical and clinical databases, to ensure that the competencies are being attained by all UMMS students.

### **FY 06 Summary**

- In collaboration with Susan Pasquale, PhD, Division of Curriculum and Faculty Development, brief presentations regarding the Objectives Project were made to the 1<sup>st</sup> and 2<sup>nd</sup> year Curriculum Committees, the Clerkship Directors Group and the Clinical Years Committee.
- Dr. Pasquale developed a one-page 'Guide to Writing Learning Objectives' for distribution to course and clerkship directors.
- Individual meetings to provide feedback and suggestions for revision of course learning objectives were held with six course directors from Year 1 and three course directors from Year 2. Subsequent communication with course directors regarding further revisions of their learning objectives was done via email.
- Completed revised learning objectives have been posted on WebCT for three courses in Year 1 and for one course (1 block) in Year 2.
- Clerkship Directors Group developed common learning objectives for the Third Year. They requested to postpone revision of individual clerkship learning objectives until the UMEDS project was implemented.

### **FY 07 Goals/Objectives**

- Ongoing progress in the roll out of the Objectives Project with a specific focus on performance-based measures to support learning objectives, in partnership with the

leadership of the curriculum committees, the leaders of the Clerkship Directors Group and the Clinical Years Committee.

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## **DIVISION OF CURRICULUM AND FACULTY DEVELOPMENT**

SUSAN PASQUALE, PHD, MT-BC, NMT, DIRECTOR

### **Mission and Goals**

The goal of the Division of Curriculum and Faculty Development is to strengthen and expand curriculum and faculty development initiatives at the medical school and its clinical affiliates, supporting and advancing the school's educational mission. The division provides medical education services to the Offices of Faculty Administration and Graduate Medical Education with a focus on designing and implementing curriculum and faculty development programs, and collaborates on curricular and faculty development initiatives with the Graduate School of Biomedical Sciences and the Graduate School of Nursing. The division works in collaboration with administrators, faculty, students, other UMass schools and campuses, and universities throughout the country to design, implement, and assess new courses and curricula, innovative teaching methods, leadership and change strategies, and online learning and educational technology initiatives. It provides group and one-on-one consultation to faculty seeking to enhance their face-to-face and online teaching and student learning; designs and conducts research (e.g., presentations and publications) in medical education as relates to all areas of teaching and learning; and provides consultation to and collaborates with faculty seeking to do the same.

### **Performance Indicators**

- Establishment of new and enhanced courses and projects including 10 Curriculum Development Awards, and 16 Optional Enrichment Electives (Tables 30-34).
- New technology-based curricular enhancements for laptops in courses, clerkships and school-sponsored educational programs, (lectures, small groups, labs, computer testing) developed by 19 faculty for use in over 60 courses, programs, and events.
- Collaboration with the Vice Chancellor for Faculty Administration and Interim Provost, and Office of Faculty Administration, in the development and implementation of a nationally recognized integrated and sequenced program of over 65 faculty development offerings for faculty, attended by approximately 500 different faculty, many attending up to 4 different workshops. Related activities include: one-on-one consultation sessions with over 50 faculty, and presentation of 12 faculty development workshops on institutional and national levels.
- Advanced an ongoing and robust collaboration with Information Services, with over 15 yearly workshops and workshop series on using technology and WebCT in pedagogically sound ways.
- Brought together faculty from various specialties to develop and run an innovative course for fourth-year students which actively involves learners across the continuum, from second- and third-year medical students to residents, all working with the course participants to help them acquire key knowledge and skills necessary for residency. This course was recently accepted as a peer-reviewed presentation at an international medical education conference, as well as the annual meeting of the Association of American Medical Colleges.

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- Promoted the representation of UMMS to regional and national organizations by the following appointments: Manuscript Reviewer for Journal of the International Association of Medical Science Educators and MedEdPORTAL; Board of Directors of the International Association of Medical Science Educators; Chair, Planning Committee of the International Association of Medical Science Educators; Member of the Program Committee of the International Association of Medical Science Educators; Advisory Board, the Institute for Music and Brain Science of Massachusetts General Hospital/Harvard Medical School; University of Massachusetts Representative to the Colleges of the Worcester Consortium Faculty Development Committee; University of Massachusetts 5-Campus Cabinet, UMass Worcester Representative to the E-learning Cabinet, Faculty Engagement and Scholarship of Teaching & Learning Working Group, E-learning Cabinet, and Course and Curriculum Redesign Working Group; Macy Mentorship Program Mentor to the University of Vermont Medical School Technologyrelated

Project – *Building Learning Communities Across Geographic Barrier: Standardizing Communication Assessment of Tomorrow's Physicians*; Board of Advisors, College of Arts and

Sciences – Division of Sciences, University of Massachusetts-Lowell.

- Collaborated with the Associate Dean of Graduate Medical Education in the design, implementation, and enhancement of residency teaching and the residency curriculum, both face-to-face and online, with attention to accreditation standards and competencies.
- Enhanced coordination and development of 4<sup>th</sup>-year one-week mini-selectives elective course to students during FY06, with an enrollment of 7 medical students in each course and 6 GSN students (Table 34).
- Lead advancement of a learning portfolio initiative, which brings together students, faculty and administrators across undergraduate and graduate programs in the development of student portfolios at our institution.
- Scholarly dissemination through peer-reviewed presentations and publications with the following presentations in FY 06:

Bonaminio G, Jeffries WB, **Pasquale SJ**, Huggett KN. (2006). Mission Impossible? How to Respond When Your Assignment is Curricular Change, 11<sup>th</sup> Annual Meeting of the International Association of Medical Science Educators, Cleveland, OH. (*accepted for presentation*)

Quattrochi J, Ham W, **Pasquale S**. (2007). Innovating Faculty-Student Partnerships of Practice in Medical Education: Interactive Case-based Online Network (ICON). 11<sup>th</sup> Annual Meeting of the International Association of Medical Science Educators, Cleveland, OH. (*accepted for presentation*)

Bonaminio G, Jeffries WB, **Pasquale SJ**, Huggett KN. (2006). Curriculum Reform: Evolution or Intelligent Design? Annual Conference of the Association of American Medical Colleges, Seattle, Washington.

Blatt B, Kosowicz L, **Pasquale S**, Pretorius R, Newman L, Clifton M, Bensinger L, Soriano R, Mechaber A, Saks N, Cichoski-Kelly E, Rosen J. (2006). Bringing out the ED in MED: The latest on medical students-as-teachers programs. Annual Conference of the Association of American Medical Colleges, Seattle, Washington.

**Pasquale S**, Cukor J, Larkin A. (2006). A Longitudinal Resident as Teacher Course Spanning Undergraduate and Graduate Medical Education. Poster, 2006 Conference

of the Association for Medical Education in Europe, Genoa, Italy.

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Chauvin S, **Pasquale S.** (2006). Facilitating Scholarship in Your Teaching and Educator Roles. 10<sup>th</sup> Annual Meeting of the International Association of Medical Science Educators, San Juan, Puerto Rico.

**Pasquale S,** Chauvin S. (2006). What are Teaching Portfolios and Why Do I Need One? 10<sup>th</sup> Annual Meeting of the International Association of Medical Science Educators, San Juan, Puerto Rico.

## **FY 06 Summary**

### **Curriculum Development Enhancements**

- Ten curriculum enhancement proposals were submitted by 11 faculty for funding through the Curriculum Development Fund; all were approved and implemented in FY 06. Ongoing consultation was provided to support related faculty efforts (Table 30).
- New technology-based curricular enhancements for laptops in courses and clerkship and school-sponsored educational programs, (e.g., lectures, small groups, labs, computer testing) developed by 19 faculty for use in over 60 courses, programs and events.
- Enhanced coordination and development of 4<sup>th</sup> year one-week mini-selectives elective course to students during FY 06. Enhancements included: increased integration and sequencing of course content across the four courses; opportunities for students to select courses in which they had most interest; inclusion of Graduate School of Nursing students in 3 of 4 courses; increase in quantity and quality of course information available on the OME web page to students and faculty prior to registration. The FY 06 mini-selective topics included: Laboratory Medicine for the Clinician; Teaching and Learning in Residency: Maximizing Your Residency Experience; Emergency Medicine; and Urgent Medical Problems: Preparation for Internship, with an enrollment of 7 medical students in each course and 6 GSN students (Table 34).
- Continued curricular development of the 'Teaching and Learning in Residency: Maximizing Your Experience' 4<sup>th</sup> year mini-selective. Student evaluations indicated that 100 percent of students "agreed" or "strongly agreed" that this mini-selective is a valuable experience and provides useful knowledge and skills to improve their teaching and leadership roles during residency. The curriculum of this selective course has been presented at a peer-reviewed international conference.
- Continued advancement of a policy and procedures document for the Optional Enrichment Electives (OEE), a formal elective program administered by the division. Sixteen OEE's were offered in FY 06. Strengthened the online information available for the electives, and created an evaluation form for the OEE that has been used by each course (Table 33). Policy and procedure of the OEE's was further clarified in distributed documentation.
- Collaborated with the Associate Dean of Graduate Medical Education in the development, implementation, coordination and enhancement of residency teaching and the residency curriculum, with regard to accreditation standards and competencies.
- Provision of medical education consultation to the following groups and/or projects:
  - Migration and redesign of its core curriculum offerings in WebCT, development of an online orientation for new residents; a workshop series for the Anesthesiology Residency, with a focus on teaching, learning, and leadership in the residency years. The three workshops in the series were: Clinical Teaching; Giving and Receiving

Constructive Feedback; and Leadership.

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Provided one-on-one consultation services to the Year 2 Pharmacology Course Director and course faculty to strengthen teaching and curricular design of the course throughout the Spring 2006 semester. Had weekly meetings with course director, periodic meetings with course faculty and with students, and attended 45 course lectures from January through April 2006. Also helped the course director and course faculty design and implement small group problem solving sessions in the course.

Provided direct consultation to the Anesthesiology and Surgery residency programs regarding design and implementation of increased educational programming.

Provided consultation to Years 1-4 course faculty, in groups and on an individual basis, to review and re-work as needed, current objectives and curricula, as is relevant to ongoing curriculum reform in light of our institution's new competencies.

Provided ongoing one-on-one consultation to seven faculty, in addition to a faculty workshop, with respect to development of their academic portfolios for promotion.

Ongoing consultation provided to course faculty regarding various aspects of face-to-face and online course design and teaching/learning issues; and research design.

### **Faculty Development**

Over 65 faculty development programs and activities attended by approximately 500 faculty were developed and conducted in a wide range of venues and audiences, as well as one-on-one

consultation sessions with over 50 faculty:

- Developed and implemented faculty development programs within and across the three UMass schools. Workshops included: Developing your Academic Portfolio for Promotion; Building and Leading Research Teams; Advancing Your Presentation Skills; Advanced Skills for Your Presentation Toolbox: A Working Group for the Practiced Presenter; Clinical Teaching; Giving and Receiving Constructive Feedback; Leadership; Student Learning Portfolios; Mentoring and Supporting Junior Faculty; WebCt Introduction and Best Practices for Online Teaching – Part I; Assignments is the Tool, Pedagogy is the Rule; Complementary and Alternative Medicine: Neurologic Music Therapy.

- Ongoing faculty development service to the Office of Faculty Administration, as Director of Faculty Development in the development and implementation of its nationally recognized integrated and sequenced program of over 65 faculty development offerings for faculty focused on four central themes: technology, teaching, research, and leadership. As part of this program, present workshops to faculty groups across the institution in the School of Medicine, Graduate School of Nursing, and Graduate School of Biomedical Sciences. The program offers faculty the opportunity to optimally combine and tailor workshop offerings, to best meet their personal and professional development needs.

- Ongoing faculty and curriculum development service to the Office of Graduate Medical Education, including migration and redesign of its core curriculum offerings in WebCT; development of an online orientation for new residents; a workshop series for the Anesthesiology Residency, with a focus on teaching, learning, and leadership in the residency years.

- Lead advancement of a learning portfolio initiative, which brings together students,

faculty and administrators across undergraduate and graduate programs in the  
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development of student portfolios at our institution. This work is informed by the division director's service on a 5-campus working group on e-Portfolios and attendance at a number of e-Portfolio workshops.

- Ongoing one-on-one work with faculty in years 1-4 to revise course objectives as part of an Objectives Project initiative, and mapping those objectives to the medical school's education competencies.

### **Academic Computing-Technology Enhancements**

The division collaborated with Academic Technology/Information Services in the following projects:

- Populate and oversee the Association of American Medical College's (AAMC's) Curriculum Management and Information Tool (CurrMIT) with respect to UMMS course information data.
- Continued in a consultation role for the Surgery Clerkship's webpage development.
- The online Resident Orientation for the Office of Graduate Medical Education and its residents, as that office continues its work with respect to the Accreditation Council for Graduate Medical Education (ACGME) competencies. Collaborate with Academic Computing in the migration and redesign, as needed, of the web-based core curriculum modules.
- 'Advanced Skills for Your Presentation Toolbox: A Working Group for the Practiced Presenter'. This series for faculty was designed and implemented in conjunction with faculty from Academic Computing and the Office of Faculty Administration.
- Teaching 15 WebCT "Introduction and Best Practices for Online Teaching – Part I" workshops to approximately 275 faculty and staff. Continued collaboration with Information Services in developing and offering workshops and workshop series on using technology and WebCT in pedagogically sound ways, as well as consultations with individual faculty looking to improve their online teaching.

### **Additional Projects and Activities**

- Editor of the Office of Medical Education's annual newsletter, in collaboration with the Office of Public Affairs and Publications.
- Successfully completed all requirements in an intensive, month-long face-to-face- and online program to become a WebCT Certified Senior Trainer.
- Small group faculty for the Domestic Violence Interclerkship.
- Small group faculty leader, for the fifth consecutive year, for the Year 1 Physician, Patient and Society Course.
- Faculty and co-director, for the sixth consecutive year, of the 4<sup>th</sup> year selective course: Teaching and Learning in Residency: Maximizing Your Experience.
- Worked with faculty in the design of proposals being submitted to the IMEG Program, and served as an IMEG reviewer.
- Served as a reviewer for peer-reviewed publications venues: MedEd PORTAL and *Teaching and Learning in Medicine: An International Journal*.
- Macy Mentorship Program Mentor to the University of Vermont Medical School Technology-related Project – Building Learning Communities Across Geographic Barrier: Standardizing Communication Assessment of Tomorrow's Physicians.

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- Collaborated with the other four UMass campuses on a variety of inter-campus working committees and task forces relating to teaching and learning, and technology. The cabinets and working groups were: Colleges of the Worcester Consortium Faculty Development Committee; University of Massachusetts 5-Campus Cabinet, UMass Worcester Representative to the E-learning Cabinet; Faculty Engagement and Scholarship of Teaching & Learning Working Group; and Course and Curriculum Redesign Working Group.
- Presentation of a workshop to UMMS medical students and other allied health professionals on the application of neurologic music therapy to sensorimotor, speech/language, and cognitive dysfunction due to neurological diseases or injuries of the human nervous system.

### **FY 07 Goals/Objectives**

- Continued expansion and strengthening of collaborations with other UMass campuses and other medical schools to design, implement, and assess new courses and curricula, innovative teaching methods, leadership and change strategies, and online learning and educational technology initiatives. Division director's ongoing work with faculty and programs from the other four UMass campuses, and continued service on 5-campus cabinets and working groups will enhance this work.
- Expanded service to the Office of Faculty Administration to expand and strengthen existing programs, and design and implement new faculty development initiatives.
- Continued development and integration of the month-long 4<sup>th</sup> year mini-selectives elective, including an increased online presence and increased participation of medical students and residents.
- Ongoing quality enhancement and coordination of the Optional Enrichment Electives courses, including increased communication with and among course directors, and an expanded online presence.
- Design and implementation of faculty development initiatives within the UMMS Simulation Center, including individualized work with faculty and programs seeking to develop programs specific to their learners' needs within the center.
- Expand ongoing collaborative projects with Academic Computing/Information Services to develop a web-based presence for the faculty development arm of the UMMS Simulation Center.
- Continued collaboration with Information Services in developing and offering workshops and workshop series on using technology and WebCT in pedagogically sound ways, as well as consultations with individual faculty looking to improve their online teaching.
- Ongoing individualized and intensive faculty and curriculum development with the Year 2 Pharmacology Course, its Director and faculty.
- Continued advancement of a learning portfolio initiative, bringing together students, faculty and administrators across undergraduate and graduate programs in the development of student portfolios. Work with this initiative will continue to be informed by division director's service on a 5-campus working group on e-Portfolios and attendance at e-Portfolio workshops.

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- Ongoing one-on-one work with faculty in years 1-4 to revise course objectives as part of the Objectives Project, and mapping those objectives to the medical school's education competencies.

- Continued collaboration with OME-based grant initiatives.
- Ongoing service to the offices of Faculty Administration and Graduate Medical Education to expand and strengthen existing programs, and develop new initiatives as appropriate.
- Continued collaboration with the Graduate School of Nursing to enhance joint programming with the School of Medicine.
- Promotion of the reputation and visibility of UMMS as an institution of national distinction by supporting educational research and scholarly activity through active service on committees of local and national organizations, the UMass 5-campus system, presentations at local and national meetings, and peer-reviewed publications.

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## **PHYSICIAN, PATIENT AND SOCIETY COURSE**

DAVID HATEM, MD, COURSE DIRECTOR

ANN PERLA, ADMINISTRATIVE MANAGER

### **Mission and Goals**

The goal of the PPS course is to provide the foundational clinical competencies in patient care during the preclinical years, optimally preparing students for their clinical clerkships. The course emphasizes the achievement of competencies in the medical interview; the physical examination; clinical problem solving, including integration of basic science material; personal and professional development; continuous teaching and learning; and the use of specific analytic and assessment principles within the fields of epidemiology, community health, and medical ethics. This longitudinal, multi-component course is the largest in the school, encompassing over 450 hours of required curriculum time, enrolling 200 students in AY 05-06, and drawing upon approximately 300 faculty. The course has three main components: PPS small groups, each consisting of 9-11 students with two faculty facilitators; the Longitudinal Preceptor Program (LPP), in which students work alongside a practicing physician in a clinical setting, practicing the skills taught in small group; and the Physical Diagnosis course (PD), in which the principles of the normal and abnormal physical examination are taught and practiced, in 8 clinical teaching sites. Additional components include: the Community Health Clerkship (CHC) in Year 1, and the Epidemiology component in Year 2. The CHC places students in diverse sites across the Commonwealth for a two-week immersion experience to enhance their understanding of the importance of the community context in health and health care, with a focus on underserved populations. The Epidemiology component in Year 2 provides a core set of epidemiologic and biostatistical concepts and skills required to critically evaluate research reports in the medical literature, including measures of disease occurrence and association; and design, bias and cause in epidemiologic studies. The goal of this component is to provide a skills base for the practice of evidence-based medicine and to develop students' awareness of contemporary approaches and issues in clinical research in medicine. The PPS Course utilizes standardized patients for teaching and assessment, including Objective Structured Clinical Examinations (OSCE's) conducted at critical points in the two-year curriculum.

### **Performance Indicators**

- The AAMC Graduation Questionnaire data supports the programmatic quality of the PPS course and its effectiveness in meeting its primary goal of preparing students for the clinical years. Based on 2006 AAMC GQ data, PPS excels in comparison to other comparable courses nationwide, with 92 percent of UMMS students rating the PPS

course as good to excellent in preparation for the clerkships, compared to 81 percent for all other schools (Table 14).

- In UMMS evaluations, the PPS course continues to be among the most highly rated of the UMMS preclinical courses in preparing students for the clinical years, as well as in other areas including: clarity of learning objectives, assessment methods, manageable

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pace, integration of knowledge and skills, professionalism of faculty, and respect for students (Table 15).

- Scholarly dissemination through the following peer-reviewed publications and presentations:

#### **Papers:**

Haidet P, Kelly PA, Bentley S, Blatt B, Chou CL, Fortin AH 6<sup>th</sup>, Gordon G, Gracey C, Harrell H, **Hatem DS**, Helmer D, Paterniti DA, Wagner D, Inui TS. Communication, Curriculum, and Culture Study Group. Not the same everywhere. Patient-centered learning environments at nine medical schools. *Journal of General Internal Medicine*. 2006;21:405-9.

**Starr S**, Haley H-L, Mazor K, Ferguson W, Philbin M, Quirk M. Initial development of an instrument to measure teacher identity in physicians. *Teaching and Learning in Medicine*. *Teaching and Learning in Medicine*, 2006;18(2):117-25.

**Starr S** and Perrin E. Teaching about schools during pediatric residency. *Ambulatory Pediatrics*. 2005; 5 (3) 178-84.

Quirk M, Haley H-L, **Hatem D**, **Starr S**, Philbin M. Primary care renewal: Regional faculty development and organizational change. *Family Medicine*. 2005;37(3):211-218.

#### **Presentations:**

Quirk M and **Starr S**. Delivering challenging feedback and The challenging teacher/learner interaction. University of New England College of Health Professions Annual Faculty Development Conference. Portland, ME, Oct 21, 2005.

Alter C and **Starr S**. How to give a successful large group presentation. *A Current Review of Pediatric Endocrinology*, San Diego CA, May 31-June 3, 2005.

Chou C, **Hatem DS**, Branch WT, Chou C, Salazar WH. Why Can't You Behave? The AAPP Model of Teaching Behavior Change in the Office Setting. Society of General Internal Medicine National Meeting. April 2006. Los Angeles CA.

**Hatem D**, Borkan J. Narrative Competence in Clinical Medicine. International Conference on Communication in Health Care. October 2005, Chicago, IL.

**Hatem D**, Rowe M. Setting Learning Goals. Technion Conference on Communication in Healthcare. Sept 2005, Haifa IS

**Hatem D**, Frankel R, Rowe M. Using the One-Minute Preceptor Model to Teach Inpatient Communication Skills. Technion Conference on Communication in Healthcare. Sept 2005, Haifa IS

**Hatem D**, Rowe M, Lichstein P. Basic Facilitation Skills to Enhance Learning. Technion Conference on Communication in Healthcare. Sept 2005, Haifa IS

**Hatem D**. Narrative Competence in Clinical Medicine. Technion Conference on Communication in Healthcare. Sept 2005, Haifa IS

#### **FY 06 Summary**

##### **Administrative Leadership**

- Stephen Krinzman, MD took over as the coordinator of the Physical Diagnosis 2 course.

- PPS Directors' Retreat conducted on June 14, 2006. This half-day retreat allowed all of the PPS directors and administrative staff to meet and discuss the goals and objectives of PPS. This session focused on the following aspects across all PPS Course components: curriculum process and objectives, evaluation, and integration.

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### **Curriculum Development Enhancements**

- In collaboration with the Integrated Geriatrics Program, development and implementation of online demonstrations of the geriatric interview and functional assessment. These interviews follow 3 patients, and allow students to observe two physicians' interviewing styles and techniques.
- In PPS 2, altered the order of the first semester sessions, beginning with several sessions focused on interviewing skills in order to more effectively build on what students had learned in PPS 1.
- In PPS 2, added teaching about medical error to a session in second semester curriculum, better preparing students for this clinical reality.
- In PPS 2, coordinated with New England AIDS Education and Training Center to have people living with HIV bring their perspective to the spring session.
- In collaboration with the EDCAM grant, integration of Complementary and Alternative Medicine into the PPS curriculum in PPS Year 1 small group session materials and in Longitudinal Preceptor Program (LPP), as well as sponsoring a separate faculty development session on the topic.

### **Student Performance Assessment**

- Introduced a Physical Diagnosis end of course evaluation utilizing the Harvey simulator. Students were asked to identify cardiac sounds and answer multiple choice questions.
- Continuation of a series of Mini-OSCE's as a curriculum and student performance assessment for the interview strand of PPS. The Mini-OSCE's are a series of four Standardized Patient interviews performed by individual students at one point during the school year. Collectively, the class performed 400 interviews, (all 3 functions of the medical interview were featured).
- Ongoing student mid-year evaluation of faculty teaching.
- Ongoing development of LPP 1 and 2 reflective write-ups to assess professionalism, personal growth and competencies relating to "Physician as Person" competency.
- Developed competency-based criteria for achievement in PPS 2 to be applied in both PPS 1 and PPS 2 this year.
- Developed and implemented learning portfolio in PPS 2 and implemented learning goals worksheets for PPS 1 with plan to develop a more robust portfolio requirement for PPS 1 in upcoming year (AY 2006-07).

### **Faculty Recruitment, Retention and Development**

- Collaboration with the Division of Community-Based Education to support efforts to recruit and retain faculty preceptors.
- In the fall of 2005, faculty development topics included: "Giving Feedback in Small Groups" and "Developing and Implementing Learning Portfolios"; in the spring of 2006, a faculty development session included "Using Portfolios to Evaluate Student Learning" and "The Sexual Health Curriculum". Sessions offer opportunities to improve facilitation methods, and to further understanding of the PPS curriculum and evaluation tools.
- Initiation of needs assessment process regarding faculty needs and faculty development

for the LPP Program.

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- In collaboration with the Educational Development in Complementary and Alternative Medicine (EDCAM) grant, ran a faculty development session on CAM topics for LPP preceptors.
- Participation in OME Community-Based Education site visits.
- PPS Leadership completed training on WebCT.

#### **FY 07 Goals/Objectives**

- Effective integration of the School of Medicine's new competencies into the PPS course framework.
- Continued collaboration with the OME and its grant initiatives, including Macy and EDCAM, to further strengthen the curriculum.
- Development of an evaluation plan to monitor student progress throughout the two years of the PPS course through checklist assessment, and use of student learning portfolios.
- Development of evaluation and research plan for LPP 1 and 2 reflective write-ups.
- As the High Stakes EOTYA requirement is implemented, enhancement of End of Year 2 PPS exam.
- Participation in the Competency Implementation Project, and support for integration with PPS Curriculum.
- Participation in the roll out of WebCT with migration of PPS course components (PPS 1 and 2 small groups, Community Health Clerkship, Epidemiology, Physical Diagnosis 1 and 2, and the Longitudinal Preceptorship Program 1 and 2) with a focus on multi-media resources to support clinical skills teaching and assessment.

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### **INTERCLERKSHIP PROGRAM**

JULIE JONASSEN, PHD, DIRECTOR

#### **Mission and Goals**

The Interclerkship Program was launched in AY 1995-96 for third year medical students, with the mission of teaching topics that had traditionally fallen through the cracks of medical education. The goal of these short, intensive one-day programs is to provide students with skills that can be put into immediate practice during subsequent clerkships. The Interclerkship Program completed its eleventh year in AY 2005-2006 and in each of these years, the program has been rigorously evaluated. Analysis of course data supports the effectiveness of this educational model in acquisition and retention of knowledge, skills, and attitudes in core content areas such as domestic violence, multiculturalism, and end of life care. The Interclerkship Program has also stimulated publication and peer-reviewed presentation at a national level and served as the centerpiece for a number of curricular innovations supported by external grants, including Macy Initiative in Health Communication, Educational Development in Complementary and Alternative Medicine, Pfizer Sexual Health Curriculum Initiative, and Hartford Geriatric Curriculum Initiative. The Interclerkship Program is one of many venues for the AY 2006-07 pilot projects associated with the Competency Implementation Project (CIP).

In AY 05-06, the Interclerkship Program continued to provide a venue for addressing a number of AAMC guidelines and LCME educational standards in the areas of End of Life Care, Multiculturalism, Geriatrics, U.S. Healthcare Policy, Domestic Violence, Disabilities,

Complementary and Alternative Medicine, and Patient Safety and Medical Error (Table 32). This Interclerkship roster has remained stable over the past three years, although the courses each look critically at performance outcomes and student feedback, using this information to make improvements each year.

### **Performance Indicators**

- Interclerkship evaluation data continue to confirm that significant improvements in knowledge, attitudes and skills are observed at the conclusion of each Interclerkship.
- 66-90% of students “agreed” that each Interclerkship addressed a topic essential to medical practice and used appropriate teaching formats.
- AAMC Graduation Questionnaire data continue to indicate that students feel well-satisfied with curriculum in a majority of content areas addressed by the Interclerkships (often the only place in which these topics are addressed). (Table 5)
- Scholarly dissemination through peer-reviewed publications and presentations, including presentations at the 2006 AAMC meeting that highlighted outcomes from two interclerkships: the End of Life Interclerkship, and the Disabilities Interclerkship.

Kadish, SJ, Zanetti, ML, Sefton, LA, Barrett SV, Clay, M, Clive, DM, Jonassen, JA, Pugnaire, MP: Residents Report on the Importance of an Undergraduate End of Life Interclerkship

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Jonassen JA, Barrett SV, Cassin C, Long-Bellil L, O’Connor D, Rogoff ML, Young MH: Teaching medical students about caring for patients with disabilities.

### **FY 06 Summary**

- Eight multidisciplinary Interclerkship programs, given over eight required Interclerkship days in AY 2005-06, provided practical information to 3<sup>rd</sup> year UMass medical students about Domestic Violence, U.S. Healthcare Policy, Disabilities, Geriatrics, Multiculturalism, End of Life Care, Complementary and Alternative Medicine, and Patient Safety and Medical Error.
- An extensive programmatic review of the Interclerkship Program was given to the Clinical Years Committee in the spring of 2006. This review looked historically at internal and external performance measures for the Interclerkship Program over the past decade.
- The Interclerkship on Complementary and Alternative Medicine continues to be enhanced with a grant from AMSA-NIH titled Educational Development of Complementary and Alternative Medicine (EDCAM).
- The Geriatrics Interclerkship continues to enhance its opportunities for student-real patient interactions: all students visit elders in assisted living facilities and each student conducts a one-on-one interview with an elder.
- The U.S. Healthcare Policy Interclerkship, first launched in 1996 as the “Managed Care” Interclerkship, continues to evolve, now focusing exclusively on the U.S. Healthcare System. Central to this program is a discussion of issues concerning the evolving and turbulent health care system and marketplace, including changes in Medicaid and Medicare. It is noteworthy that UMass graduates’ perceptions of their education around managed care declined significantly in the 2005 GQ, perhaps reflecting the uncertainties about how and where these students will be practicing medicine.
- The Domestic Violence Interclerkship has capitalized on 10 years experience in identifying the most effective workshops and the best faculty to teach them. Abusescreening with standardized patients continues to be a highlight of this program and the

cases have been edited to reflect a greater awareness of medical students about domestic violence issues.

- The Multiculturalism Interclerkship effectively used feedback from previous classes to focus on the cultural diversity in the Worcester area and how this impacts upon healthcare delivery. This is one of a number of venues for teaching about multicultural issues in medical care in the UMass curriculum.
- The Disabilities Interclerkship continues to be enhanced by a collaboration between UMass faculty from the Center for Health Policy Research and the Department of Mental Retardation, with a broader focus on the healthcare delivery issues faced by those with either cognitive disabilities or physical disabilities.
- The End of Life (EOL) Interclerkship continues to reinforce the longitudinal experiences of about 50% of the class who also take the "Care of the Seriously Ill" optional enrichment elective (OEE). The EOL Interclerkship has a strong clinical focus and is designed to complement, rather than repeat the information from the OEE.

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### **FY 07 Goals/Objectives**

- Development of WebCT resources to support the Interclerkship Program. Optimally, this will include access to the resources made available to students during each interclerkship. Online registration and online pre/post testing might be a longer term goal.
- Participation in the Competency Implementation Project (CIP), and support for integration of our new competencies into the Interclerkship curriculum. In the context of the CIP project, focus will be placed on advocacy across interclerkships in the coming year.
- Organization of a formal meeting of Interclerkship Course Directors to discuss some of the issues and concerns that are common to all programs: emerging themes, scheduling and resource issues, evaluation, publications.
- Continuation of the current slate of Interclerkships as required programs for all third year students.

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## **DIVISION OF COMMUNITY-BASED EDUCATION**

ROBERT A. BALDOR, MD, DIRECTOR

KATHLEEN RYAN TRUMPAITIS, ADMINISTRATIVE COORDINATOR

### **Mission and Goals**

The Division of Community-Based Education serves as the primary contact and advocate within UMass Medical School for faculty who practice at affiliated community hospitals and offices across the Commonwealth. Working directly with departmental representatives and course directors across all four years of medical school, the division serves as a liaison between UMMS and its community-based preceptors. As a result of collaborative efforts of the Longitudinal Preceptorship Program and clerkships in Family Practice, Internal Medicine, Neurology, Ob/Gyn, Pediatrics, Psychiatry, and Surgery, UMMS medical students are provided with hands-on experience using the best educators in the Commonwealth – its own practicing physicians.

### **Performance Indicators**

- Continued to maintain a broad, diverse and stable base of community-based educators who served the School of Medicine in FY 06: 600+ community-based educators; 28

community-based educational partners and affiliate sites active in teaching.

- Continued partnership with departments to award faculty appointments to eligible community-based educators, with an achieved goal of 100% of all eligible community-based educators holding an appropriate faculty appointment.
- Facilitated appointments of 11 community-based educators to the UMMS faculty, and 30 academic promotions of existing community-based faculty.
- Recognized for their achievements as community-based faculty, the 2006 UMMS Community Faculty Educator Award recipients were: Scott L. Brownstein, MD, William J. Crooks, MD, Sunita Godiwala, MD and Parvis Sadighi, MD.
- Provided administrative and technical support in conjunction with the SOM WebCT Working Group Committee, e.g. facilitated monthly meetings, established faculty distribution lists, and supplied student placements for both community and noncommunity-based sites across the Commonwealth.
- Collaborated with course and clerkship directors across all four years, the Registrar's Office, and departments including IS, Student Affairs, and the OME Division of Research & Evaluation, to assure the successful implementation of WebCT 'go live' for AY 05-06.
- Nurtured the development of the SOM WebCT Working Group Committee and promoted the emergence of the SOM Educational Technology Advisory Committee (ETAC).

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### **FY 06 Summary**

- Coordination of off-site faculty development sessions at teaching affiliates. In partnership with David Hatem, MD (Clinical Faculty Development Center), CBE Division Director Robert A. Baldor, MD presented a BMC site-specific faculty development workshop entitled: "Improving Patient Satisfaction in the Patient Setting." Additionally, James Comes, EdD, Lamar Soutter Library, presented a community faculty development session, "How to access on-line services/journals" for UMMS faculty at the Greater Lawrence Family Health Center. This presentation was also delivered by Eric Alper, MD and Len Levin, MS LIS, MA, AHIP, LSL, to faculty affiliated with The Milford Regional Medical Center/Tri-River Family Health Center.
- Distribution of promotional documentation (e.g. brochures, Competencies for Medical Education posters, plaques) as a channel of extended outreach to community-based faculty.
- Facilitation and expedition of the UMMS faculty appointment and promotion process. Ongoing responsibilities include: collaborating with the Office of Faculty Administration and Department Chairs; disseminating data as it applies to community-based 'pre-faculty' involving the LPP and clerkships at community affiliate sites located throughout the Commonwealth.
- As a result of staff changes within the Office of Faculty Administration, CBE assumed a more visible role as a community contact with the facilitation of faculty appointments for community-based educators during this transition.
- Continuation of regularly scheduled quarterly meetings with Clerkship Course Coordinators to ensure accuracy and completeness of the faculty appointment process and enhancement of administrative functions for clerkships. Major topics included: scheduling of interclerkships as it relates to standard clerkship schedules; and expedited faculty review process for community-based educators eligible for lower level faculty

appointment status.

- Ongoing collaboration with the Manager of Educational Programs from the Lamar Soutter Library, to develop a UMass-sponsored program to supply EBSCO, a cost-effective alternative medical information management database for UMMS students, preceptors and faculty at community affiliate sites.
- In partnership with the offices of Public Affairs, Student Affairs and Faculty Administration, dissemination of information to community-based preceptors/faculty, including events such as Convocation, Educational Recognition Awards, Match Day, Commencement and faculty development programs.
- Maintenance of an integrated database and preparation of reports pertaining to community-based faculty, hospital-based faculty at affiliate hospitals, and student placements in clinical teaching sites in the Longitudinal Preceptor Program (LPP), clerkships, and 4<sup>th</sup> year electives.
- Maintenance of the OME's Community-Based Education website to assure accuracy of contact information and to comply with technological advances and community-based preceptors and faculty needs.
- Continued maintenance of an updated electronic distribution list of community affiliate faculty, enabling prompt communication with volunteer faculty at affiliate sites.
- Full integration of the LPP preceptor faculty and clerkship preceptor faculty databases into the curriculum and PeopleSoft databases to assure that all information is contained

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in two comprehensive databases. This integration simplifies the process of extracting information for report generation, decreases the chance for data entry error, and enhances consistency in the data entry process.

- In conjunction with Information Services, created and maintain electronic resources supporting community-based education including the CBE website and web-based OME-CBE newsletter, VOCE.
- In collaboration with IS and curriculum leadership throughout the four years of medical school, remain actively involved with all facets of the School of Medicine's implementation of UMEDS/Clinical Logs Project.
- Provided administrative support to the WebCT SOM Educational Advisory Committee including: scheduling of standing meetings, transcription and distribution of minutes to members, creation and maintenance of enrollment population of the SOM Faculty Monitor Account Distribution List, and compiling and generating reports as requested.

#### **FY 07 Goals/Objectives**

- Continue partnership with departments to maintain faculty appointments to eligible community-based educators, with the achieved goal of 100 percent of all eligible community-based educators holding an appropriate faculty appointment.
- Ongoing liaison with administration, faculty and staff from Berkshire Medical Center, the Milford Regional Medical Center/Tri-River Family Health Center, and St. Vincent Hospital to facilitate action on areas of identified need.
- Ongoing sponsorship of annual educational summits for each of our major clinical teaching affiliates: Berkshire Medical Center, and the Milford Regional Medical Center/Tri-River Family Health Center. Summits take place at the Lazare Research Building on the campus of UMMS.
- Continue to facilitate outreach and programming, including: library presentations, faculty development sessions, educational affiliate and community-based education site visits,

and development of a mechanism of off-site support.

- Continue to exercise quality control of the Longitudinal Preceptorship Program honorarium payment process to assure timely and efficient compensation to preceptors.
- Maintain an active role with ongoing SOM technical support as it relates to ETAC including: ongoing migration of courses and clerkships re: WebCT: OME based courses and electives; use of WebCT and other technology tools for online testing, and expanding online course evaluations; continued support to assist IS/Registrar with enrollment and curriculum data needs; and Clinical Logs roll out to all clerkships, progress and refinement of reporting and submission of UMEDS status as part of LCME interim report due in 2007.
- Promotion of the reputation and visibility of UMMS as an institution of national distinction by supporting medical education research and scholarly activity through peerreviewed publications and presentations at national meetings.

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## **DIVISION OF GRANTS AND SPECIAL PROJECTS**

EMILY FERRARA, MA, DIRECTOR

### **Mission and Goals**

The goal of the Division of Grants and Special Projects is: 1) to manage educational grants, which currently include: Macy Mentorship Program in Health Communication Education; Educational Development in Complementary and Alternative Medicine (EDCAM) grant; AMA Medical Education Research Consortium (MERC) grant; AAMC Caring for Community "Marrow for Tomorrow" student outreach grant; and Edward J. Stemmler Medical Education Research Grant (Table 12); 2) to support and collaborate with missioncritical

projects for the School of Medicine, including initiatives conducted through the Office of the Dean (accreditation processes and other administrative projects), and OMEbased

special projects; 3) to foster interdisciplinary and inter-institutional collaborations, involving UMMS, GSN and GSBS faculty and students, the UMMHC clinical system, community-based organizations, and other key partners in the design and implementation of special projects; and 4) to submit grant applications in order to secure funding support for new curriculum development and special medical education projects in support of the Medical School's mission.

### **Performance Indicators**

- Awarded one of 16 AMA planning grants to support medical education research initiatives in the art of medicine competencies, with UMass serving as lead school for 4-school Massachusetts consortium participation in this national initiative (PI: M. Pugnaire, Co-Investigator E. Ferrara, 2006-07, \$30,000).
- Completed successful implementation of the Macy Mentorship Program in Health Communication Education, a dissemination grant led by UMMS in partnership with eight New England medical schools (Josiah Macy, Jr. Foundation grant, PI: A. Lazare; Co-PI: M. Pugnaire, 2003-2005, \$533,000; no-cost extension through June 2006).
- Completed successful implementation of Edward J. Stemmler Medical Education Research project, funded through competitive grant by the National Board of Medical Examiners (PI: M. Pugnaire, 2003-2005, \$70,000; no-cost extension through June 2006).
- Continued curricular initiatives in Complementary and Alternative Medicine, in

collaboration with the Department of Family Medicine and Community Health, as one of 6 medical schools in the country, to receive the Educational Development in Complementary and Alternative Medicine (EDCAM) grant, sponsored by American Medical Student Association (AMSA) and NIH-National Center for Complementary and Alternative Medicine (PI: G. Anand, Co-PI: E. Ferrara, 2003-2007, \$60,000).

- Continued support for Marrow for Tomorrow, a student-initiated community service project funded through the AAMC Caring for Community Grant; goal is to reach out to underrepresented minority communities to increase minority representation in bone marrow registries. (PI: A. Geller; AY 2005-06, \$12,452).

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- Continued existing interdisciplinary initiatives, and developed new activities, particularly in the areas of collaboration with the Southeastern Massachusetts AHEC Program and the Lamar Soutter Library.

- Promoted the reputation and visibility of UMMS to regional and national audiences and organizations through the scholarly dissemination through a total of 5 peer-reviewed publications and presentations.

### **FY 06 Summary**

#### **Macy Mentorship Program in Health Communication Education**

The Macy Initiative in Health Communication (1998-2002), was a national, collaborative medical education project funded by the Josiah Macy, Jr. Foundation. The initiative, under the leadership of Chancellor and Dean Aaron Lazare, MD (Principal Investigator), and Vice Dean Michele Pugnaire, MD (Project Director), provided UMMS with an opportunity to develop, implement and evaluate innovative communication skills curricula for medical students. The initiative garnered international and national recognition for its innovative and systematic approach to communication skills education, with outcomes published in such prestigious medical journals as *JAMA* and *Academic Medicine*. Building on the success of the Macy Initiative, UMass was awarded a second grant by the Macy Foundation to disseminate phase one outcomes to eight New England medical schools: Brown, Boston University, Dartmouth, Harvard, Tufts, University of Connecticut, University of Vermont and Yale. The Macy Mentorship Program in Health Communication Education was funded for a total of \$533,000 over three years (April 2003-December 2005; no-cost extension through June 2006); Dr. Lazare serves as PI; Dr. Pugnaire serves as co-PI; and Emily Ferrara is Macy Project Administrator.

#### **Performance Indicators – Macy Grant**

Dissemination of Macy-related activity at UMMS through peer-reviewed collaborative presentations:

- Pugnaire M, **Ferrara E**, Dardano K, Fortin A, Gauferg E, McCahan J, Monroe A, Pfeiffer, Richardson-Nassif K, Rowland P. UMass Macy Mentorship Program in Health Communication Education: Lessons Learned in an 8-School Partnership (poster exhibit), SEP Ottawa Conference, New York, NY, May 2006.

- Pugnaire M, **Ferrara E**, Zanetti M, Quirk M. UMass Macy Mentorship Program: Preliminary Outcomes from an 8-School Collaboration, (presentation) NEGEA 2006 Annual Educational Retreat, Philadelphia, PA, March 3-4, 2006.

- Pugnaire M, **Ferrara E**, Dardano K, Fortin A, Gauferg E, McCahan J, Monroe A, Pfeiffer, Richardson-Nassif K, Rowland P. UMass Macy Mentorship Program in Health Communication Education: Lessons Learned in an 8-School Partnership (poster exhibit).

2005 AAMC Annual Meeting, Washington, DC, November 2005.

**FY 06 Summary – Macy Grant**

- Development of collaborative peer-reviewed presentations at national meetings, including AAMC Annual Meeting.
- Refinement and implementation of a Capstone Dissemination Conference, held in January 2006. Programmatic evaluation for this conference showed strong satisfaction ratings by faculty from participating schools.

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- Held April 2006 Writing Retreat for Macy partner schools
- Participated in development of two manuscripts for peer-reviewed journal submission:
- Successful completion of implementation phase as evidenced by the successful roll out of a communication skills curriculum project at each school:

**FY 07 Goals/Objectives – Macy Grant**

- Completion of final grant report and continued dissemination through peer-reviewed presentation, publication and website development as portal for dissemination.
- Completion of data collection and analysis, in collaboration with the Division of Research and Evaluation.
- Development of collaborative peer-reviewed presentations at national meetings and scholarly dissemination and research through peer-reviewed publications.

**EDCAM – Educational Development in Complementary and Alternative Medicine**

The Educational Development in Complementary and Alternative Medicine (EDCAM) grant is a four-year medical education curriculum development initiative, funded by the American Medical Student Association (AMSA) with support from the NIH-National Center for Complementary and Alternative Medicine. UMass was selected as one of three medical schools nationwide to be awarded a grant to participate in the first cycle of the EDCAM project; 3 additional schools were subsequently awarded grants in a second funding cycle. Genevieve Anand, MD has served as Principal Investigator, and Emily Ferrara, MA, as co-Principal Investigator and Project Administrator for the grant. The EDCAM project is housed in the Office of Medical Education, and is funded at a level of \$60,000 for four years (2003-2007).

**Performance Indicators – EDCAM Grant**

- E. Ferrara completed training as Mindfulness Meditation teacher at Center for Mindfulness, 2005; developed and presented 1.25 hour faculty workshop on “Mindfulness Meditation and Expressive Writing” for Spring 2006 faculty retreat and workshop for 3<sup>rd</sup> year students as part of the CAM Interclerkship.

**FY 06 Summary – EDCAM Grant**

- E. Ferrara prepared for assumption of PI role on grant, as of July 1, 2006 due to resignation of Genevieve Anand, MD, MPH; Elizabeth Saich, MD, MPH, will assume the Co-PI role on the grant for the final year.
- Ongoing implementation of: orientation session on Stress Management/Mindfulness for incoming students; CAM cases in Epidemiology; Pharmacology Course enhancements.
- Supported implementation of new CAM Optional Enrichment Elective, undertaken by CAM Student Interest Group Leaders; the course was offered for first time in Fall 2005; 20 first- and second-year students completed the course.
- Supported activities and programs sponsored through the CAM Student Interest Group and CAM Advisory Committee, including Brown Bag Lecture Series.
- Developed and implemented all-day CAM Faculty Development Retreat held on March

11, 2006, offering 7 hours of Risk Management CME; successful event attended by approximately 35 faculty and student leaders.

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- Ongoing resource development, including enhancements to CAM website and other online resources, including Go-Local CAM collaboration.

#### **FY 07 Goals/Objectives – EDCAM Grant**

##### **Ongoing implementation**

- Continuation of curriculum enhancement, faculty development, and overall resource development activities with a focus on sustainability of changes achieved during first three years of grant.
- Scholarly dissemination of grant activities and accomplishments through peer-reviewed publications and presentations at national conferences.
- Ongoing support of activities and programs sponsored through the CAM Student Interest Group, including implementation of CAM Optional Enrichment Elective.

#### **AMA Medical Education Research Consortium (MERC) Grant**

The AMA Medical Education Research Consortium of the American Medical Association (AMA) awarded UMass a one-year, \$30,000 grant in support of the involvement of a consortium of Massachusetts Medical Schools in a national initiative to advance medical education research in the art of medicine competencies. UMass was the recipient of one of 16 grants awarded in the competitive RFP process. The AMA MERC initiative is housed in the Office of Medical Education's Division of Grants and Special Projects, under the leadership of Michele Pugnaire, MD serving as Principal Investigator and Emily Ferrara, MA, Director of the Division of Grants and Special Projects, serving as Co-Investigator. Other key participants include Drs. Mark Quirk and Deborah DeMarco as Co-Principal Investigators for the UMass site; the PI's at the other three schools were drawn from leadership involved in the Macy Mentorship Program collaboration: Benjamin Siegel, MD, BUSM; Elizabeth Gaufberg, MD, MPH, Harvard Medical School; and Mary Lee, MD, MPH, TUSM.

#### **Performance Indicators – AMA MERC Grant**

- One of 16 grants awarded to support medical education research initiative in the art of medicine competencies, with UMMS serving as lead school for participation by 4-school Massachusetts consortium in national initiative.

#### **FY 06 Summary – AMA MERC Grant**

- Provided administrative oversight for UMass's involvement as lead school for Massachusetts consortium participation in national medical education research initiative.
- Participated as UMMS representative at first National Meeting of the AMA Medical Education Research Consortium, held in Atlanta, Feb 10-12, 2006.
- Provided leadership and coordination for a local Massachusetts Consortium meeting, held at TUSM in March 2006.

#### **FY 07 Goals/Objectives**

- Completion of successful yearlong participation by members of the Massachusetts Consortium in the national AMA MERC Initiative

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- Apply for funding to support the continuation of medical education collaborations among the 4 Massachusetts medical schools, building on the successes of the Macy Mentorship Program in Health Communication.

## **Edward J. Stemmler Medical Education Research Grant**

### **Completion of final year and final grant report**

The Edward J. Stemmler, MD Medical Education Research Fund of the National Board of Medical Examiners (NBME) awarded UMass a two-year, \$70,000 grant in support of the research project titled "Using Standardized Patients to Assess Professionalism: A Comparative Analysis of Two Approaches." UMass was one of 4 schools to receive a Stemmler grant in 2002-03 competitive grant cycle. The Stemmler project is housed in the Office of Medical Education's Division of Research and Evaluation under the leadership of Michele Pugnare serving as Principal Investigator and Mary Zanetti, EdD, Director of the Division of Research and Evaluation. (For complete summary of FY 06 Stemmler grant activities and achievements, turn to the Research and Evaluation section of this report.)

### **AAMC Caring for Community Grant: Marrow for Tomorrow**

UMMS was one of 8 schools nationally to be awarded an AAMC Caring for Community Grant for a student-initiated community service project. The UMass project, "Marrow for Tomorrow", was selected in May 2005 to receive a one-year grant to enhance outreach to minority populations in Worcester to increase bone marrow donors from underrepresented communities. The UMMS effort involves piloting three community-specific educational initiatives: a high school-based enrichment program to instruct students on how to advocate on behalf of marrow registration; the production of culturally sensitive educational videos targeting the Chinese and Southeast Asian population; and collaboration with Worcester family health centers and social networks to promote bone marrow donation through health fairs, video presentations, written materials and a website.

### **Performance Indicators – AAMC Marrow for Tomorrow**

- Supported student interest group in successful request for a one-year no-cost extension to complete implementation of the AAMC Caring for the Community grant project. (Funded for \$12,452 for one year, no-cost extension through June 2007; PI: Andrew Geller, Class of 2009)
- Secured in-kind support from Central Massachusetts Area Health Education Center (AHEC), to provide Vietnamese translation services for the bone marrow education video portion of the MFT project.

### **FY 06 Summary – AAMC Marrow for Tomorrow**

- Provided administrative oversight and support for submission of progress report and nocost extension request to AAMC's Caring for Community grant program.
- Provided mentorship to Marrow for Tomorrow student leaders to initiate planning and activities; to recruit new leadership to the project; and to foster linkages to communitybased partners, including Central Mass. AHEC.

### **FY 07 Goals/Objectives – AAMC Marrow for Tomorrow**

- Continue to provide administrative oversight for student-led grant.

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- Provide mentorship and support to medical student leaders of Marrow for Tomorrow project, to implement multi-faceted outreach effort, including video development.
- Develop Marrow for Tomorrow web presence on the OME website.

### **Interdisciplinary Projects**

Interdisciplinary project activities involve School of Medicine representation in and/or development and implementation of special projects that cross schools (SOM, GSN, GSBS), offices (Library, Equal Opportunity), clinical partners, and external organizations

(Massachusetts Medical Society). Current Interdisciplinary Project activities include:

- Medical Humanities initiatives spearheaded out of the Office of Medical Education.
- Community Health Clerkship in Gay, Lesbian, Bisexual and Transgender Health, developed and implemented in collaboration with Southeastern Massachusetts AHEC.
- Curriculum development initiatives through Innovations in Medical Education Grant (IMEG) Program
- Medical Creative Writing elective, an Optional Enrichment Elective offered to 2<sup>nd</sup> year medical students.

#### **Performance Indicators – Interdisciplinary Projects**

- Implemented first-ever Community Health Clerkship in Gay, Lesbian, Bisexual and Transgender Health in October 2005, in collaboration with Southeastern MA AHEC Program Director Heidi Holland, and community-based organizations and health centers that serve the GLBT population in Massachusetts.
- Collaborated in national presentation on GLBT Health Community Clerkship: Holland H, **Ferrara E**. Gay, Lesbian, Bisexual & Transgender Health: A Community Clerkship Collaboration, AHEC National Conference, June 2006, Omaha NB.
- Collaborated in regional presentation on medical humanities: Atasoylu A, Batalden M, **Ferrara E**, Gaufberg E, Hatem D. Incorporating the Humanities into Medical Student and Resident Training, Medical Humanities Workshop, Society of General Internal Medicine New England Regional Meeting, Boston, MA, March 24, 2006.
- Participated on judging panel for Second Annual Berlin Award for Creative Writing awarded to UMMS students, April 2006 (publication of 1<sup>st</sup> place work forthcoming in Worcester Medicine and Berkshire Medical Journal in Summer/Fall 2006).
- Achieved second place award in 2006 Annual Poetry Contest of the Worcester County Poetry Association, for poem: "The Winter After".
- Published article on the Literature and Medicine program: **Ferrara E**. Literature and Medicine: Humanities at the Heart of Healthcare. *Worcester Medicine*, 2006

#### **FY 06 Summary – Interdisciplinary Projects**

- Implemented first-ever Community Health Clerkship in Gay, Lesbian, Bisexual and Transgender Health, in collaboration with Southeastern MA AHEC Program Director Heidi Holland, and community-based organizations and health centers that serve the GLBT population in Massachusetts; 5 students (2 medical students; 3 graduate nursing students) completed the clerkship
- Participated as member of Physician as Person Competency Working Group; prepared and presented working group's plans to Educational Policy Committee.

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- Planned and implemented 4<sup>th</sup> annual Literature and Medicine Program, in collaboration with Massachusetts Foundation for the Humanities and the Medical School Library with in-kind funding secured from UMMS, GSN, Nursing Administration and Physician Administration at UMMHC.
- Implemented 2<sup>nd</sup> Annual Berlin Creative Writing Award, in collaboration with Student Affairs dean, faculty in Psychiatry and Medicine, and the UMMS Lamar Soutter Library committees on Humanities in Medicine Collection and Cultural Events.
- Continued representation as founding member on the Humanities in Medicine Committee, with the goal of establishing a medical humanities collection of books, journals and videotapes accessible to the UMMS community. This effort was broadened

during the past two years to include medical humanities programming and a website.

- Development and implementation of four IMEG projects (Table 35):
  - Implementation of Live Learner Assessment Technology in the Classroom, PI Sheldon Benjamin, MD and Co-PI Caroline Fisher, MD, PhD, Psychiatry;
  - Instruction in Airway Assessment and Management with High Fidelity Simulation, PI: Debra Heitmann, MD, CoPI Jeff Cukor, MD, Emergency Medicine;
  - Pediatric Overweight Prevention, Recognition, and Treatment Curriculum, PI: Sarah Goff, MD, CoPI: Suzanne McLaughlin, MD, Pediatrics/Internal Medicine;
  - Simulated Pediatric Resuscitation Program: An Educational Intervention and Evaluation, PI: Mariann Manno, MD, Pediatric Emergency Medicine.
- Continue to serve as reviewer for *Reflective Practice* section of international journal, Patient Education and Counseling.
- Representation as member of the Executive Committee of the Diversity and Equal Opportunity Council (standing committee of UMMS); and as member of GLBT Subcommittee.
- Representation as Faculty Advisor for QMass medical student group.

#### **FY 07 Goals/Objectives – Interdisciplinary Projects**

- Streamline and implement Community Health Clerkship in Gay, Lesbian, Bisexual and Transgender Health, in collaboration with Southeastern MA AHEC Program Director Heidi Holland, and community-based organizations and health centers.
- Continue participation in “Physician as Person” Competency initiatives.
- Plan and implement 5<sup>th</sup> annual Literature and Medicine Program, in collaboration with Massachusetts Foundation for the Humanities and the Medical School Library.
- Implement 3<sup>rd</sup> Annual Berlin Creative Writing Award, in collaboration with Student Affairs dean, faculty in Psychiatry and Medicine, and the UMMS Lamar Soutter Library.
- Initiate new collaborative activities and programs in medical humanities/humanism in medical education.

#### **Community Service Activities:**

- Greater Worcester Community Foundation: Appointed member of Advisory Committee for GLBT Partnership Initiative, and serve on Needs Assessment and Communications committees for same; Appointed Corporator; Invited to serve as Co-Chair of GLBT Partnership Initiative in June 2006; Peter Levine, MD, past CEO/President of UMass Memorial Health Care is honorary co-chair for this initiative.
- Children’s Friend, The Carriage House: Volunteer for Grief Center Training

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### **INTEGRATED GERIATRICS PROGRAM**

SARAH MCGEE, MD, MPH, DIRECTOR

TRICIA DRONEY, MPH, PROJECT MANAGER

#### **Mission and Goals**

In 2001, UMass Medical School was one of 40 medical schools nationally to be awarded a two-year grant by the AAMC/Hartford Foundation for Establishing Enhanced Geriatrics Curricula in Undergraduate Medical Education. Grant leadership was provided by Michele Pugnaire, MD, Vice Dean for Undergraduate Medical Education (PI) and Sarah McGee, MD, MPH, Director of Curricular Projects and Assistant Professor, Director of Education for the Division of Geriatrics. (Co-PI). The OME provided administrative management and secretarial support for all Hartford grant activities. The goal of this grant was to enhance

student knowledge of and commitment to caring for the elderly by establishing a continuitybased, multi-disciplinary curriculum in geriatrics, longitudinally integrated across all four years of medical school. Since the completion of the grant in early 2004, Dr. McGee has assumed leadership of the UMass Integrated Geriatrics Program.

### **Performance Indicators**

- Promoting the reputation and visibility of UMMS through peer-reviewed publications, presentations and research projects:

**McGee S**, Gleich G, Bonner A. Geriatrics Interclerkship, Electronic Publication, Portal of Geriatrics Online Education: <http://www.pogoe.org>, 2006 Mar.

O'Dell K, **McGee S**. Acupuncture for Urinary Urgency in Women Over 50: What Is The Evidence? Urologic Nursing 26(1): 23-29, 2006 Feb.

Zanetti M, Alper E, Gammon W, Mazor K, Hatem D, **McGee S**, Pugnaire M. Using a Targeted OSCE Station to Measure Unprofessional Behavior. Poster 12th International Ottawa Conference on Clinical Competence, New York, NY, May 20-24, 2006.

Beaman R, **McGee S**, O'Connor D. Developing a Set of Indicators to Assess End of Life Care in Massachusetts Nursing Homes, Division of Geriatrics and the Center for Health Policy and Research, University of Massachusetts Medical School. [http://www.umassmed.edu/healthpolicy/uploads/FinalReport\\_EOL\\_NursingHomesWebsite.pdf](http://www.umassmed.edu/healthpolicy/uploads/FinalReport_EOL_NursingHomesWebsite.pdf)

Beaman R, **McGee S**, O'Connor D. End of Life Care in Nursing Homes: Developing a Set of Indicators with Practitioners, Policy Makers, and Researchers. Joint Conference of the National Council on the Aging and the American Society on Aging Annual Meeting, 2006 March.

### **FY06 Summary**

#### **Curriculum Activities**

- Medicine Clerkship continued to require all participating third-year medical students to complete a geriatrics continuity exercise, which entails interacting with elders in the OME ANNUAL REPORT FY 06

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acute and non-acute settings with associated written reflective assignment.

- Required third year Geriatrics Interclerkship was again conducted for all third-year students and geriatric track nurse practitioner students. After review of previous interclerkship evaluations, a number of enhancements were introduced to the program. Students were given the option of attending selectives pertaining to geriatric pharmacology, elders and driving, health care financing, gait and balance, and dementia, depression and delirium. Selective topics were modified, and new topics were added based on the previous year's student evaluations. These didactic sessions are combined with off-site visits to area assisted living facilities where students informally interact with elders and conduct a life history and functional assessment. Faculty then co-facilitate small group student discussions with assisted living staff.

- Required half-day Physician, Patient and Society session at the Worcester Senior Center was again conducted for all first year medical students. The session utilized volunteer senior educators as small group facilitators as well as a panelist of geriatrics physician experts who responded to student inquiries regarding elders and their issues around utilization, cost and access to pharmaceuticals

- Together with the Massachusetts Area Health Education Center (AHEC) Network, coordinated a two-week Geriatrics community medicine clerkship for three first year medical students and two geriatric nurse practitioner students, utilizing 6 community agencies and physician and nurse geriatric providers.
- Continuation of recruitment of elders and development of elder case studies for inclusion in "Walk in My Shoes" simulated experience for all first year medical students.
- Two fourth-year medical students participated in a one-month geriatric elective with the UMass Memorial Healthcare Division of Geriatrics.
- Co-sponsorship, with Meyers Primary Care Institute, of the annual Geriatrics Teaching Day for faculty, residents and medical students.
- Utilization of an updated video entitled "Conducting a Geriatric Patient Interview" for the Physician, Patient and Society Year 1 course. In the video, geriatrics faculty conducted interviews with three elder patients modeling appropriate interviewing techniques.
- With the UMMS Multimedia Technology Group, creation of the Geriatrics "Longitudinal Integrated Theme" (LITs) website which showcases geriatrics as one of a number of longitudinal curricular themes. These longitudinal themes are defined as critical curriculum content not offered through a discrete course but instead integrated into existing courses and/or electives.
- Presentation on 'Functional Assessment' in Physical Diagnosis 2 course.
- Presentation on 'Overview of End of Third Year Assessment" (EOTYA) at Orientation to the Clinical Years.
- Geriatric content was added to the Physician, Patient and Society 1 "Uncertainty in Medicine: Osteoporosis" session to include a case study where the patient is an elder adult with functional impairment.

#### **Geriatrics Faculty Development Activities**

- Petra Flock, MD, Geriatrician and undergraduate teaching faculty member with the Division of Geriatric Medicine, attended a faculty development mini-fellowship in Long OME ANNUAL REPORT FY 06

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Term Care Education at Duke University. Course directors from Duke University are scheduled to visit UMass for a follow-up site visit in February 2007.

#### **Other Geriatrics Academic and Community-Based Activities**

- Sponsorship of a Geriatrics Community Appreciation Luncheon for representatives of elder services network who collaborate with the medical school on undergraduate medical education geriatrics curriculum initiatives.
- Participation on UMass Commonwealth Medicine Aging, Disability and Long-Term Supports (ADLS) domain educational activities designed to bring together members of the medical school community who have a common interest in addressing issues related to these topics.
- Ongoing support for the activities of the Geriatrics Student Interest Group. Student chapter of the American Geriatrics Society was formed. Graduate nursing students were successfully recruited as active members of this student group. Two speakers on geriatrics topics of interest were presented to interested first and second year students.

*David Fields, MD*, UMass Memorial Health Care, Geriatrics Clinical Practice: Realities and Myths: A lunch talk for all health professional students about the incidence and uniqueness of depression in the elderly

*Lisa Krinsky*, LGBT Aging Project of Jamaica Plain, Working with lesbian, gay, bisexual and transgendered older adult patients: A lunch talk for health professional students about the unique needs of LGBT elders.

Sponsorship of Well Elder Screening Program at the YMCA utilizing medical students supervised by Linda Pellegrini, Geriatric Nurse Practitioner. Screenings for blood pressure, memory, osteoporosis and ear wax were conducted by students with well elders participating in YMCA programs.

#### **FY 07 Goals/Objectives**

- Facilitation of interested medical students in application submissions to the American Federation of Geriatrics Research (AFAR) Summer Internship program at Boston University.
- Redesign of Geriatrics Interclerkship using FY 06 evaluation comments; design FY 07 session with a continued emphasis on more advanced level of clinical care content.
- Launch Geriatrics Longitudinal Integrated Theme (LITs) website once constructions of interrelated sites are completed and courses are successfully transferred and operational on WebCT.
- Development of key words related to geriatric medicine to be used for searching interactive curriculum database.
- Work with Nutrition course faculty on integration of geriatrics content; create lecture on Elders and Nutrition to be integrated in future academic years.
- Explore viability of greater integration of geriatrics course content with Pharmacology course director.

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## **OME-SPONSORED PROGRAMS**

This section of the OME Annual Report describes six programmatic components sponsored by the OME. These programs are: Senior Scholars Program, Summer Research Fellowship Program, International Medical Education Program, Generalist Physician Program, Community Service Assistantship Program, and Central Massachusetts Albert Schweitzer Fellowship Program. The purpose of these programs is:

- To promote student enrichment and leadership
- To enhance student interests, skills and experience in scientific research
- To expand UMMS educational opportunities, regionally and globally, through educational and service opportunities worldwide.

### **SENIOR SCHOLARS PROGRAM**

ANTHONY J. ROTHSCHILD, MD, DIRECTOR

JUDITH SAVAGEAU, MPH, ASSOCIATE DIRECTOR

#### **Mission and Goals**

The fundamental goal of the Senior Scholars Program is to increase the number of students participating in research activities and, in so doing, increase their understanding of scientific methods that can be applied directly to problem-solving skills development and critical thinking. Specific goals of the program are: to provide a structured research experience for fourth year medical students; to develop participants' hypothesis-generating skills; to provide an opportunity for students considering academic careers; and to foster student-mentor relationships.

#### **Performance Indicators**

- In keeping with the Senior Scholars Program goal of promoting research experience for

UMMS medical students, enrollment in the SSP program did not change significantly between FY 05 (19 students) and FY 06 (16 students); though there was a slight decrease in the total number of participating students. (Table 20). There continues to be a goal to increase this number through intensive faculty-directed student recruitment.

- Program outcomes support the educational goals of the program: three students presented their projects at four national meetings (Table 42); two students and their mentors submitted an article for publication in a peer-reviewed medical journal; three additional students had papers in draft form awaiting final submission (at the time of their graduation); and another three projects had papers planned but additional/final data collection needed to be completed before writing up the results.

### **FY 06 Summary**

- A total of 16 students participated in the program, representing a small decrease from the year prior (Table 38).

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- UMMS faculty members from 10 different departments mentored students, with mentors representing the following specialties at UMMS: OB/GYN, Orthopedics and Physical Rehabilitation, Anesthesiology, Cardiology, Psychiatry, Pediatrics, Surgical Oncology, Family Medicine and Community Health (including the Center for Health Policy and Research), Dermatology and Emergency Medicine.
- Three students presented their Senior Scholars projects at national meetings (Table 42). For the second consecutive year, funding from OME was available to support student participation in regional and national meetings where their study's findings were being presented. This continued to motivate students to disseminate their study's findings beyond the poster requirements of the Senior Scholars Program.
- Two papers were submitted to peer-review medical journals upon completion of the students' research projects. In addition, three student/mentor pairs were nearing the completion of papers and submissions were planned for the near future (postgraduation), plus three other projects had plans for submission/publication upon the completion of additional data gathering by other project team members.
- Recruitment efforts put into place in recent years have been continued, to increase new faculty mentors (representing a broader variety of departments) as well as increase the visibility of the program among second- and third-year medical students. Targeted outreach to students, and to faculty who have mentored students in the past, continued to be a successful venture.
- Continuation of efforts to increase research collaborations with educational sites affiliated with the medical school. A member of the Senior Scholars Program committee now routinely attends planned educational summits to speak about the SSP and identify opportunities for off-site faculty to mentor fourth-year students conducting research projects in their own educational setting.
- The Senior Scholars Committee continued to seek input (though focus group efforts) from current fourth-year students regarding the recruitment of new students into this program. Students were queried about 'how they heard about the program', 'how they identified a project to work on', 'how they identified a mentor to work with', 'what factors helped them to decide to participate in this program', 'when during medical school did they make the decision to plan on completing a senior scholars research project', 'what resources did they feel they needed in order to complete their research projects', and 'should a scholarly project be required of all medical students at some

point in their medical education training'. Results from these qualitative interviews are used to address future recruitment of students and the identification of resources to meet the needs of those noted by the students (e.g., statistical support and assistance with developing their final posters).

- A new brochure about the Senior Scholars Program was developed as well as a summary notebook about the program including copies of abstracts from recent graduates. These materials were distributed (as information and recruitment tools) to students during the Career Day for third-year students, as well as to attendees at the annual Senior Scholars Poster Day.

### **FY 07 Goals/Objectives**

- Increase enrollment of students in the Senior Scholars Program; goal set at approximately 20 percent of the senior class.

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- Enhance diversity in project opportunities by including clinician-scientist mentors on the Memorial Campus and departments that have not been well-represented in prior years.
- Continue to increase the scope of committee membership to include representation of all major departments, through direct contact with departmental chairs and center directors.
- Continue recruitment efforts among students in Years 1 and 2 of medical school, especially among those who participated in the Summer Research Fellowship Program as well as among third-year students during the annual Career Day.
- Augment student dissemination of research activity through peer-reviewed publications and presentations at national meetings.
- Collaboration with school-wide initiatives in grant development targeted at promoting recruitment, training and retention of clinician-scientists.
- Continue participation in the Competency Implementation Project, through interface/integration with "Physician as Scientist" competency efforts.

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## **SUMMER RESEARCH FELLOWSHIP PROGRAM**

MICHAEL GODKIN, PHD, CO-DIRECTOR

ANTHONY POTEETE, PHD, CO-DIRECTOR

### **Mission and Goals**

The principle goal of the Summer Research Fellowship Program is to increase the number of UMMS graduates who include research as a track in their careers. Specific goals are to provide students with the opportunity to learn about, and implement the basic steps of biomedical and behavioral research; to provide role models who are excellent researchers and who can convey enthusiasm for conducting research; to create a sense of belonging to a research community; and to develop students' interest in conducting research.

### **Performance Indicators**

- 100 percent of students who participated in the program and responded to the most recent evaluation survey indicated that the Summer Fellowship Program increased the likelihood of integrating research into their career.
- 100 percent of students in the program "agreed" or "strongly agreed" that the program was a valuable educational experience in the most recent evaluation survey.
- High number of student participants: 21 out of a class of 100 (Table 36).
- Nearly \$25,000 of PI contributions.

### **FY 06 Summary**

- 21 UMMS medical students participated in the program.
- Each student was mentored in his or her project by a UMMS faculty member with multiple UMMS departments represented (For a complete list of Summer Research Fellowship projects, see Table 36).

### **FY 07 Goals/Objectives**

- Collaboration with school-wide initiatives in grant development targeted at promoting recruitment, training and retention of clinician-scientists.
- Participation in the Competency Implementation Project, through interface/integration with the "Physician as Scientist" competency efforts.

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## **INTERNATIONAL MEDICAL EDUCATION PROGRAM**

MICHAEL GODKIN, PHD, DIRECTOR

### **Mission and Goals**

The principle goal of the International Medical Education Program is to develop the linguistic and cultural skills of medical students so they may better be able to serve multicultural and minority patients in Massachusetts. An important educational methodology to achieve this goal is the use of immersion experiences in foreign countries. These educational experiences promote the development of cultural humility, acquisition of language skills, and learning about indigenous health beliefs and clinical practices. A core curriculum in the program is The Pathway on Serving Underserved and Multicultural Populations, which integrates international and domestic learning opportunities throughout the four years of medical school. In this program, students have the opportunity of using language and cultural skills learned abroad in clinical and community service with multicultural populations in Massachusetts.

### **Performance Indicators**

- Enrollment and student interest in the elective Pathway Program remains high with all 20 available first-year slots being filled.
- Enrollment in international electives also remains high with 86 students participating in the past year (Table 39).
- Participation in international health experiences and service to underserved populations by UMMS students continues to substantially exceed national averages as measured by the AAMC Graduation Questionnaire (Table 16, 17).
- Award of a Public Service Endowment Grant of \$4,000 to develop Portuguese and Spanish-speaking skills of medical students.
- Award of a Healy grant of \$4,000 to further evaluate the effect of the Pathway program on participants' attitudes toward serving the underserved.
- Awards to students from Rotary International totaling \$36,702 for students to conduct international service projects.
- Award of \$25,000 from Rotary International to Julie Herlihy (Class 2007) to augment a revolving loan program in Zambia.
- Award of a Schweitzer Fellowship to Nancy Tulathimutte to go to the Schweitzer Hospital in Gabon for three months of clinical service.
- Publication in *Teaching and Learning in Medicine* of a manuscript entitled, "The Effect of a Global Longitudinal Pathway on Medical Students' Attitudes Toward the Medically

Indigent." Godkin M, Savageau J, Fletcher K. Volume 18(3), Summer 2006.

#### **FY 06 Summary**

- Maintenance of a UMMS Rotaract Club in conjunction with the Westborough Rotary Club and Rotary International. Over 60 students are members of this club, which develops international and local community service projects. Seven UMMS students were awarded Rotary International Scholarships to serve overseas.

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- Extramural funding was secured from a variety of sources, including: Healy - \$4,000; Public Service Endowment - \$4,000; Family Medicine Predoctoral Grant - \$10,000; Office of Community Programs - \$10,000; Rotary International - \$36,702.
- 86 students completed international experiences.
- 8 foreign medical students enrolled in and completed electives at UMass.

#### **FY 07 Goals/Objectives**

- Implementation of Healy and Public Service Endowment grants.
- Advise the UMass Rotaract Club and their implementation of service projects locally and abroad.
- Collaboration with the POLUS Center on projects in Nicaragua and an evolving relationship with the National Autonomous University of Nicaragua.
- Collaboration with school-wide initiatives in grant development targeted at promoting advocacy, service-learning, and cross-cultural educational programs.
- Participation in the Competency Implementation Project, including interface/integration with "Physician as Advocate" competency efforts.
- Conduct a qualitative study on the effect of the pathway program on students.
- Add GSN students to the Pathway program.

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### **GENERALIST PHYSICIAN PROGRAM**

TRICIA DRONEY, MPH, PROJECT MANAGER

#### **Mission and Goals**

Through the Generalist Physician Program, based in the Office of Medical Education, UMMS supports two second-year medical students who provide leadership in the promotion of generalism in medical education. These student leaders organize a variety of events that further enhance students' interest and appreciation for the complexity of practicing medicine as generalists. Many of these events are co-sponsored with other UMMS student interest groups whenever the topics are of mutual interest to both groups. Monthly luncheon guest speakers, the annual Primary Care Dinner and special promotional events are examples of activities sponsored through the Generalist Physician Program. The Generalist student leaders also serve as editors of the student newsletter, *Of Primary Importance*, which highlights

notable medical student activities as well as reflections on many facets of student life at UMMS.

#### **Performance Indicators**

- Sponsored 15 activities promoting generalism in medicine (Table 41).

#### **FY 06 Summary**

- Sponsorship of 12th Annual Primary Care Dinner in which 80 students and 25 faculty participated.
- Sponsorship of 12 events on primary care topics including: human rights advocacy,

perspectives from the dean's office, international health and missionary medicine.

- Publication of Fall, Winter and Spring issues of the student publication, *Of Primary Importance*.

#### **FY 07 Goals/Objectives**

- Maintain activity in the areas of primary care and community service to meet the needs of underserved communities, to preserve UMMS's consistently high performance indicators in these areas.
- With leadership provided by two second-year medical students, continue to collaborate with other UMMS student groups who share an interest in expanding learning opportunities related to generalism in medical education.

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### **COMMUNITY SERVICE ASSISTANTSHIP PROGRAM**

SUZANNE CASHMAN, SCD, CO-DIRECTOR

MICK HUPPERT, MPH, CO-DIRECTOR

#### **Mission and Goals**

The Community Service Assistantship Program offers first year medical students the opportunity to work during the summer before second year on one of a variety of community service projects aimed at meeting the needs of underserved communities throughout Massachusetts. This can be done either through employment in a communitybased

agency, or through development of an independent project. Students apply for positions with sites that interest them, and receive payment for their summer work.

Through this service-learning program, students have the opportunity to: learn about health problems and needs of underserved populations locally and around the state; participate actively in providing services designed to respond to identified community needs; meet several times in small groups to reflect on their experiences and relate them to their preparation in the Community Medicine Clerkship and PPS course; and acquire knowledge and skills that influence their academic, professional and personal development.

Through this program, UMMS establishes and strengthens its relationships with non-profit and community-based organizations while continuing to provide structured learning experiences for first-year medical students. Community organizations benefit in their roles as educators of future health professionals and through their receipt of skilled student services for the summer.

#### **Performance Indicators**

- The number of students applying for a summer placement in the Community Service Assistantship Program stayed fairly steady: 13 students participated in the summer of 2006.

#### **FY 06 Summary**

- In the Summer Community Service Assistantship Program, 13 first year students selected placements from a list of 20 host agencies. All 13 students were placed and successfully completed the program (Table 37). Successful completion included keeping a journal of reflections, participating in several small group discussions and presenting highlights of their work at the summer poster session.

#### **FY 07 Goals/Objectives**

- Maintain or increase the number of first-year students participating in the Community Service Assistantship Program, contingent upon securing additional funding.

- Maintain activity in the areas of community service, service-learning, and meeting the needs of underserved communities, to preserve UMMS's consistently high performance indicators in these areas.
- Participate in the Competency Implementation Project through interface/integration with "Physician as Advocate" competency efforts.

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## **CENTRAL MASSACHUSETTS**

### **SCHWEITZER FELLOWSHIP PROGRAM**

SUZANNE CASHMAN, SCD, CO-DIRECTOR

MICK HUPPERT, MPH, CO-DIRECTOR

#### **Mission and Goals**

Worcester, Massachusetts is the new home for the Albert Schweitzer Fellowship Program's latest expansion. A satellite of the Boston chapter, the Central Massachusetts site marks an exciting new initiative that results in doubling the number of fellows serving communities in this region of the Commonwealth. In a competitive selection process, 10 students from three health and human service schools were selected in the spring of 2006 to join the 25 Boston-based fellows as the 2006-07 class of Boston/Worcester Schweitzer Fellows. UMass Medical School, Massachusetts College of Pharmacy and Health Sciences-Worcester, Clark University, and the Colleges of Worcester Consortium worked with leaders of the Boston chapter to effect this expansion. The Central Massachusetts Schweitzer Fellowship Program satellite is administered through the UMMS Office of Community Programs. Suzanne Cashman, ScD and Mick Huppert, MPH, Associate Dean and Director of the Office of Community Programs, serve as Co-Directors, with Meghan Kalinich, MS, Director, Boston Schweitzer Fellows Program, providing oversight.

Honoring the legacy of Dr. Albert Schweitzer, the Boston/Worcester area graduate students commit to a year of service with a community agency; each Schweitzer Fellow devotes over 200 hours of service to local communities focusing on health issues identified in the community including: publishing a community health newspaper, strengthening vulnerable communities, expanding outdoor experiences for able and disabled individuals, teaching and mentoring children who live in public housing, educating parents about over-the-counter treatments for their children, and providing advocacy for at-risk infants and young children. The Worcester Schweitzer Satellite Program is supported financially by the Boston Schweitzer Fellowship, Clark University, Massachusetts College of Pharmacy and Health Sciences-Worcester, and UMMS, as well as through faculty mentors who volunteer from these schools to work with the fellows on their community projects.

#### **Performance Indicators**

- Successfully established a Worcester/Central Massachusetts satellite site of the Bostonbased Albert Schweitzer Fellowship Program, through a multi-institutional collaboration.
- Secured placements for 5 medical students, out of a total of 10 placement slots.
- Participation of 3 faculty mentors to support the medical students in their program placements.

#### **FY 06 Summary**

- In a competitive selection process, 5 medical students were placed and successfully developed projects with faculty mentorship (Table 40).

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- 5 additional students from other health professions programs (e.g., Massachusetts

College of Pharmacy, Clark University) were successfully placed and mentored.

### **FY 07 Goals/Objectives**

- Maintain the current level of medical student participation in the Schweitzer Fellowship Program.
- Expand the program scope to include other schools/professions.
- Secure financial support for the program, through grants and collaborations with schoolwide and external initiatives targeted at promoting advocacy, service-learning, and community service opportunities.
- Participate in the Competency Implementation Project through interface/integration with "Physician as Advocate" competency efforts.

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### **OFFICE OF ADMISSIONS**

JOHN PARASKOS, MD, ASSOCIATE DEAN

KAREN LAWTON, DIRECTOR

#### **Mission and Goals**

The Office of Admissions oversees and implements the medical school admissions process consistent with our goal of national distinction in medical education; our missions in service, research and education for the Commonwealth; institutional policies of UMMS; and the standards and regulatory guidelines established by oversight bodies such as the AAMC and LCME. Since one of our main institutional missions focuses on service to the health care needs of the Commonwealth, the admissions process seeks out applicants who demonstrate a commitment to serving Massachusetts and its needs in health care. In addition, in response to our evolving institutional mission in health sciences research, the admissions process also seeks qualified MD/PhD applicants, both in-state and out-of-state, who demonstrate interest and experience in health sciences research.

#### **Performance Indicators**

- In keeping with our goal of national distinction in medical education, the qualifications of the entering matriculates in 2005 continued to demonstrate mean MCAT scores above the national average (Tables 24-26).
- 795 applications were received, of these 440 were competitive enough to be interviewed.
- 181 were sent acceptances to matriculate 102. Composition of places offered was:
  - 162 Regular MD – MA Residents
  - 13 MD/PhD – MA Residents
  - 6 MD/PhD – Non MA Residents
- UMMS continued to demonstrate a competitive ratio of acceptances offered to fill the class (Tables 27-28).
- In FY 06, MD/PhD: 32 applicants were interviewed and 19 were offered acceptances, consistent with the Admissions Office goal of enhancing recruitment into the MD/PhD program (Table 29). Five of the 19 accepted to the program chose to matriculate at UMMS.

#### **FY 06 Summary**

- Close collaboration with the leadership of the MD/PhD program to establish a more effective and efficient process for the recruitment and retention of MD/PhD applicants.
- Recruitment and training of qualified faculty to serve on the Admissions Committee and to assist with interviewing medical school applicants.

- Continued integration of PSSA database development into the admissions process.
- Continued work with PSSA database developers to refine the online application system.

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### **FY 07 Goals/Objectives**

- Implementation of a totally paperless online medical school application process.
- Continued training of applicants, committee members and interviewers in the use of the electronic application system.
- Support of UMMS educational programs through proactive communication and dissemination to the UMMS applicant pool.
- Continued development and expansion of the pool of out-of-state MD/PhD applicants.
- Addressing space and other infrastructure needs to support and facilitate the migration to the totally electronic application.
- Selection of the best possible class for entering UMMS in August 2006.

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## **STANDARDIZED PATIENT PROGRAM**

WENDY GAMMON, MA, MED, PROGRAM DIRECTOR

### **Mission and Goals**

The UMMS Standardized Patient Program serves as an institution-wide resource for standardized patient training and development with the goal of augmenting the quality of medical education for our diverse learners. The SP Program also provides SP services on a contractual basis to medical schools and other organizations outside UMMS, thereby enhancing the visibility and reputation of UMMS as a leader and innovator in medical education.

In AY 2005-06, performance-based teaching and assessment using SP's continued to be the established standard for clinical skills training and competency-based evaluation in U.S. medical schools and has been elevated in importance since the mandated USMLE Step II clinical skills assessment became effective July 2004. This added component of the Boards exam established performance based assessments using SP's as another "gold standard" of clinical skills measurement for all U.S. medical school graduates. In June 2006, all eligible third year students went through the UMass 8-station OSCE assessment using standardized patients. Since 1995, the so-named End of Third Year Assessment (EOTYA) has been in place; however, henceforth from June 2006, successful performance of this exam is required for UMMS graduation, and this new "high stakes" status was piloted in June 2005. During AY 05-06, a new program of EOTYA evaluation, clinical skills needs assessment, remediation and examination retake was successfully piloted with 25 UMass students identified as demonstrating clinical skills weaknesses in EOTYA 2005. During this pilot, the original policies and procedures were revised and refined in response to this experience, and this remediation program is currently in its second year. The goal remains to prepare students to successfully demonstrate mastery of core clinical skills competencies as a UMass graduate as well as to provide adequate preparation for the USMLE Step 2 exam.

The rising trend of competency-based clinical skills teaching and assessment has increased the demand for the SP Program to provide services to medical schools and other organizations outside UMMS. In FY 06, the ongoing expansion of SP Program academic services included a greater number as well as greater diversity of entities receiving academic services by our SP Program, including most New England medical schools, area hospitals, HMO's and other health care organizations, community education workshops, continuing

medical education and graduate medical education programs, nursing and physician assistant training programs.

### **Performance Indicators**

- The successful implementation of the first High Stakes End of Third Year Assessment (EOTYA) exam in June 2006 with successful piloting of the follow-up remediation and retake program following Pilot EOTYA implemented in June 2005.

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- Ongoing service to UMass Graduate Medical Education and Graduate School of Nursing for teaching and assessment: new OSCE's and GYN exams (St. Vincent Hospital); GYN/GU exams (UMMS Family Medicine and Community Health residents); UMass Graduate School of Nursing with first-time OSCE's for new GSN degree program students; clinical electives for resident remediation.
- Ongoing annually scheduled projects with other regional medical schools: Harvard Medical School, Boston University School of Medicine, Tufts University School of Medicine.
- Development and implementation of new projects in AY 05-06 with regional medical education programs; these include Tufts University (new format for PD 2 Physical Exam session; continued End of First and Second Year Assessments and now twice annual OSCE interclerkship exercises utilizing UMass SP's; Brown Medical School (new End of Second Year Assessment using UMass SP's).
- Continued promotion of UMMS to regional and national organizations by the following appointments: Faculty appointment to Assistant Professor of Medicine in the UMMS Department of Medicine; continued service as: Member, NBME National Case Development Committee (National Board of Medical Examiners, developing cases for the USMLE Step 2 licensure exam); Director of Finance, Board of Directors, Association of Standardized Patient Educators (ASPE).
- Scholarly dissemination through peer-reviewed presentations and publications:
  - Adamo, G., **Gammon, W.** Case material development, recruiting and training for standardization with SP's. Annual Meeting of the Association of Medical Education in Europe. 30 August-3 September 2005. Amsterdam, The Netherlands. (workshop)
  - Adamo, G., **Gammon W.** Simulated and Standardized Patients in Medical Education. Annual Meeting of the Association of Medical Education in Europe. 30 August - 3 September 2005. Amsterdam, The Netherlands. (workshop)
  - Gammon, W.**, Fox, H. SP Orientation Programs: Developing and Maintaining High Quality Program Standards. Annual Meeting of the Association of Standardized Patient Educators. 11 – 14 September, 2005. Chicago, Illinois. (workshop)
  - Gammon, W.**, Fox, H. The Emerging Status of Today's SP Program: Gaining Institutional Credibility, Visibility and Support. Annual Meeting of the Association of Standardized Patient Educators. Sept 11 - 14, 2005. Chicago, Illinois. (workshop)
  - Gammon, W.**, Fox, H. The Emerging Status of Today's SP Program: Gaining Institutional Credibility, Visibility and Support: 12<sup>th</sup> International Ottawa Conference on Medical Education, May 20-24, 2006. New York. (presentation)
  - Zanetti, M., Alper, E., **Gammon, W.**, Mazor, K., Hatem, D., McGee, S., Pugnaire, M. Using a Targeted OSCE station to Measure Unprofessional Behavior. 12<sup>th</sup> International Ottawa Conference on Medical Education, May 20-24, 2006. New York. (poster)

## **FY 06 Summary**

During FY 06, the Standardized Patient Program at UMass provided a wide range of services to diverse medical schools and other organizations.

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### **Summary of SP Programs and Services: New and Ongoing**

#### **UMass Community**

##### *Ongoing Programs & Services:*

- Physician, Patient & Society 1 and 2 courses (small group sessions, individual interview sessions, mid-term and final exams)
- Physical Exams (Physical Diagnosis 2 and Medicine clerkship)
- GYN/GU exams (PD II and OB/GYN clerkship)
- Complete medical interview (PD 2)
- Clerkships: OSCE's/interim sessions for Psychiatry, OB/GYN, Surgery, Pediatrics, Family Medicine, and Medicine
- End of Third Year Assessment
- Remediation - undergraduate, EOTYA, interns, residents
- GYN/GU exams - UMass Lowell graduate nurses
- GYN/GU exams - UMass Worcester graduate nurses
- OSCE's - St. Vincent Hospital interns
- OSCE's - UMass Worcester undergraduate nurses, new GSN degree program
- GYN/GU exams - UMass Memorial Family Medicine residents
- Neurology OSCE - UMass Neurology residents
- Workshop - UMass Department of Emergency Medicine

#### **Harvard Medical School**

##### *Ongoing Programs & Services:*

- Doctor/Patient Course examinations - Years 1 and 3
- Physical Exams - Physical Diagnosis 2 sites
- GYN/GU exams - Year 2
- Physical Diagnosis 2 Comprehensive Final Exam
- Comprehensive 4<sup>th</sup> Year Examination

#### **Boston University School of Medicine**

##### *Ongoing Programs & Services:*

- Physical Exams - Physical Diagnosis 2
- Substance Abuse focused teaching interviews
- End of Third Year Assessment
- End of Second Year Assessment

#### **Tufts University School of Medicine**

##### *Ongoing Programs & Services:*

- Focused History + Physical and Physical Exam teaching sessions - Physical Diagnosis 2
- End of First Year Assessment
- End of Second Year Assessment
- Physical Exams - Year 2
- OSCE Prep Interclerkship

#### **Other Schools**

##### *Ongoing Programs & Services:*

- Northeastern University - GYN/GU exams to PA students

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- Northeastern University - OSCE's for PA students
- University of New Hampshire - GYN/GU exams to nurse practitioners
- Massachusetts College of Pharmacy & Health Sciences - GYN/GU exams to PA students

*New Services:*

Brown Medical School – End of Second Year Assessment

**UMass Macy Mentorship Program in Health Communication Education Grant**

- Continued collaboration with Macy Mentors to assist participant schools in the final grant year in the development, implementation and dissemination of communication curriculum

**Summary of all entities served by UMass Standardized Patient Program in AY 05-06:**

**13 Medical Schools and other Health Profession Schools:**

Albany Medical College

Boston University School of Medicine

Boston University School of Public Health

Brown Medical School

Harvard Medical International

Harvard Medical School

Massachusetts College of Pharmacy & Health Sciences

Massachusetts Institute of Technology (combined program with Harvard Medical School)

Northeastern University Physician Assistant Program

Tufts University School of Medicine

University of Connecticut School of Medicine

University of Massachusetts Medical School

University of New Hampshire Nurse Practitioner Program

**8 Hospitals and Other Health Care Facilities:**

Beth Israel Deaconess Medical Center

Harvard Vanguard Medical Associates

Massachusetts General Hospital

New England Baptist Hospital

St. Elizabeth's Medical Center

St. Vincent Hospital Internal Medicine Residency Program

Tufts-New England Medical Center

West Roxbury VA Hospital

**3 National and Regional Oversight Organizations:**

National Board of Medical Examiners

National Institutes of Health, in collaboration with Tufts-New England Medical Center:  
multi-factorial biases in clinical practice (grant)

Association of Standardized Patient Educators

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**5 Other UMass Teaching Programs:**

UMass Memorial Family Practice Residency Program

UMass Memorial Neurology Residency Program

UMass Memorial OB GYN Residency Program

University of Massachusetts Graduate School of Nursing, Lowell  
University of Massachusetts Graduate School of Nursing, Worcester

**FY 07 Goals/Objectives**

- Continued growth and expansion of Standardized Patient Program services to the UMMS community, including the School of Medicine, Graduate School of Nursing and Graduate Medical Education.
- Continued collaboration with and expansion of SP services to Harvard University, Boston University, Brown Medical School, Tufts University, Northeastern University, University of New Hampshire, Harvard Vanguard and Harvard Medical International.
- Implementation of High Stakes End of Third Year Assessment (EOTYA) for AY 06-07.
- Refinement and implementation of remediation and retest program for High Stakes EOTYA in continued collaboration with Clerkship Directors and Division of Research and Evaluation.
- Ongoing expansion and refinement of SP programming to support the EOTYA, all clerkships, and PPS course, in order to best prepare UMMS students for USMLE Step 2 clinical skills assessment.
- Participation in the Competency Implementation Project through interface/integration with efforts related to clinical skills teaching and assessment.
- Continued collaboration with new grant initiatives housed in the OME as well as schoolwide.
- Promotion of the reputation and visibility of UMMS as an institution of national distinction by supporting educational research and scholarly activity through presentations at local and national meetings, and peer-reviewed publications.

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Interclerkships  
Program  
\*Director  
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Summer research  
Program Directors  
A Poteete,  
M Godkin  
Assoc Dean  
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M Zanetti  
Acad Business  
Coordinator  
K Moylan  
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Vice Dean for  
Undergraduate  
Medical Education  
M Pugnaire  
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Chair/Co-Chair  
R Baldor  
J Jonassen  
Yr1, Yr 2,  
Clinical Yrs, 4th Yr  
Curriculum  
Committees  
Senior Scholars  
Program  
Co-Directors

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Coordinator

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S Krinszman

Administrative

Manager

A Perla

KEY

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REPORTING

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Curr/Fac Dev  
Director Div  
Grants/Projects  
E Ferrara  
Division  
Grants/  
Projects CIP  
Project  
Manager  
T Droney  
Geriatrics GPP  
and CIP  
Coordinator  
Director  
S Pasquale  
Optional  
Enrichment  
Electives  
Yr 4 Mini  
Selectives  
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L Sefton  
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Simulation  
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M Taylor  
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## **OFFICE OF MEDICAL EDUCATION FY06 ANNUAL REPORT**

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\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(last updated 11/17/06). **TABLE 1**

**"Overall, I am satisfied with the quality of my  
 medical education"**

**AAMC Graduation Questionnaire**

55  
 62 63 62  
 69  
 67  
 56  
 61  
 55 54  
 58  
 36 36 37 38 39  
 35 35 35  
 39 39 40

0  
20  
40  
60  
80  
100  
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006\*

**Graduation Year**  
**% "Very Satisfied" ('96-'97)/**  
**"Strongly Agree" ('98-'06)**

UMMS

All Schools

\*Response rates: PGY1=58%, n=60; GQ UMass=88%, n=92; GQ All Schools=61%, n=9,585.  
Graphs produced by the Research and Evaluation Division of the Office of Medical Education  
(Last updated 11/17/06). **TABLE 2**

**"Overall, I am satisfied with the quality of my medical education"**

**Class of 2005\***

51  
41  
42  
39  
54  
58  
0 20 40 60 80 100  
GQ All Schools  
GQ UMMS  
PGY1

**Percent**

Strongly Agree

Agree

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education  
(last updated 11/17/06). **TABLE 3**

**"I am confident that I have acquired the clinical skills**

**required to begin a residency program"**

**AAMC Graduation Questionnaire**

36  
45  
42  
55  
41 41  
35 37  
26

36 35  
28  
36  
44  
42  
39 40 40  
39  
43  
39 40  
0  
20  
40  
60  
80  
100  
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006\*

**Graduation Year**  
**% "Very Confident" ('96-'97)/**  
**"Strongly Agree" ('98-'06)**  
UMMS

All Schools

\*Response rates: PGY1=58%, n=60; GQ UMass=88%, n=92; GQ All Schools=61%, n=9,585.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(Last updated 11/17/06). **TABLE 4**

**"At the time I graduated, I had acquired the clinical skills**

**required to begin a residency program"**

**Class of 2005\***

52  
60  
40  
39  
36  
58  
0 20 40 60 80 100

GQ All Schools

GQ UMass

PGY1

**Percent**

Strongly Agree

Agree

\*Response rates: UMass=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(last updated 11/17/06). **TABLE 5 (1 of 4)**

**2006\* AAMC Graduation Questionnaire Results**  
**(Graph 1 of 4)**

38  
44  
52  
45  
42  
43  
28  
53  
47  
54  
55  
57  
65  
63  
49  
30  
30  
31  
35  
36  
38  
39  
45  
45  
51  
56  
58  
61  
63  
67

0 20 40 60 80 100

Chemoprevention methods

Environmental health

Disaster management

Occupational medicine

Health care systems

Medical record-keeping

Clinical pharmacology

Health services financing

Rehabilitative care

Managed care

Practice management

Physical rehabilitation

Medical licensure/regulation

Medical economics

Law and medicine

**Percent Rating Instruction Time "Inadequate"**

UMMS

All Schools

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(last updated 11/17/06). **TABLE 5 (2 of 4)**

## **2006\* AAMC Graduation Questionnaire Results**

**(Graph 2 of 4)**

18  
17  
20  
25  
19  
24  
17  
16  
42  
12  
32  
38  
31  
47  
46  
16  
16  
16  
17  
18  
18  
19  
19  
19  
20  
20  
20  
21  
26  
27

0 20 40 60 80 100

Physician-physician communication skills  
Interpretation of clinical data and research reports  
Epidemiology  
Palliative care/pain management  
Literature reviews/critiques  
Biostatistics  
Immunization  
Decision analysis  
Biological/chemical terrorism  
Interpretation of laboratory results  
Public health  
Health surveillance strategies  
Health care quality improvement  
Global health issues  
Health policy  
**Percent Rating Instruction Time "Inadequate"**

UMMS

All Schools

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(last updated 11/17/06). **TABLE 5 ( 3 of 4)**

# 2006\* AAMC Graduation Questionnaire Results (Graph 3 of 4)

21  
14  
19  
6  
8  
8  
16  
34  
19  
27  
9  
13  
26  
33  
30  
6  
6  
6  
7  
7  
8  
8  
10  
11  
11  
11  
12  
12  
13  
16

0 20 40 60 80 100

Community medicine  
Health promotion and disease prevention  
Human sexuality  
Problem solving  
Evidence-based medicine in general  
Management of disease  
Women's health  
Complementary and alternative medicine  
Continuity of care  
Health determinants  
Behavioral sciences  
Teamwork with other health professionals  
Health disparities  
Role of community health and social service agencies  
Long-term health care

## Percent Rating Instruction Time "Inadequate"

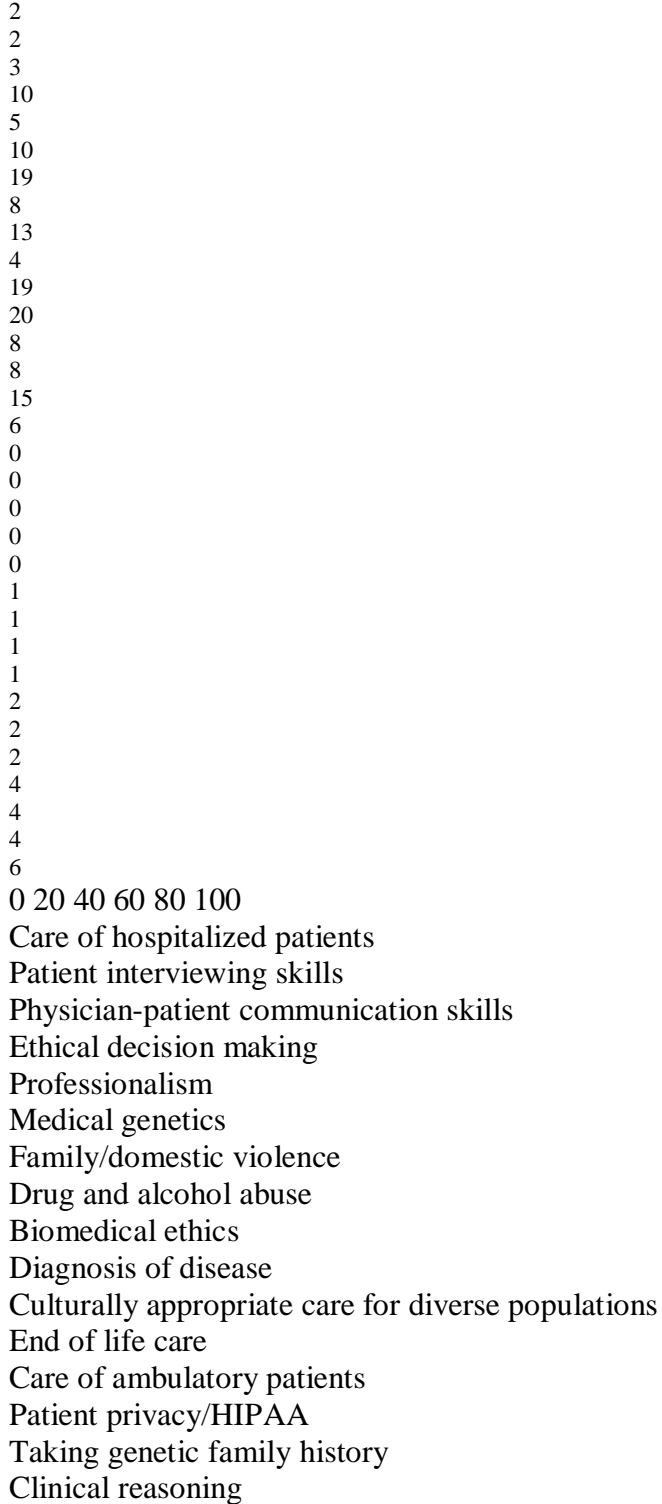
UMMS

All Schools

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education  
(last updated 11/17/06). **TABLE 5 (4 of 4)**

## **2006\* AAMC Graduation Questionnaire Results (Graph 4 of 4)**



## **Percent Rating Instruction Time "Inadequate"**

UMMS

All Schools

\*Response rate=58%, n=60.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(Last updated 10/31/06). **TABLE 6**

## **PGY1 Residents' Perceptions of Usefulness of UMass Interclerkships**

**Class of 2005\***

35

47

51

58

59

65

67

74

79

0 20 40 60 80 100

Complementary Medicine

Working with People with Cognitive

Disabilities

Multiculturalism

Geriatrics

Patient Safety

Domestic Violence

U.S. Healthcare System

Pain Management

End of Life

**Percent responding "Moderately Useful" or "Very Useful"**

\*Response rate=58%, n=60.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(Last updated 10/31/06). **TABLE 7**

## **PGY1 Residents' Ratings of Adequacy of Undergraduate**

**Medical Education at UMass**

**Class of 2005\***

36

72

80

93

95

95

100

100

100

0 20 40 60 80 100

Perform routine procedures/technical skills

Use technology-based skills in patient care

Instruct 3rd and 4th year students

Make oral case presentations

Develop a diagnostic/management plan

Create an adequate written medical record

Conduct a medical history

Conduct a physical

Maintain expected professional demeanor

**Percent responding "Agree" or "Strongly Agree" that they were adequately prepared**

\*Response rates: PGY1=58%, n=60; GQ UMass=88%, n=92; GQ All Schools=61%, n=9,585.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(Last updated 11/17/06). **TABLE 8 (1 of 3)**

## **Comparison of Residents' Perceptions of Adequacy of Instructional Time at UMass at Graduation (GQ-2005) and End of PGY1 (2006)\***

**(Graph 1 of 3)**

0 20 40 60 80 100

Geriatrics

Nutrition

Clinical pharmacology

Teamwork with health professionals

Physician-patient relationship

Clinical problem solving

Management of disease

Patient interviewing skills

Long term health care

Primary care

Patient privacy / HIPAA

Patient follow-up

Care of ambulatory patients

Care of hospitalized patients

**Percent Indicating Appropriate Instructional Time at UMass**

PGY1

GQ

UMMS

GQ All

Schools

**Area of Instruction**

\*Response rates: PGY1=58%, n=60; GQ UMass=88%, n=92; GQ All Schools=61%, n=9,585.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(Last updated 11/17/06). **TABLE 8 (2 of 3)**

**Comparison of Residents' Perceptions of Adequacy of Instructional Time at UMass at Graduation (GQ-2005) and End of PGY1 (2006)\***

**(Graph 2 of 3)**

0 20 40 60 80 100

Law and medicine

Health care systems including managed care

Medical record-keeping

Medical economics including medical care cost control

Occupational medicine

Risk assessment and counseling

Health issues for underserved populations

Women's health

Biostatistics

Screening for diseases

Health promotion & disease prevention

Role of community agencies

Evidence-based medicine

Pain management

**Percent Indicating Appropriate Instructional Time at UMass**

PGY1

GQ

UMMS

GQ All

Schools

**Area of Instruction**

\*Response rates: PGY1=58%, n=60; GQ UMass=88%, n=92; GQ All Schools=61%, n=9,585.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(Last updated 11/17/06). **TABLE 8 (3 of 3)**

**Comparison of Residents' Perceptions of Adequacy of Instructional Time at UMass at Graduation (GQ-2005) and End of PGY1 (2006)\***

**(Graph 3 of 3)**

0 20 40 60 80 100

Professionalism

Physical diagnosis

Culturally appropriate care for diverse populations  
Cultural differences/health related behaviors  
Drug and alcohol abuse  
Family/domestic violence  
Death and dying  
Family dynamics  
Human sexuality  
Complementary and alternative medicine  
Genetic counseling  
Biomedical / medical ethics  
Behavioral sciences

**Percent Indicating Appropriate Instructional Time at UMass**

PGY1

GQ

UMMS

GQ All

Schools

**Area of Instruction**

\*Response rate=76%, n=53.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(last updated 10/31/06). **TABLE 9**

**Satisfaction of Residency Program Directors with**

**UMass**

**Graduates as PGY1 Residents**

**Residency Program Director Survey - Class of 2005\***

54

57

58

61

62

64

65

65

66

74

81

0 20 40 60 80 100

Technical/Procedural Skills

Physical Exam Skills

Medical Knowledge

Technology Skills in Clinical Care

Training and Instruction

Clinical Judgment

Clinical Documentation

Overall Clinical Competence

History-Taking Skills

Oral Case Presentations

Professionalism

**Percent Rating UMass Graduates as "Superior"**

Graphs produced by the Research and Evaluation Division of the Office of Medical Education

(last updated 8/22/06). **TABLE 10**

**U.S. News and World Report**

**Top Medical Schools - Primary Care**

**University of Massachusetts Medical School Ranking**

2

4

8

5

6

4

5

12

3

4 4

1

3

5

7

9

11

13

15

1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

**US News & World Report - Best Schools Edition**

**Rank**

\*Determined using first author on paper/oral presentation/poster and moderator/organizer for small group/mini-workshop.

Graphs produced by Research and Eval Div. of the Office of Med Ed (last updated 12/28/05).

**TABLE 11**

**AAMC National Meeting 2005**

**Peer-Reviewed Presentations**

2

1 1 1 1

2

5

3

2

4

1

2

3

1

2

3

1

1

4

2

5 1

1

1

2

2

1

2

2 2

3

1 1

0

1

2

3

4

5

6

7

8

9

10

U. of Toronto

UMass

U. of Calgary

U. of Kentucky

McMaster U.

Harvard

U. of Arkansas

AAMC

Mayo Medical School

NJ Medical School

NYU School of Medicine

U. of CA, San Francisco

**Number of Presentations\***

Paper Poster Oral Mini-Workshop Small Group

# External Funding for Medical Education: Grants/Contracts

Robert Wood Johnson Foundation

**AAMC/HRSA:**

**Josiah Macy, Jr. Foundation: Macy**

**AAMC/ Hartford Foundation:**

**AAMC/Pfizer**

**National Board of Medical Examiners:**

**Josiah Macy, Jr. Foundation:**

**National Board of Medical Examiners**

**American Medical Student Association**

**AAMC/Caring for Community Grant:**

**AMA Medical Education Research Consortium  
Grant**

1994 - 2000

1998 - 2001

1999 - 2002

2001 - 2003

2001 - 2005

1995 - 2001

2003-2006

2003-2006

2003-2007

2006-2007

2005-2007

**OFFICE OF MEDICAL EDUCATION**

**AAMC PRESENTATIONS**

**AY05-06**

**Title Author(s)/Presenter(s) Location Type of Presentation**

Competency-Based Communication

Skills Curricula at 8 Medical Schools:

A Report from the UMass Macy  
Mentorship Program in Health  
Communication Education  
Michele P. Pugnaire, MD, Auguste H. Fortin VI, MD,  
MPH, Elizabeth Gaufberg, MD, MPH, Karen  
Richardson-Nassif, PhD, Carol A. Pfeiffer, PhD, John  
F. McCahan, MD, Alicia D. Monroe, MD, Nancy  
Cochran, MD, Kristin Dardano, MD  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Group Discussion  
Does Advance Access to Electronic  
Materials Discourage Attendance at  
Basic Science Courses?  
Susan Billings Gagliardi, PhD, Kathleen M. Mazor,  
EdD  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Oral Presentation  
Factors Influencing Preceptors'  
Responses to Medical Errors: A  
Factorial Survey  
Kathleen M. Mazor, EdD, Melissa A. Fischer, MD,  
MAEd, Heather-Lyn Haley, PhD, David Hatem, MD,  
Mark E. Quirk, EdD, H. Jane Rogers, PhD  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Research Paper  
Interclerkships: Successfully  
Addressing "Hot Topics" in Medical  
Education for a Decade  
Julie Jonassen, PhD, Michele Pugnaire, MD  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Poster  
Maintaining Volunteer Faculty  
Relationships  
Robert A. Baldor, MD, Kathleen Ryan Trumpaitis  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Group Discussion  
Portfolios in Medical Education:  
Developing Practical Strategies for  
Implementation and Assessment  
Richard J. Rathe, MD, Heather E. Harrell, MD, Anita  
Pokorny, MEd, Melissa A. Fischer, MD, MAEd  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Mini-Workshop  
The Effectiveness of a Geriatrics  
Curriculum  
Susan Barrett, MS, Michele Carlin, Stacey Kadish,  
MEd, Michele Pugnaire, MD, Sarah McGee, MD,  
MPH  
AAMC RIME Washington, DC,  
November 4-9, 2005

Poster

Using Technology to Encourage  
Individualized, Student-Driven  
Learning: The Electronic Brain Atlas  
Project

Susan Billings-Gagliardi, PhD, Charlene Brown,  
MEd, Sam Gorstein  
AAMC RIME Washington, DC,  
November 4-9, 2005

Poster

## **TABLE 13A**

### **OFFICE OF MEDICAL EDUCATION PEER-REVIEWED PRESENTATIONS AY05-06**

#### **TABLE 13B Page (1 of 3)**

#### **Year Title Author(s)/Presenter(s) Location Type of Presentation**

2005

Competency-Based Communication  
Skills Curricula at 8 Medical Schools: A  
Report from the UMass Macy  
Mentorship Program in Health  
Communication Education

Michele P. Pugnaire, MD, Auguste H. Fortin VI,  
MD, MPH, Elizabeth Gauferg, MD, MPH, Karen  
Richardson-Nassif, PhD, Carol A. Pfeiffer, PhD,  
John F. McCahan, MD, Alicia D. Monroe, MD,  
Nancy Cochran, MD, Kristin Dardano, MD  
AAMC RIME Washington, DC,  
November 4-9, 2005

Group Discussion  
2005

Does Advance Access to Electronic  
Materials Discourage Attendance at  
Basic Science Courses?  
Susan Billings-Gagliardi, PhD, Kathleen Mazor,  
EdD

AAMC RIME Washington, DC,  
November 4-9, 2005

Oral Presentation  
2005

Factors Influencing Preceptors'  
Responses to Medical Errors: A  
Factorial Survey  
Kathleen M. Mazor, EdD, Melissa A. Fischer, MD,  
MAEd, Heather-Lyn Haley, PhD, David Hatem,  
MD, Mark E. Quirk, EdD, H. Jane Rogers, PhD  
AAMC RIME Washington, DC,  
November 4-9, 2005

Research Paper  
2005

Interclerkships: Successfully Addressing  
"Hot Topics" in Medical Education for a  
Decade

Julie Jonassen, PhD, Michele Pugnaire, MD

AAMC RIME Washington, DC,  
November 4-9, 2005  
Poster  
2005  
Maintaining Volunteer Faculty  
Relationships  
Robert A. Baldor, MD, Kathleen Ryan Trumpaitis  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Group Discussion  
2005  
Portfolios in Medical Education:  
Developing Practical Strategies for  
Implementation and Assessment  
Richard J. Rathe, MD, Heather E. Harrell, MD,  
Anita Pokorny, MEd, Melissa A. Fischer, MD,  
MAEd  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Mini-Workshop  
2005  
The Effectiveness of a Geriatrics  
Curriculum  
Susan Barrett, MS, Michele Carlin, Stacey Kadish,  
MEd, Michele Pugnaire, MD, Sarah McGee, MD,  
MPH  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Poster  
2005  
Using Technology to Encourage  
Individualized, Student-Driven  
Learning: The Electronic Brain Atlas  
Project  
Susan Billings-Gagliardi, PhD, Charlene Brown,  
MEd, Sam Gorstein  
AAMC RIME Washington, DC,  
November 4-9, 2005  
Poster  
2005  
Factors Influencing Preceptors'  
Responses to Medical Errors: A  
Factorial Survey  
Kathleen M. Mazor, EdD, Melissa A. Fischer, MD,  
MAEd, Heather-Lyn Haley, PhD, David Hatem,  
MD, Mark E. Quirk, EdD, H. Jane Rogers, PhD  
Academic Medicine, Volume  
80(10), October 2005  
Journal Article  
2005  
The Relationship Between Checklist  
Scores on a Communication OSCE and  
Analogue Patients' Perceptions of  
Communication  
Kathleen Mazor, EdD, Judith K. Ockene, PhD,  
MEd, MA, H. Jane Rogers, PhD, MEd, Michele

M. Carlin, Mark E. Quirk, EdD  
Advance in Health Sciences  
Education;2005;10:37-51  
Journal Article

**OFFICE OF MEDICAL EDUCATION  
PEER-REVIEWED PRESENTATIONS**

**AY05-06**

**TABLE 13B Page (2 of 3)**

**Year Title Author(s)/Presenter(s) Location Type of Presentation**

2005

Simulated and Standardized Patients in  
Medical Education  
Graceanne Adamo, Wendy Gammon, MA, MEd  
Annual Meeting of the Association  
of Medical Education ,  
Amsterdam, Netherlands  
Panel Discussion

2005

SP Orientation Programs: Developing  
and Maintaining High Quality Program  
Standards  
Holly Fox, Wendy Gammon, MA, MEd, Jennie  
Struijk, Kerry Knickle  
Annual Meeting of the Association  
of Standardized Patient Educators,  
Chicago, IL  
Workshop

2005

The Emerging Status of Today's SP  
Program: Gaining Institutional  
Credibility, Visibility and Support  
Delia Anderson, Holly Fox, Wendy Gammon, MA,  
MEd, Lynn Seng  
Annual Meeting of the Association  
of Standardized Patient Educators,  
Chicago, IL  
Workshop

2005

A Planning Framework to Aid Faculty  
in Developing and Evaluating Effective  
Online Teaching  
Susan Pasquale, PhD, MT-BC, NMT  
Creative College Teaching Journal  
Journal Article

2005

Primary Care Renewal: Regional  
Faculty Development and  
Organizational Change  
Mark Quirk, EdD, Heather-Lyn Haley, PhD, David  
Hatem, MD, Susan Starr, EdM, Mary Philbin,  
EdM

Family Medicine; 2005;37(3):211-  
218

Journal Article

2005

Creating Resiliency: An Experiential  
Workshop to Facilitate Health in  
Ourselves and Those We Teach  
Emily Ferrara, MA, et al Society of Teachers of Family  
Medicine Annual Spring  
Conference, New Orleans, LA  
Workshop  
2005

Interprofessional Educational Model for  
Teaching Community Health  
Michele P. Pugnaire, MD, Mary L. Zanetti, EdD,  
Michael A. Godkin, PhD, Deborah A. Katz, MS,  
Robin Toft Klar, DNSc, RN, Janet Fraser Hale,  
PhD, RN, CS, FNP, Jill M. Terrien, PhD©, APRNBC,  
Linda J. Cragin, MS, Suzanne B. Cashman,  
ScD

UMMS Community Medicine  
Academic Conference, Worcester,  
MA, April 2006

Poster  
2005

The Effect of a Pathway on Serving  
Multicultural Populations on Cultural  
Competence  
Robert Baldor, MD, and Mick Godkin, PhD  
WONCA (World Organization of  
National Colleges, Academies and  
Academic Associations of General  
Practitioners/Family Physicians)  
Poster

**OFFICE OF MEDICAL EDUCATION  
PEER-REVIEWED PRESENTATIONS  
AY05-06**

**TABLE 13B Page (3 of 3)**

**Year Title Author(s)/Presenter(s) Location Type of Presentation**

2005

Reliability and Validity of Checklists  
and Global Ratings by Standardized  
Patients  
Mark Quirk, EdD, Kathleen Mazor, EdD, Heather-  
Lyn Haley, PhD, Scott Wellman, MD, David  
Keller, MD, David Hatem, MD, Lisa Keller  
Teaching and Learning in  
Medicine; 17:202-209

Journal Article

2005

Development and Testing of an  
Instrument to Measure Teacher Identity  
in Physicians  
Susan Starr, EdM, Heather-Lyn Haley, PhD,  
Kathleen Mazor, EdD, Mary Philbin, EdM, Warren  
Ferguson, Mark Quirk, EdD  
Teaching and Learning in  
Medicine; 18:117-125

Journal Article

2005

Learning Portfolios: Practical

Applications and a Primer for Beginning Melissa Fischer MD MEd, Heather Harrell MD

Clerkship Directors in Internal

Medicine, Portland, OR Workshop

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education (last updated 11/17/06). **TABLE 14 (1 of 2)**

## **ICM/Intro to the Patient prepared you for clinical clerkships and electives**

### **AAMC Graduation Questionnaire**

44

44

45

44

44

42

43

42

43

47

55

68

60

62

66

58

48

64

0 20 40 60 80 100

1998

1999

2000

2001

2002

2003

2004

2005

2006\*

#### **Percent responding "Excellent"**

UMMS

All Schools

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education (last updated 11/17/06). **TABLE 14 (2 of 2)**

# ICM/Intro to the Patient prepared you for clinical clerkships and electives

## AAMC Graduation Questionnaire

- 3.2
- 3.2
- 3.2
- 3.2
- 3.2
- 3.2
- 3.2
- 3.2
- 3.2
- 3.2
- 3.3
- 3.4
- 3.4
- 3.6
- 3.5
- 3.5
- 3.6
- 3.5
- 3.4
- 3.5
- 1 2 3 4
- 1997
- 1998
- 1999
- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006\*

### Mean

UMMS

All Schools

Poor Excellent

\*Total number of respondents=102.

\*\*This item was added to End of Course Eval as of AY02/03.

Graphs produced by the Research and Eval Div. of the Office of Medical Education (last updated 9/1/06). **TABLE 15 (1of 2)**

## Physician Patient Society I

97

97

95  
97  
96  
98  
98  
99  
99  
96  
97  
90  
100  
99  
99  
98  
97  
100  
91  
96  
96  
91  
90  
89  
98  
83  
99  
97  
99  
98  
96  
98  
96

0 20 40 60 80 100

I was treated with respect\*\*

Faculty were professional role  
models\*\*

Integrate knowledge & skills

Provided a solid foundation

Exams fairly sampled knowledge

Pace was manageable

Expectations were clear

**Percent responding "Agree" or "Strongly Agree"**

AY05/06\*

AY04/05

AY03/04

AY02/03

AY01/02

\*Total number of respondents=100.

\*\*This item was added to End of Course Eval as of AY02/03.

Graphs produced by the Research and Eval Div. of the Office of Medical Education (last updated  
9/1/06). **TABLE 15 (2 of 2)**

## **Physician Patient Society II**

94  
96  
83  
97  
88  
100  
98  
96  
97  
95  
99  
92  
99  
100  
95  
96  
92  
98  
95  
99  
98  
94  
94  
89  
100  
90  
98  
98  
94  
94  
93  
97  
89

0 20 40 60 80 100

I was treated with respect\*\*

Faculty were professional role  
models\*\*

Integrate knowledge & skills

Provided a solid foundation

Exams fairly sampled knowledge

Pace was manageable

Expectations were clear

**Percent responding "Agree" or "Strongly Agree"**

AY05/06\*

AY04/05

AY03/04

AY02/03

AY01/02

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

\*\*2005 and 2006 datapoints exclude missing data.

Graphs produced by R and E Division of the Office of Medical Education (last updated  
1/31/07). **TABLE 16**

# Voluntary Participation in an International Health Experience

## AAMC Graduation Questionnaire

14  
18  
39  
20  
20  
22  
22  
25  
27  
20  
24  
51  
44  
25  
40  
33  
44  
47

0 20 40 60 80 100

1998  
1999  
2000  
2001  
2002  
2003  
2004  
2005\*\*  
2006\*

### Percent

UMMS

All Schools

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

\*\*2005 and 2006 datapoints exclude missing data.

Graphs produced by R and E Division of the Office of Medical Education (last updated 1/31/07). **TABLE 17**

# Delivering Health Services to Underserved Populations

## AAMC Graduation Questionnaire

54  
69  
69  
65  
65  
63  
62  
65  
68  
71

86  
81  
84  
84  
79  
74  
77  
84  
0 20 40 60 80 100

1998  
1999  
2000  
2001  
2002  
2003  
2004  
2005\*\*  
2006\*

**Percent**

UMMS

All Schools

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

\*\*2005 and 2006 datapoints exclude missing data.

Graphs produced by R and E Division of the Office of Medical Education (last updated 1/31/07). **TABLE 18**

## **Student Research Activity - Authorship of a Research Paper**

### **AAMC Graduation Questionnaire**

29  
33  
50  
34  
33  
34  
33  
35  
36  
23  
40  
44  
20  
26  
24  
24  
36  
35  
0 20 40 60 80 100  
1998  
1999  
2000

2001  
2002  
2003  
2004  
2005\*\*  
2006\*

**Percent**

UMMS

All Schools

\*Response rates: UMMS=90%, n=84; All Schools=72%, n=11,471.

\*\*2005 and 2006 datapoints exclude missing data.

Graphs produced by R and E Division of the Office of Medical Education (Last updated 1/31/07). **TABLE 19**

## **Student Research Activity - Research Project with a Faculty Member**

### **AAMC Graduation Questionnaire**

48  
53  
65  
54  
54  
55  
53  
57  
57  
42  
50  
55  
44  
52  
50  
40  
45  
45

0 20 40 60 80 100

1998  
1999  
2000  
2001  
2002  
2003  
2004  
2005\*\*  
2006\*

**Percent**

UMMS

All Schools

Graphs produced by the Research and Evaluation Division of the Office of Medical Education (last updated 9/21/06). **TABLE 20**

## **Senior Scholars Research Program Enrollment Number of Participants**

4

8

9 9

18

17

11 11

19

16

0

5

10

15

20

AY96/97 AY97/98 AY98/99 AY99/00 AY00/01 AY01/02 AY02/03 AY03/04 AY04/05  
AY05/06

**Academic Year**

**Number of Students**

Graphs produced by the Research and Evaluation Division of the Office of Medical  
Education (last updated 9/8/06). **TABLE 21**

## **Community Service Assistantship Program**

**Number of Participants**

10

11

16

11

8

14

12

13

0

5

10

15

20

AY98/99 AY99/00 AY00/01 AY01/02 AY02/03 AY03/04 AY04/05 AY05/06

**Academic Year**

**Number of Students**

Graphs produced by the Research and Evaluation Division of the Office of Medical  
Education (last updated 8/23/06). **TABLE 22**

## **Schweitzer Fellowship Awards**

1 1 1

6

3

2  
 5  
 3  
 5  
 1  
 2  
 5 5  
 6  
 7  
 8  
 4  
 5  
 4  
 2  
 4  
 3 3 3  
 1  
 2  
 0  
 4  
 5  
 3 3  
 1 1 1 1  
 2  
 1 1  
 0  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9

AY97/98 AY98/99 AY99/00 AY00/01 AY01/02 AY02/03 AY03/04 AY04/05 AY05/06  
 AY06/07

**Award Year**

**Number of Awards**

UMass Medical School

Harvard Medical School

Tufts University School of Medicine

Boston University School of Medicine

Graphs produced by the Research and Evaluation Division of the Office of Medical  
 Education (last updated 10/30/06). **TABLE 23**

**First Year Medical Student Membership  
 in Massachusetts Medical Society**

57  
85  
78  
65  
76  
69  
50  
75 75  
58  
28  
54  
92  
63  
40 40  
68  
57  
33  
49  
86  
51  
39  
21  
66  
45  
37  
44  
79 81  
55  
100  
61  
68  
40  
78  
0  
20  
40  
60  
80  
100

**UMass Medical School Tufts University Harvard Medical School Boston University  
Percent of First-Year Students Enrolled**

Entering 1998  
Entering 1999  
Entering 2000  
Entering 2001  
Entering 2002  
Entering 2003  
Entering 2004  
Entering 2005  
Entering 2006

Note:UMMS refers to all matriculating students All refers to matriculating students at all  
US Med Schools for given year.

Graphs prod. by the Res. and Eval Div. of the Office of Medical Ed (last updated 3/7/06).

**TABLE 24**

**MCAT - Biology**

10.8  
10.7  
10.7  
10.8  
10.7  
10.5  
10.7  
10.5 10.5  
10.7  
10.0  
10.1  
10.2 10.2 10.2  
10.1  
10.2 10.2  
10.3  
10.4  
8  
8.5  
9  
9.5  
10  
10.5  
11  
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

**Entering Year**

**Mean**

UMMS

All Schools

Note:UMMS refers to all matriculating students and All refers to matriculating students at all US Med Schools for given year.

Graphs produced by the Res. and Eval Div. of the Office of Med Ed (last updated 3/7/06). **TABLE 25**

**MCAT - Physical Sciences**

10.6  
10.3  
10.7  
10.5  
10.5 10.5  
10.7  
9.9  
10.4  
10.7

9.8 9.8  
9.9  
10.0 10.0 10.0 10.0  
9.9 9.9  
10.1  
8  
8.5  
9  
9.5  
10  
10.5  
11  
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

**Entering Year**

**Mean**

UMMS

All Schools

Note:UMMS refers to all matriculating students and All refers to matriculating students at all US Med Schools for given year.

Graphs produced by the Res. and Eval Div. of the Office of Med Ed (last updated 3/7/06). **TABLE 26**

## **MCAT - Verbal**

10.3 10.3 10.3  
10.4 10.4  
10.1  
10.2  
10.4  
10.5  
10.3  
9.6 9.6  
9.5 9.5 9.5 9.5 9.5 9.5  
9.7 9.7  
8  
8.5  
9  
9.5  
10  
10.5  
11  
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

**Entering Year**

**Mean**

UMMS

All Schools

Graphs produced by the Research and Evaluation Division of the Office of Medical Education (last updated 11/2/06). **TABLE 27**

# Applications Received at UMMS

(Total number of verified applications)

572  
645  
621  
1051  
915  
816 826  
708  
613  
549  
89  
118  
0  
200  
400  
600  
800  
1000  
1200  
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

## Entering Year

MD/PhD - Non-Mass. Resident

MD/PhD - Mass. Resident

MD - Mass. Resident

692

795

Graphs produced by the Research and Evaluation Division of the Office of Medical Education  
(last updated 11/2/06). **TABLE 28**

# Acceptances Offered to Fill First-Year Entering Class

155  
162  
154 155 154  
157  
149  
134  
148  
159

6

4

100

120

140

160

180

200  
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

**Entering Year**

MD/PhD - Non-Mass. Resident

MD/PhD - Mass. Resident

MD - Mass. Resident

164

181

\*As of 2004, out-of-state applicants are now permissible.

Graphs produced by the Research and Evaluation Division of the Office of Medical Education (last updated 3/22/06). **TABLE 29**

**MD/PhD Applicants**

14

11 11

34

29

32

39

31

120

150

8 6 8

25

18 19 17

14

20

32

6

2

5

11

8 7

11 10 9

19

1 0

3 4 6

2

8

5 4 5

0

20

40

60

80

100

120

140

160

1996 1997 1998 1999 2000 2001 2002 2003 2004\* 2005

**Entering Year**

# of MD/PhD applicants verified by AMCAS  
# of MD/PhD applicants interviewed  
# of MD/PhD applicants accepted into MD program  
# of MD/PhD applicants matriculated into MD/PhD program

**TABLE 30**

**OFFICE OF MEDICAL EDUCATION CURRICULAR PROGRAMS  
CURRICULUM DEVELOPMENT FUNDS PROJECTS  
AY2005-2006**

**Project**

**Number**

**Project Title**

**Course Faculty**

**Department**

1

Multisystem II: Interactive Case Presentations Mark Madison, MD

Tom Smith, MD

Medicine, Division of Pulmonary,

Allergy & Critical Care Medicine

Pathology

2

Neurology Teaching Video Archive and MBBII

Interactive Sessions

Tom Smith, MD

David Chad, MD

Pathology

Neurology

3

Educational Skills Enhancement for Voluntary

Faculty

Ted Peskin, MD Obstetrics & Gynecology

4

Electronic Curriculum: Expansion of Format of

Biology of Disease and MBB-II/Neurology

Lectures Uploaded to WebCT to Include

Powerpoint Files

Tom Smith, MD Pathology

5 Radiological-Histological Correlations Anca Stefan, MD Cell Biology

6

Excellence in Medical Student Education by

Formal Training of Residents as Teachers

Mitchell Cahan, MD Surgery

7 Pedometer Project and Guest Lecturer Leslie Soyka, MD Pediatrics

**TABLE 31 (1 of 2)**

**OME SPONSORED CURRICULAR PROGRAMS  
STUDENT TEACHING ACTIVITY**

**AY 05-06**

**Activity**

**Number**

**Teaching Activity**

**Number of Students**

**Contact Hours**

**Class Year**

**Required Courses**

- 1 PPS 1 100 76.0 1
- 2 Community Medicine 100 94.5 1
- 3 PPS 2 101 52.0 2
- 4 LPP 1 100 57.50 1
- 5 LPP 2 101 21.0 2
- 6 PD1 100 20.0 1
- 7 PD2 105 29.50 2
- 8 Epidemiology 101 12.75 2

**Interclerkships**

- 1 Patient Safety & Medical Error 98 8 3
- 2 Domestic Violence 98 8 3
- 3 Health Policy and the Practice of  
Medicine  
98 8 3
- 4 End of Life 98 8 3
- 5 Multiculturalism 97 8 3
- 6 Complementary and Alternative  
Medicine  
98 8 3
- 7 Disabilities 97 8 3
- 8 Geriatrics 97 8 3

**Optional Enrichment**

- 1 American Sign Language 8 16 1 & 2
- 2 Maternal Child Health 10 34 3
- 3 Medical Interviewing in Spanish 30 17.5 1 & 2
- 4 Care for the Seriously Ill 65 14 1 & 2
- 5 Pathway on Serving Multicultural &  
Underserved Populations  
76 N/A – ongoing 1,2,3, & 4
- 6 Adoption and Foster Care:  
Considerations for Medical Practice  
10 12 1 & 2
- 7 Teen Pregnancy: Medical & Psychosocial  
Perspectives  
15 14.75 1 & 2
- 8 Rural Health Scholars 19 26 + 1 clinical  
experience, 2-6 weeks in  
length  
1, 2, 3, & 4

**TABLE 31 (2 of 2)****OME SPONSORED CURRICULAR PROGRAMS****STUDENT TEACHING ACTIVITY****AY 05-06****Activity****Number****Teaching Activity****Number of Students****Contact Hours****Class Year****Optional Enrichment**

- 1 Creative Writing in Medicine 3 8.75 2
- 2 Wilderness Medicine and Recreational Emergencies 22 21 1 & 2

- 3 Basic Skills for Working with Smokers: An Online Training Course for Health Professional Students 5 16 1
- 4 Money, Power and Medicine 16 12 1,2, 3 & 4
- 5 The Realities of the US Health Care System 13 14 1 & 2
- 6 Complementary & Alternative Medicine 18 16 1 & 2

**Electives**

- 1 Senior Scholars Research Program 17 8 weeks 4
- 2 Teaching and Learning in Residency: Maximizing Your Experience Miniselective 7 1 week 4
- 3 Laboratory Medicine for the Clinician Miniselective 7 1 week 4
- 4 Emergency Medicine: An Interdisciplinary Approach Miniselective 7 1 week 4
- 5 Management of Urgent Medical Problems: Preparation for Internship Miniselective 7 1 week 4
- 6 International Medical Education Program 59 4 weeks 1 & 4

**TABLE 32**

**OME SPONSORED CURRICULAR PROGRAMS  
INTERCLERKSHIPS**

**AY 05/06**

**Course  
Number  
Course Title  
Course  
Coordinator  
Sponsoring  
Department(s)/Institution  
Course  
Date**

1  
Health Policy and The Practice of  
Medicine  
Robert Baldor, MD  
Jerry Gurwitz, MD  
Jay Himmelstein, MD  
Family Medicine and  
Community Health  
Center for Health Policy and  
Research  
Tuesday, January 3, 2006

2  
Domestic Violence Interclerkship  
Julie Jonassen, PhD  
Kim Houde, MD  
Physiology  
Family Medicine and  
Community Health  
Monday, September 26th, 2005

3  
Patient Safety and Medical Error  
Eric Alper, MD  
Susan Zweizig, MD

Medicine  
Obstetrics/Gynecology  
Friday, November 4<sup>th</sup>, 2005  
4

End of Life Interclerkship  
David Clive, MD  
Marjorie Clay, PhD  
Medicine, Division of Renal  
Medicine  
Office of Ethics  
Thursday, March 23<sup>rd</sup>, 2006  
5

Multicultural Interclerkship  
Warren Ferguson, MD  
Michael Godkin, PhD  
Family Medicine and  
Community Health  
Friday, March 24<sup>th</sup>, 2006  
6

Geriatrics Interclerkship  
Sarah McGee, MD  
Tricia Droney, MPH  
Medicine, Division of  
Geriatrics  
Office of Medical Education  
Monday, April 3<sup>rd</sup>, 2006  
7

Disabilities Interclerkship  
Mai-Lan Rogoff, MD  
Martin Young, MD  
Linda Long  
Dee O'Connor  
Candace Cassin  
Psychiatry  
Pediatrics  
Center for Health Policy &  
Research  
DMR  
Friday, June 23<sup>rd</sup>, 2006  
8

Complementary & Alternative  
Medicine Interclerkship  
Genevieve Anand, MD  
Family Medicine and  
Community Health  
Tuesday, April 4<sup>th</sup>, 2006

**TABLE 33 (1 of 2)**  
**OME SPONSORED CURRICULAR PROGRAMS**  
**OPTIONAL ENRICHMENT ELECTIVES**  
**AY 05-06**  
**Elective**  
**Number**  
**Elective**  
**Title**

**Faculty****Member/Coordinator****Sponsoring Office, Division, Department Number of Sessions**

1

Adoption and Foster Care: Considerations  
for Medical Practice

Martha Henry, PhD

Center for Adoption Research

8

2

American Sign Language

Susan Pasquale, PhD/

Kathy Moylan

Office of Medical Education

16

3

Basic Skills for Working with Smokers:

An Online Training Course for Health

Professional Students

Judith Ockene, PhD,

MEd

Mary Jo White, MS,

MPH

Division of Preventive and Behavioral

Medicine, Department of Medicine

8 (modules)

4

Care of the Seriously Ill

Marjorie Clay, PhD

David Clive, MD

Office of Ethics

7

5 Child Maltreatment Julie Jonassen, PhD

Christian Menard, PhD

Department of Physiology Not offered in

AY0506

6

Complementary and Alternative Medicine Gigi Anand, MD

Anne Gilroy, MA

Department of Family Medicine and

Community Health

8

7

Creative Writing in Medicine

David Hatem, MD

Emily Ferrara, MA  
 Department of Medicine, Department of  
 Family Medicine and Community Health,  
 Office of Medical Education  
 7  
 8 Law, Ethics and Medicine Marjorie Clay, PhD  
 Debra Pinals, MD  
 Office of Ethics  
 Not offered in  
 AY0506  
 9  
 Maternal Child Health  
 Scott Wellman, MD  
 Debra Papa, MD  
 Department of Pediatrics,  
 Department of OB/GYN  
 11  
 10  
 Medical Interviewing in Spanish  
 Susan Pasquale, PhD  
 Kathy Moylan  
 Office of Medical Education  
 12  
 11 Money, Power and Medicine Marjorie Clay, PhD  
 Bruce Meyer, MD  
 Department of OB/GYN 6  
 12  
 Pathway on Serving Multicultural &  
 Underserved Populations  
 Mick Godkin, PhD  
 Department of Family Medicine and  
 Community Health  
 Independent  
 Study

**TABLE 33 (2 of 2)**  
**OME SPONSORED CURRICULAR PROGRAMS**  
**OPTIONAL ENRICHMENT ELECTIVES**

**AY 05-06**

Elective  
 Number  
 Elective  
 Title  
 Faculty Member/  
 Coordinator  
 Sponsoring  
 Department/Institution

Number of  
Sessions

13

Rural Health Scholars

Joseph Stenger, MD

Suzanne Cashman,

ScD

Department of Family Medicine and Community Health,  
Statewide Area Health Education Center

13

14

Teen Pregnancy – Medical and

Psychosocial Perspectives

Marianne Felice, MD

Dianne Elfenbein,

MD

Department of Pediatrics 8

15

The Realities of the US Health Care

System

Suzanne Cashman,

ScD

Jay Himmelstein,

MD, MPH

Department of Family Medicine and Community Health 7

16

Wilderness Medicine and

Recreational Emergencies

Francis Renzi, MD Department of Emergency Medicine 5

## **TABLE 34**

### **OME SPONSORED CURRICULAR PROGRAMS**

#### **MINISELECTIVES**

**AY 05-06**

**Course**

**Number**

**Project Title**

**Faculty & Course**

**Directors**

**Department/Institution**

**Course Dates**

**Contact**

**Hours**

**Class**

**Year**

1

Laboratory Medicine

for the Clinician

Liberto Pechet, MD

Patricia Miron, PhD

Pathology, Medicine

Pathology

April 3-7 1 week 4

2

Teaching and Learning

in Residency:

Maximizing Your

Experience

Susan Pasquale, PhD

Jeffrey Cukor, MD

Office of Medical

Education, Family

Medicine and

Community Health

Emergency Medicine

April 10, 13-14 1 week 4

3

Emergency Medicine:

An Interdisciplinary

Approach

Debra Heitmann, MD Emergency Medicine April 18-24 1 week 4

4

Management of Urgent

Medical Problems:

Preparation for

Internship

Mary O'Brien, MD Medicine April 25-28 1 week 4

## **TABLE 35**

### **OME SPONSORED CURRICULAR PROGRAMS**

### **INNOVATIONS IN MEDICAL EDUCATION GRANTS PROGRAM**

#### **AY 05-06**

**Grant**

**Number**

**Grant Title**

**Principal**

**Investigator**

**Sponsoring**

**Department/Institution**

**Grant**

**Period**

**Funding**

**Amount**

1

Implementation of Live Learner Assessment

Technology in the Classroom

PI: Sheldon Benjamin,

MD  
Co-PI: Caroline Fisher,  
MD, PhD  
Psychiatry  
December  
15, 2005-  
June 30,  
2006  
\$5,285  
2

Instruction in Airway Assessment and Management  
with High Fidelity Simulation  
PI: Debra Heitmann, MD  
Co-PI: Jeff Cukor, MD  
Emergency Medicine  
May 1, 2006-  
April 30,  
2007  
\$4,592  
3

Pediatric Overweight Prevention, Recognition , and  
Treatment Curriculum  
PI: Sarah Goff, MD  
Co-PI: Suzanne  
McLaughlin, MD  
Pediatrics/Internal  
Medicine  
May 1, 2006-  
April 30,  
2007  
\$6,850  
4

Simulated Pediatric Resuscitation Program: An  
Educational Intervention and Evaluation  
PI: Mariann Manno, MD  
Pediatric Emergency  
Medicine  
May 1, 2006-  
April 30,  
2007  
\$5,928

**TABLE 36 (1 OF 2)**

**OME SPONSORED STUDENT PROGRAMS**

**MEDICAL STUDENT SUMMER RESEARCH FELLOWSHIP PROGRAM**

**AY 05 – 06**

**Project  
Number  
Project Title  
Student  
Name  
Principal Investigator Sponsoring  
Department/Institution  
Graduating  
Class**

1

Injury Free Coalition for Kids of  
Worcester

Joshua Shaw  
Colleen McGuire  
Surgery

2009

2

Injury Free Coalition for Kids of  
Worcester

Julie Birns  
Colleen McGuire  
Surgery

2009

3

Total Joint, Spine, Hand Center  
Outcomes Registries

Marie Walcott  
David Ayers, MD  
Orthopedics

2009

4

Exercise, Activity and  
Rehabilitation Research Following  
Total Knee Replacement

Joseph Strebel  
David Ayers, MD  
Orthopedics

2009

5

Bowel Obstruction in Newborn  
Infants – Relationship to Cystic  
Fibrosis

William  
Zawatski  
Brian P. O'Sullivan, MD  
& Anne Marie Comeau,  
PhD

Pediatrics

2009

6

Lawrence Latino Diabetes  
Prevention Project

Deanna Erb  
Ira S. Ockene, MD;  
Yunsheng Ma, PhD;  
Barbara Olendzki, RD  
MPH LDN; & Phil  
Merriam, MSPH

Medicine,  
Cardiovascular Medicine  
and Preventive &  
Behavioral Medicine

2009

7

The Benefits of Contralateral  
Acoustic Stimulation for Cochlear

Implant Recipients  
Michele  
Schroeder  
Sarah F. Poissant, PhD;  
Co-PI: Daniel J. Lee, MD;  
Co-PI: Eva Bero, MA  
Otolaryngology  
2009

8  
In vitro Modification of Calcium  
Apatite Mineral Patterns by  
Osteoclasts  
Eric Ursprung  
Jie Song, PhD  
Orthopedics & Cell  
Biology  
2009

9  
Interactive Neurology Teaching  
Care Archive  
Justin Yamin  
Lawrence J. Hayward,  
MD, PhD  
Neurology  
2009

10  
“Glucose-Insulin-Potassium (GIK)  
Immediate Myocardial Metabolic  
Enhancement during Initial  
Assessment and Treatment in  
Emergency Care”, known as the  
IMMEDIATE Trial  
Jessica Hahn  
Robert Goldberg, PhD,  
MPH  
Cardiology  
2009

11  
Functional Studies of the BRCA1  
Associated BACH Helicase  
Nambiuur  
Vidyashanker  
Sharon Cantor, PhD  
Cancer Biology  
2009

## **TABLE 36 (2 OF 2)**

### **OME SPONSORED STUDENT PROGRAMS**

### **MEDICAL STUDENT SUMMER RESEARCH FELLOWSHIP PROGRAM**

**AY 05 – 06**

**Project**

**Number**

**Project Title**

**Student**

**Name**

**Principal Investigator Sponsoring**

**Department/Institution  
Graduating  
Class**

12

Satisfaction with Surgical  
Outcomes: A Comparison  
of the Pelvic Floor Impact  
Questionnaire with 3  
Generic, Global Questions

Katherine

Callaghan

Abraham Morse, MD

OB/GYN

2009

13

Development of Digital  
Radiology Teaching File

Laurent

Benedetti

Young H. Kim, MD

Radiology

2009

14

Asthma-Initiating a Planned  
Care Model of Asthma Care  
at HFHC

Andrew Gara

Ronald Adler, MD

Hahnemann Family

Health Center (HFHC)

2009

15

Anticonvulsant use in the  
Geriatric Population

Giocchino

Curiale

William Tosches, MD

Neurology

2009

16

Cell Therapy to Affect  
Electrophysiologic  
Substrate of Arrhythmias

Andrew

Beaser

Jeffrey Olgin, MD

University of California

San Francisco

2009

17

Visual Attention in Schoolaged  
Children

Laura

Hagopian

Teresa Mitchell, PhD

Eunice Kennedy Shriver

Center  
2010  
18  
Development of Rabies  
Therapeutic Monoclonal  
Antibody  
David Chiu  
William Thomas, Jr., PhD  
Mass Biologic  
Laboratory, Jamaica  
Plain, MA  
2010

19  
Assessing the role of  
Education in Women's  
Knowledge and Perceptions  
of Adjunct HPV Testing for  
Cervical Cancer Screening  
Hannah  
Melnitsky  
Debra Papa, MD  
OB/GYN  
2010

20  
Immunopathogenesis of  
Hemorrhagic Fever Renal  
Syndrome  
Sophie Delano  
Daniel Libraty, MD  
Center for Infectious  
Disease and Vaccine  
Research  
2010

21  
Adoptive Immunotherapy of  
Gene Modified T-cells for  
Glioblastoma  
Robert  
Eppsteiner  
Robert Carter, MD  
Attending Neurosurgeon  
Mass General Hospital  
& Harvard Medical  
School  
2009

**TABLE 37**  
**OME SPONSORED STUDENT PROGRAMS**  
**COMMUNITY SERVICE ASSISTANTSHIP PROGRAM**  
**AY05-06**

**Project**  
**Number Project Title Student Name Site Graduating**  
**Class**

- 1 Healthy Kids Katherine Barnes GBV Center for Healthy Kids 2007
- 2 Health Care Access Stacey Beberman The Access Project 2007

- 3 Healthy Kids Miguel Concepcion GBV Center for Healthy Kids 2007
- 4 Medical Assistant Christina Gioioso Boston Health Care for the Homeless 2007
- 5 Medical Assistant Kim Henlotter GBVHC/Framingham 2007
- 6 Youth Program Assistant Adalia Jun Ecotarium 2007
- 7 Healthy Kids William Knaus GBV Center for Health Kids 2007
- 8 Medical & Project Assistant Kristin Mallott FHC W 2007
- 9 Health Educator Niyati Mehta Health Awareness 2007
- 10 Medical & Special Projects Assistant Susan Swords Martha's Vineyard Health Access Project 2007
- 11 Medical Assistant Robyn Wing Stanley Street Treatment and Resources 2007
- 12 Health Educator Sandy Wong Healthy Start Worcester 2007
- 13 Health Educator James Yon AIDS Project Worcester 2007

**TABLE 38 (1 OF 2)**

**OME SPONSORED STUDENT PROGRAMS  
SENIOR SCHOLARS PROGRAM**

**AY 05-06**

**Project  
Number  
Project Title  
Student  
Name  
Faculty Advisor  
Sponsoring  
Department/Institution  
Graduating  
Class**

1  
A Comparison of Exercise-Induced  
Hematocrit (HCT) Changes Between  
Non-invasive Infrared Sensors (NIRS)  
and Venous Blood Draws  
Kenneth  
Johnson  
Babs Soller, PhD  
Anesthesiology  
2006

2  
The Effect of Age on Postoperative Pain  
Medication Requirements Following  
Vaginal Reconstructive Surgery  
Kenneth Walton  
Lisa Labin, MD  
Ob/Gyn  
2006

3  
Ascending Aorta Replacement in Patients  
with Congenitally Bicuspid Aortic  
Valves: A Description of 105 patients  
Undergoing Aortic Valve Replacement  
Elizabeth C.  
Mitchell  
Linda A. Pape (MD)

Medicine, Division of  
Cardiology  
2006

4

Investigation of Noninvasive Near-  
Infrared Spectroscopic Sensor for  
Measurement of Blood Hematocrit

Anh T. Tran  
Babs R. Soller, PhD  
Anesthesiology  
2006

5

Documenting Quantity and Variation in  
Patient-managed Exercise and Activity  
after Total Knee Replacement

Joseph S.  
McLaughlin  
Patricia Franklin, MD  
David Ayers, MD  
Orthopedic and Physical  
Rehabilitation  
2006

6

The Effect of Split versus Combined  
Therapy in Medication Compliance of  
Psychiatric Patients

Eric Kosinski  
Anthony Rothschild, MD  
Psychiatry  
2006

7

A Qualitative Study of the Collaboration  
between Health Care Providers and  
Lawyers within the Family Advocates of  
Central Massachusetts Program

Allison  
Hargreaves  
David Keller, MD  
Pediatrics  
2006

8

Serum Glucose Levels and Hospital  
Outcomes in the Setting of Acute  
Myocardial Infarction in Patients Not  
Known to Have Diabetes: A Community-  
Wide Perspective

Daniel Kramer  
Robert Goldberg, PhD  
Cardiovascular Medicine  
2006

**TABLE 38 (2 OF 2)**  
**OME SPONSORED STUDENT PROGRAMS**  
**SENIOR SCHOLARS PROGRAM**  
**AY 05-06**  
**Project**

**Number**

**Project Title**

**Student**

**Name**

**Faculty Advisor**

**Sponsoring**

**Department/Institution**

**Graduating**

**Class**

9

Determination of Cystic Fibrosis  
Frequency Among Newborns Diagnosed  
with Meconium Ileus and other Bowel  
Obstructions

Allison  
Paroskie  
Brian O'Sullivan, MD  
Pediatrics  
2006

10

Examining the Role of Palliative  
Procedures in Patients with Stage IV GI  
Cancers

Nathan J.  
Aranson  
Giles Whalen, MD  
Surgical Oncology  
2006

11

The Influence of Message Framing on  
Adolescent Females' Intention to Obtain  
Chlamydia Screening

Andrea Urban  
Diane Blake, MD  
Pediatrics  
2006

12

MassHealth Primary Care Services  
Assessment Tool

Matthew J.  
Logalbo  
Jay Himmelstein, MD, MPH  
Center for Health Policy and  
Research/Family Medicine  
and Community Health  
2006

13

Structure Based Drug Design: Inhibition  
of E6 Protein in Immortalized HPV Cell  
Lines Implicated in Human Epithelial  
Cancers

Nicole  
LeBoeuf  
Elliot Androphy, MD  
Medicine/Dermatology  
2006

14

Cardiac Resynchronization Therapy

What's Ticking at UMass

Matthew

Hitron

Denis Tighe, MD

Cardiology

2006

15

National Patterns of Immediate Breast

Reconstruction for Neoplastic Disease

Jaisa Olasky

Anne Campbell Larkin, MD

Surgical Oncology

2006

16

First Trial of Early Intensive Glycemic

Control in Critically Ill Emergency

Department Patients

Jennifer

Cyrkler

Marie Mullen, MD

Emergency Medicine

2006

### **TABLE 39 (1 OF 3)**

#### **OME SPONSORED STUDENT PROGRAMS**

#### **INTERNATIONAL MEDICAL EDUCATION PROGRAM**

**AY 05-06**

**Project**

**Number**

**Student**

**Name**

**Graduating**

**Class**

**Destination**

**Project**

**Period**

1 Tobin Abraham 2006 India November, 2005

2 Bevin Kenney\*\*\* 2006 Dominic Republic March, 2006

3 Richard DeSouza 2007 China August, 2005

4 Garreth Biegun 2006 Ecuador August, 2005

5 Nancy Tulathimuttre 2007 Gabon, Africa August, 2005

6 Alison Lee 2006 Zambia, Africa August, 2005

7 Lara Antkowiak\*\*\* 2006 India November, 2005

8 Andrew Jones 2008 Ecuador January, 2006

9 Laura Sacco 2006 Guatemala January, 2006

10 Julie Herlihy\*\*\* 2007 Zambia January, 2006

11 Jeanne Cawse\*\*\* 2006 Ecuador January, 2006

12 Anjali Koka 2006 India January, 2006

13 Mike Xiang Lee 2006 South Africa January-February, 2006

14 Sheila Arvikar\*\*\* 2006 Costa Rica January-February, 2006

15 Megan Donohue 2006 Ecuador February, 2006

16 Matthew Logalbo 2007 Ecuador January-February, 2006

17 Tobin Abraham 2006 Kenya February, 2006  
 18 Lara Antkowiak 2006 Kenya February, 2006  
 19 Kiran Raman 2006 Mexico February, 2006  
 20 Kathleen O'Brien\*\*\* 2006 India February, 2006  
 21 Kevin Schwartz 2006 Uganda February-March, 2006  
 22 Angie Ross 2006 Mexico February-March, 2006  
 23 Melindy Ciulla\*\*\* 2006 Nicaragua February, 2006  
 24 Robert Hyde 2006 South Africa March-April, 2006  
 25 Rita Reshamwala\*\*\* 2006 India March-May, 2006  
 26 Kerry Murphy\*\*\* 2006 Dominic Republic March, 2006  
 27 Michael Perloff\*\*\* 2006 San Jose March-May 2006  
 28 Matthew Logalbo 2007 India March-April, 2006  
 29 Tara Kumaraswami 2006 Ecuador April 2006  
 30 Mike Kelly 2006 Peru April, 2006  
 31 Kenneth Walton\*\*\* 2006 Thailand February-March, 2006  
 32 Brigid McKenna 2006 Mexico April-May, 2006  
 33 Ted Hartenstein 2006 Mexico April-May, 2006  
 34 Caitlin Saint-Aubin 2006 Guatemala April, 2006

**TABLE 39 (2 OF 3)**

**OME SPONSORED STUDENT PROGRAMS  
 INTERNATIONAL MEDICAL EDUCATION PROGRAM  
 AY 05-06**

**Project  
 Number  
 Student  
 Name  
 Graduating  
 Class  
 Destination  
 Project  
 Period**

35 Deborah King 2006 Peru April, 2006  
 36 Francesca Beaudoin 2006 Ecuador April, 2006  
 37 John Haran 2007 Ecuador April-May, 2006  
 38 Rachel Siegel\*\*\* 2006 Tanzania April-May, 2006  
 39 Anjali Koka\*\*\* 2006 Africa May-June, 2006  
 40 Anh Tran 2006 Thailand & Vietnam June-July, 2006  
 41 Megan O'Bryan\*\*\* 2006 Costa Rica June, 2006  
 42 Lara Jirmanus 2009 Lebanon Summer 2006  
 43 Mallika Mundkur 2009 India Summer 2006  
 44 Alison Stechenberg 2009 Guatemala Summer 2006  
 45 Mary Flynn 2009 Argentina Summer 2006  
 46 Michelle St. Fleur 2009 Brazil Summer 2006  
 47 Julia Anderson 2009 Uruguay and South Africa Summer 2006  
 48 Jeffrey Riese 2009 Guatemala Summer 2006  
 49 Sayumi DeSilva 2009 Ecuador Summer 2006  
 50 Deborah Liptzin 2009 Argentina Summer 2006  
 51 Helen Moreira 2009 Costa Rica Summer 2006  
 52 David Bielak 2009 Brazil Summer 2006  
 53 Laura Beth Chamberlain 2009 Ecuador Summer 2006  
 54 Elizabeth Patton 2009 Panama Summer 2006  
 55 Darrah Doyle 2009 South Africa Summer 2006  
 56 Ryan Dono 2009 Ecuador Summer 2006

57 Jennifer Chiang 2009 Costa Rica Summer 2006  
 58 Elizabeth Partnoy 2009 Nicaragua Summer 2006  
 59 Brian Sullivan 2009 Thailand and Cambodia Summer 2006  
 60 Miguel Concepción\*\*\* 2009 Puerto Rico Summer 2006  
 61 Samuel Ayala\*\*\* 2009 Puerto Rico Summer 2006  
 62 Amy Podolski\*\*\* 2009 Uganda Summer 2006  
 63 Angela Lo\*\*\* 2009 India Summer 2006  
 63 Heather Wiggin\*\*\* 2009 Costa Rica Summer 2006  
 65 Nicholas Chun\*\*\* 2009 South Korea Summer 2006  
 66 Wynn Morgan\*\*\* 2009 China Summer 2006  
 67 Elizabeth Yu\*\*\* 2009 Venuenzuela Summer 2006  
 68 Alyse Mousette \*\*\* 2009 Peru Summer 2006

**TABLE 39 (3 OF 3)**

**OME SPONSORED STUDENT PROGRAMS  
 INTERNATIONAL MEDICAL EDUCATION PROGRAM  
 AY 05-06**

**Project  
 Number  
 Student  
 Name  
 Graduating  
 Class  
 Destination  
 Project  
 Period**

69 James Hart\*\*\* 2009 Peru Summer 2006  
 70 Julie Lee \*\*\* 2008 Guatemala Summer 2006  
 71 Laura Petras\*\*\* 2008 Guatemala Summer 2006  
 72 Christina Gioiosa\*\*\* 2009 Guatemala Summer 2006  
 73 Jessica Hoseason \*\*\* 2009 Guatemala Summer 2006  
 74 Peter Townsend \*\*\* 2008 Guatemala Summer 2006  
 75 Jorge Tello\*\*\* 2009 Guatemala Summer 2006  
 76 Julie Lee\*\*\* 2008 Guatemala Summer 2006  
 77 Laura Petras\*\*\* 2008 Guatemala Summer 2006  
 78 Dhivya Kannabiran\*\*\* 2009 India Summer 2006  
 79 Olga Valdman\*\*\* 2008 Dominic Republic Spring Break 2006  
 80 Laura Petras\*\*\* 2008 Dominic Republic Spring Break 2006  
 81 Kate Rutherford\*\*\* 2008 Dominic Republic Spring Break 2006  
 82 Amy Daisy Heard\*\*\* 2008 Dominic Republic Spring Break 2006  
 83 Michelle St. Fleur\*\*\* 2009 Dominic Republic Spring Break 2006  
 84 Jorge Tello\*\*\* 2009 Dominic Republic Spring Break 2006  
 85 Ernie Pedapati\*\*\* 2009 Dominic Republic Spring Break 2006  
 86 Marie Walcott\*\*\* 2009 Dominic Republic Spring Break 2006

\*\*\* Non OME Funded Students

**TABLE 40**

**OME SPONSORED STUDENT PROGRAMS  
 SCHWEITZER FELLOWSHIP  
 AY 05-06**

**Project  
 Number Project Title Student Name Advisor Site Graduating  
 Class**

- 1 The Well-Being Newspaper Darrah Doyle Linda Clark FHCW 2009
- 2 Strengthening Vulnerable Communities Lara Jirmanus Mick Huppert OCP 2009
- 3 The Well-Being Newspaper Jay Lawrence Linda Clark FHCW 2009
- 4 Center for Health Kids/GBV Charles Strom Suzanne Cashman FMCH 2009
- 5 Yoga in the Valley/GBV Susan Swords Suzanne Cashman FMCH 2009

**TABLE 41 (1 of 2)**

**OME SPONSORED STUDENT PROGRAMS**

**GENERALIST PHYSICIAN PROGRAM**

**AY 05-06**

**Activity**

**Number**

**Event Title**

**Faculty/Student Leader**

**Presenter**

**Sponsoring Department/Institution**

1

Student Leaders Luncheon

Michele Pugnaire, MD

Mai-Lan Rogoff, MD

Office of Medical Education

Office of Student Services

2 Publication "Of Primary Importance" Student Newsletter Olga Valdman, GPP Leader

Carme Ogando, GPP Leader

Medical Student Class of 2008

Medical Student Class of 2009

3 Missionary Work In Dominican Republic Michele Pugnaire, MD Office of Medical Education

4 Youth Hands On Science Night Family Medicine Physicians

First and Second Year

Medical Students

Family and Community Medicine

5 Twelfth Annual Primary Care Dinner Mike, Ennis, MD Department of Family Medicine

Twenty-Five Primary Care Physicians from

UMMS and Fallon/St. Vincent's

6

Publication: "Of Primary Importance" Student Newsletter

Olga Valdman, GPP Leader

Carme Ogando, GPP Leader

Medical Student Class of 2008

Medical Student Class of 2008

7

Art Night: Hurricane Katrina Fundraiser

Olga Valdman, GPP Leader

Carme Ogando, GPP Leader

Medical Student Class of 2008

Medical Student Class of 2008

Students, Faculty and Employees of UMMS

8

Promotion of Primary Care Week

*Student Leaders:*

Generalist Physician Program

Pediatrics Interest Group

International Health

American Medical Student

Association  
Student National Medical  
Association  
Medical Student Classes of 2008 and 2009  
9

Panel Discussion: "Latin American Cultural Differences"  
Dr. Pablo Hernandez  
Ms. Martha Benitez  
Office of Medical Education: Spanish as a  
Second Language Optional Enrichment  
10

Publication: "Of Primary Importance" Student Newsletter  
Olga Valdman, GPP Leader  
Carme Ogando, GPP Leader  
Medical Student Class of 2008  
Medical Student Class of 2008  
11

AIDS Week Events  
Mick Huppert, MPH  
(GPP sponsored speaker)  
Family Medicine and Community Health  
Office of Community Programs  
Partners in Health  
Jubilee USA Network  
UMass Memorial Nursing Department  
AIDS Project Worcester

**TABLE 41 (2 of 2)**  
**OME SPONSORED STUDENT PROGRAMS**  
**GENERALIST PHYSICIAN PROGRAM**  
**AY 05-06**

12  
Doctors without Borders: Pediatrician in Sudan  
Jon Specter, MD  
Neonatology  
International Health Interest Group

13  
Dominican Republic: Medical Student Experience  
Medical Student Participants  
of Service Trip to Dominican  
Republic  
Office of Medical Education  
International Health Interest Group

14  
Publication: "Of Primary Importance"  
Olga Valdman, GPP Leader  
Carme Ogando, GPP Leader  
Medical Student Class of 2008  
Medical Student Class of 2008  
15 Dinner With the Dean Aaron Lazare, MD Office of the Chancellor/Dean

**TABLE 42**  
**OME SPONSORED STUDENT PROGRAMS**  
**MEDICAL STUDENT RESEARCH PROJECT PRESENTATIONS AT**  
**NATIONAL MEETINGS**  
**AY 05 – 06**

**Project**

**Number**

**Project Title**

**Student**

**Name**

**Conference Name/Location/Date Graduating**

**Class**

1

Investigation of Noninvasive Near-Infrared Sensor for  
Measurement of Blood Chemistry

Anh Tran

2005 American Society of Anesthesiologists

Annual Meeting, Atlanta, Georgia, Date of

Presentation: October 25, 2005

2007

2

Healthcare delivery in rural Massachusetts: The Visiting  
Specialist Model

Jacob Drew

National Rural Health Association Annual

Conference, Reno, Nevada, Dates of Conference

5/16-5/18 -

2007

3

Zonegran AES Poster

Jonathan Tisdell

August 2005 - International Epilepsy Congress,

Paris, France and

December 2005 – American Epilepsy Society

Annual Meeting, Washington, DC

2007