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TO: Board of Trustees
University of Massachusetts

FROM: Michael F. Collins, MD
Interim Chancellor, University of Massachusetts Worcester

SUBJECT: Chancellor's Report to the Board of Trustees

It is my pleasure to submit this report in my new position as Senior Vice President for Health Sciences and Interim Chancellor of the University of Massachusetts Worcester.

During the first weekend in June, there were several historic celebrations on the Worcester campus. The first was a recognition dinner for Dr. Aaron Lazare, which featured warm and insightful remarks by several invited dignitaries, including President Jack Wilson. The second was a campus event for faculty, students and parents of this year's graduates that celebrated Nobel Laureate Craig C. Mello, PhD. The Commencement Exercises on June 3 were quite impressive as 181 degrees were awarded to graduates from the institution's School of Medicine, Graduate School of Biomedical Sciences and Graduate School of Nursing. Honorary degrees were conferred upon David "Duddie" Massad, chairman of Commerce Bank & Trust in Worcester and president of Diamond Chevrolet, Inc. of Worcester and Wallingford Toyota in Wallingford, Connecticut, and Arthur J. Remillard, Jr., founder of The Commerce Group, Inc. Both Mr. Massad and Mr. Remillard have been longtime supporters of the UMass Memorial Foundation.

This report includes news of these and other developments at UMass Worcester, arranged according to the priorities set by the University of Massachusetts Board of Trustees:

1. Maintain Affordability and Access

GSBS offers competitive stipends for students

To recruit and retain top-notch students, the Graduate School of Biomedical Sciences offers students tuition waivers and eligibility for graduate assistantships that carry a competitive

stipend of \$25,740. Students are also able to apply for external funding in addition to these stipends to meet personal expenses.

PhD/MD program broadens applicant pools

Although the School of Medicine is required to recruit its students from cities and towns in Massachusetts only, a limited number of candidates for the combined PhD/MD program may now be accepted from out-of-state. This has increased the quality and depth of the students seeking enrollment to the program and will allow the campus to apply for prestigious national training grants (for which it had been ineligible when the joint program was limited to Massachusetts residents). This integrated pathway is designed for students planning a career in biomedical sciences as a physician-scientist and combines the curriculums of the School of Medicine and the GSBS to provide a structured foundation of diverse topics, with the flexibility necessary to meet the needs of the individual student. Graduates of the combined program are the highest level life sciences researchers so vital to the future of the Massachusetts economy.

2. Enhance Student Learning Experience

Medical School fosters inter-professional collaboration through simulation

The UMMS Simulation Center has been awarded an Academic Technology Grant from the University of Massachusetts Information Technology Council for its project, “A Multidisciplinary Simulator-Based Approach for Teaching and Learning Central Venous Catheter Insertion.” The project focuses on three aspects of a simulation experience to build students’ clinical competence: education, training and performance assessment. Technologies include an on-line module, Varian simulation technology and hands-on simulation experience. The project incorporates multidisciplinary teaching and learning experiences into clinical practice early in the curriculum of both the medical and nursing schools; these experiences bring an understanding of knowledge, skills and clinical roles for physicians and nurses, as well as teamwork in patient management.

UMMS continues to rank among the top 10 percent

UMass Medical School again ranked in the top 10 percent of the nation’s 125 accredited medical schools and 19 schools of osteopathic medicine in the category of primary care education in U.S. News & World Report’s annual review, “America’s Best Graduate Schools.” UMMS has held a spot near the top of the category since the magazine began its rankings in 1994.

Three Schools Committee formed

To enhance communication and interaction among students enrolled in the School of Medicine, Graduate School of Biomedical Sciences and Graduate School of Nursing, the Student Body Councils of each approved the formation of the Three Schools Committee. The committee includes 12 members—four students from each school—and is currently working with the Faculty Council to create a governance document that defines the committee’s role in the institution. In addition, plans include advising on how students can participate in the University’s efforts in translational science and how University resources can be better utilized to benefit all students.

Establishment of the Office for Primary Care Strategy Integration

In response to the primary care physician shortage and to build upon UMass Medical School's national reputation as a leader in primary care education, the school and our clinical partner UMass Memorial Health Care have created the Office for Primary Care Strategy Integration. The office is led by an executive committee including Daniel Lasser, MD, chair of family medicine & community health, Julia Andrieni, MD, vice chair and division director of general internal medicine, Dennis Dimitri, MD, vice chair of clinical services in family medicine, Linda Sagor, MD, division director of general pediatrics, and Jerry Gurwitz, MD, director of the Meyers Primary Care Institute. It will perform a series of initiatives, including fostering an academic focus on primary care by enhancing the medical school curriculum and mentoring programs for students and residents to encourage their participation in primary care practice.

American Geriatrics Society awards interdisciplinary grant to UMass Medical School

To support joint efforts aimed at enhancing health care services elderly patients receive, the American Geriatrics Society (AGS) has awarded David C. Ayers, MD, chair of orthopedics & physical rehabilitation, Jerry H. Gurwitz, MD, chief of the division of geriatric medicine and professor of medicine and family medicine & community health and Sarah McGee, MD, director of educational programs in the division of geriatric medicine, a two-year Geriatrics Education for Specialty Residents grant. The grant supports collaborations between the geriatrics faculty and surgical and related medical specialty faculty at medical schools and hospitals throughout the country.

3. Strengthen Research and Development Enterprise

Advanced Therapeutics Institute to be established at UMass Medical School

To capitalize on its expertise in RNA interference (RNAi)-based gene silencing, UMass Medical School is establishing the RNAi Therapeutics Institute. With important leadership from our Senior Science Advisor and Nobel Laureate Craig C. Mello, PhD., we have initiated a national search for a new Director of the Institute. RNAi screening is a powerful approach to unlocking how genes function in specific cellular processes. To date, several UMMS laboratories have realized major success with RNAi screening in the discovery of novel proteins that function in cancer cell metastasis and cell signaling pathways. The Institute will serve as a repository for RNA libraries that can be applied by investigators to diverse systems in target discovery programs. The campus envisions the Institute to be part of the larger Advanced Therapeutic Center which will also include major research Centers for Gene Therapy and Stem Cell Biology and Regenerative Medicine. The campus has been encouraged by conversations led by President Wilson that have included these plans in the Life Sciences Initiative proposed by Governor Patrick and now under consideration by the legislature.

Mello provides voice for basic science research support

In late spring, Nobel Laureate Craig C. Mello, PhD, joined the other American Nobel Laureates in Washington, D.C. to discuss with policymakers the need to increase investments in scientific research. The Nobel Laureates also met with members of the House Science and Technology Committee. Dr. Mello and President Jack Wilson joined Massachusetts Governor Deval Patrick in late May as he announced a billion dollar commitment to the life sciences in Massachusetts, including creation of a Massachusetts Stem Cell Bank to be housed at UMMS and expanded

financial support for life sciences research, including funding for development of the RNAi Therapeutics Institute.

Gail Patrick Innovation Award given to GSBS Dean

The American Diabetes Association (ADA) Research Foundation awarded Professor of Biochemistry & Molecular Pharmacology and Dean of the Graduate School of Biomedical Sciences Anthony Carruthers, PhD, the selective Gail Patrick Innovation Award. Named for the late Gail Patrick, the first national chairman of the American Diabetes Association Board of Directors, the \$100,000 grant will support Carruthers' pursuit of a troubling issue related to the inhibition of GLUT4—a particular class of insulin-regulated glucose transporter found in fat tissues and striated muscle—as a side effect of HIV protease inhibitor therapy. While greatly benefiting AIDS patients, HIV protease inhibitors can also lead to patients' development of insulin resistance and type 2 diabetes.

IMPAACT on maternal, pediatric and adolescent AIDS

Principal Investigator Katherine Ruiz de Luzuriaga, MD, professor of pediatrics and molecular medicine, and colleagues recently received a funding renewal of nearly \$1 million per year for seven years from “IMPAACT,” the National Institutes of Health's newly reorganized International Maternal Pediatric Adolescent AIDS Clinical Trials. According to Dr. Luzuriaga, who has conducted vital research in this area since 1992, new and ongoing clinical trials will advance IMPAACT's mission to decrease HIV-related morbidity and mortality in pregnant women, children and adolescents.

Study shows addiction to nicotine almost immediate in youth smokers

More than four million youth between the ages of 12 and 17 are smokers, according to the National Institutes of Health, and a new study, led by Joseph DiFranza, MD, professor of family medicine & community health, looks at how easily they can become addicted to nicotine. “Symptoms of Tobacco Dependence After Brief Intermittent Use,” Dr. DiFranza's four-year study monitoring nearly 1,250 sixth-graders in six Massachusetts communities, found 10 percent of youth who smoke cigarettes are addicted within two days of first inhaling, and 25 percent are addicted within a month. The study also discovered that adolescents who smoke only a few cigarettes each month suffer withdrawal symptoms when deprived of nicotine.

Medical School receives two prestigious awards from Keck Foundation

UMMS has received two prestigious honors from the W. M. Keck Foundation: Stephen Doxsey, PhD, professor of molecular medicine and biochemistry & molecular pharmacology, was awarded a Keck Medical Research Grant; and Job Dekker, PhD, assistant professor of biochemistry & molecular pharmacology, was named a Keck Distinguished Young Scholar. One of the largest private philanthropic organizations in the country, the Keck Foundation supports the work of leading researchers to lay the groundwork for breakthrough discoveries.

CytoDyn Receives Rapidly Updated DNA Flu Vaccine from UMass Medical School

The laboratory of Shan Lu, MD, PhD, professor of medicine, has provided CytoDyn, Inc. with updated DNA-based H1 and H3 serotype influenza vaccines for the 2007-2008 flu season. CytoDyn will use both types of vaccines in clinical trials to evaluate the prime-boost method of vaccination invented by Dr. Lu, who heads the DNA vaccine effort at UMMS.

4. Continue a Focus on Diversity and Positive Climate

Annual International Festival held in May

To create a community of inclusion by promoting learning among cultures, UMass Medical School's Diversity and Equal Opportunity Office (DEOO), Human Resources and the International Subcommittee of the Council on Equal Opportunity and Diversity sponsored the Second Annual International Festival held on the Worcester campus in May. The event featured student and faculty participants as well as an offering of cultural exhibits, entertainment, food and a market of fair-trade handicrafts.

Civility Awareness Day planned

Plans are underway for UMass Medical School's second annual Civility Awareness Day program to be held on September 18. The event, sponsored by the Civility sub-committee of the Counsel on Equal Opportunity and Diversity, will feature keynote speaker Daniel Goleman, PhD, internationally renowned psychologist, science journalist and author of the New York Times best- seller, *Social Intelligence*.

5. Renew the Faculty

New School of Medicine Dean named

Physician-scientist Terence R. Flotte, MD, was appointed dean of the School of Medicine and executive deputy chancellor of UMass Medical School. He officially began his new position on May 15. Dr. Flotte was the Nemours Eminent Scholar and chair of the Department of Pediatrics at the University of Florida College of Medicine prior to joining UMMS.

Rosmarin named chief of Hematology/Oncology and deputy director of the Cancer Center

Alan G. Rosmarin, MD, was named chief of the Division of Hematology/Oncology in the Department of Medicine at UMass Memorial Medical Center and deputy director of the UMass Memorial Cancer Center at UMass Medical School and UMass Memorial. Dr. Rosmarin was previously at the Warren Alpert Medical School of Brown University, where he was interim director of hematology, director of the hematology/oncology fellowship program and associate professor of medicine, molecular biology, cell biology and biochemistry.

Keaney to lead Division of Cardiovascular Medicine

General and interventional cardiologist John F. Keaney, Jr., MD, was named chief of the Division of Cardiovascular Medicine at UMass Memorial Medical Center, and appointed professor of medicine at UMass Medical School. Dr. Keaney comes to Worcester from Boston University School of Medicine, where he was professor of medicine and pharmacology.

6. Increase Endowment

Ninth Annual Walk to Cure Cancer

The Annual Walk to Cure Cancer on the UMass Medical School campus has raised more than \$3 million to support cancer research at the Medical School and cancer care at UMass Memorial Medical Center. This year's goal is to recruit 10,000 walkers and raise \$1 million. The Walk to Cure Cancer takes place this year on September 23 at noon.

New chair elected for UMass Memorial Foundation Board of Directors

The UMass Memorial Foundation, the 501(c)(3) nonprofit organization that raises private philanthropic support for UMass Memorial Health Care and UMass Medical School, elected Mary C. DeFeudis as chair of its board of directors during its annual meeting in June. Ms. DeFeudis, who will serve a two-year term as chair, has a long history of philanthropy and service to the Medical School and UMass Memorial, in addition to organizations throughout Central Massachusetts. In her capacity as chair, she will assist the Foundation's staff in initiatives to bolster community and foundation financial support for research and patient care initiatives.

7. Develop First-rate Infrastructure

Accelerating treatment with state-of-the-art image guidance

UMass Medical School and UMass Memorial Health Care recently opened the Center for Innovative Imaging & Intervention (CI3) to develop advanced imaging and image-guidance for the next generation of disease diagnosis and treatment, while accelerating the translation of scientific advances into clinical application through multidisciplinary collaboration. Through a partnership with Philips Medical Systems of Andover, Mass., CI3 allows scientists and clinicians who are experts in imaging and interventional technologies to respond to clinical needs.

UMMS acquires FEI Quanta 200 FEG MKII scanning electron microscope

Local researchers now have access to one of a handful of state-of-the-art environmental scanning electron microscopes in the country since its acquisition by UMass Medical School earlier this year. The half-million dollar FEI Quanta 200 FEG MKII scanning electron microscope (SEM) is housed in the Core Electron Microscopy Facility, one of more than 25 research core facilities at the Medical School that offer support to investigators through shared expertise, services, technology and equipment. SEM is capable of producing images of biological and non-biological samples at more than 300,000 times their actual size, revealing a wealth of structural detail.

Event 'tops off' advanced education and clinical practice center

To commemorate a milestone on the UMass Medical School campus, a topping-off ceremony was held to celebrate the completion of the structural steel frame for the new Advanced Education and Clinical Practice Center (AECPC). Scheduled for completion by fall 2008, the AECPC will include seven floors and add more than 250,000 square feet of clinic, office and classroom space to the campus, which will benefit both the Medical School and UMass Memorial Health Care. The building will include the Center for Experiential Learning and Simulation, the Clinical and Translational Science Department and two separate ambulatory clinics.

Worcester City Campus Corporation purchases 333 South Street Buildings

The Worcester City Campus Corporation (WCCC), an affiliate of the University of Massachusetts, has purchased property at 333 South Street in Shrewsbury from the Maxtor Realty Corporation/Seagate Technology LLC. The property consists of two buildings containing approximately 670,000 gross square feet of space. Currently, the UMass President's Office and UMass Medical School lease approximately 95,000 square feet in the buildings. This property acquisition provides needed space and substantial capital cost avoidance as compared to the cost of new office or laboratory construction.

8. Develop Leadership Role in Public Service

\$1.5 million grant renewal supports health education programs for underserved across state
UMass Medical School has been awarded a three-year grant to continue its Area Health Education Center (AHEC) program, which seeks to remedy the current shortage of health care professionals across the state. The \$500,000-per-year grant is funded by the Health Resources and Services Administration, a division of the federal Department of Health and Human Services, and will support the statewide system of six regional AHEC training centers. In Massachusetts, AHEC is based at UMass Medical School and managed by the school's Commonwealth Medicine division.

Bringing health care coverage to the uninsured

Through an innovative partnership between Massachusetts and 35 community organizations, \$3.5 million was allocated for health insurance enrollment outreach grants, administered by the Executive Office of Health and Human Services' Office of Medicaid and UMass Medical School's Commonwealth Medicine Office of Community Programs. As a result, more than 51,000 MassHealth applications were submitted by the organizations in fiscal year 2007, in response to Massachusetts' new law mandating insurance coverage for all residents.

Enhancing patient access to services

The Massachusetts Department of Public Health's Women's Health Network, the Central Massachusetts Area Health Education Center (AHEC) and AHEC of Southeastern Massachusetts are collaborating to improve the delivery of health care services to low-income and underinsured women by training community health workers to become patient navigators and providing cross-cultural competency instruction to health care providers. The Central Massachusetts and Southeastern AHECs are regional centers of the Massachusetts AHEC Network, managed by UMass Medical School's Commonwealth Medicine and sponsored by non-profit agencies or city health departments. Through its nationally recognized Outreach Worker Training Institute, the Central Massachusetts AHEC enrolls community health workers and supervisors across the state in courses aimed at enhancing the delivery of health care and services.

Lochrie honored with Erskine Award

Jane Lochrie, MD, clinical associate professor of medicine, was awarded the 2007 Katherine F. Erskine Award in Medicine and Science at its annual Tribute to Women. The annual awards are given to women in five professional areas—Arts and Humanities, Business and Law, Community/Social Service and Government, Education and Medicine and Science—whose achievements have improved life in their community, especially for women and girls. A Medical School alumna, Dr. Lochrie has helped establish and run free health clinics, including the Fallon Clinic M. Elizabeth Fletcher Women's Health Center and the clinic at St. Anne's Church in Shrewsbury.

9. Improve Delivery of Administrative and IT Services

New high-speed statistics server available

UMass Medical School's Information Services recently announced its acquisition of a new high-speed statistics server called STATS for performing data analysis on very large datasets such as those commonly used in health sciences research. STATS is at least four times faster than the old

server and three times faster than a new high speed PC, and is capable of performing many analyses simultaneously.

High performance computing

UMass Medical School's Information Services is in the process of upgrading its High Performance Computing environment, which includes the hosting of HPC clusters Droplet and Biocluster. Droplet is funded by a National Institutes of Health shared instrumentation grant and is used for investigator-initiated projects. Biocluster is funded by IS and is configured to run bioinformatics programs. This summer, IS also made enhancements that are flexible and powerful enough to support current research needs and scalable for future needs.

10. Position University in the Higher Education Marketplace

Applications to Graduate School of Biomedical Sciences reach record numbers

Applications to the Graduate School of Biomedical Sciences are 20 percent higher than any total in the graduate school's history and 25 percent higher than last year. According to Michael Cole, director of recruiting and admissions for the GSBS, the increase is attributable to the recognition of research excellence brought by the Nobel Prize win of Craig C. Mello, PhD. "I expect to see increased interest from all students, but I am also hopeful and optimistic that Massachusetts students especially will look at us in an even more positive light, making us more competitive in student ranking with Boston-area institutions," said Cole.

UMMS contributes to Web-based video promoting Worcester colleges

As a member of the Colleges of Worcester Consortium, an alliance of 13 area colleges that works cooperatively to further the missions of the member institutions individually and to advance higher education regionally, UMass Medical School assisted in the production and launching of a Web-based video promoting Worcester and the area as a college destination for prospective undergraduate and graduate students. The video was made possible through a grant from the Massachusetts Office of Travel and Tourism

I look forward to joining you at the Board of Trustees meeting on September 19 on the campus of the University of Massachusetts Lowell.