Vitae:

The magazine of the University of Massachusetts Medical School

Spring / Summer 2000 Vol. 22 No. 2

inside: improving policies and practices *(page 4)*,
CPACE keeps pace with cancer *(page 8)*,
a doctor without borders *(page 18)*

Vitae: *L., the plural of life*

The name of this magazine encompasses the lives of those who make up the UMMS community, for which it is published. They are students, faculty, staff, alumni, volunteers, benefactors and others who aspire to help this campus achieve national distinction in education, research and public service.

The University of Massachusetts Medical School

school of medicine, opened in 1970
graduate school of biomedical sciences, opened in 1979
graduate school of nursing, opened in 1986

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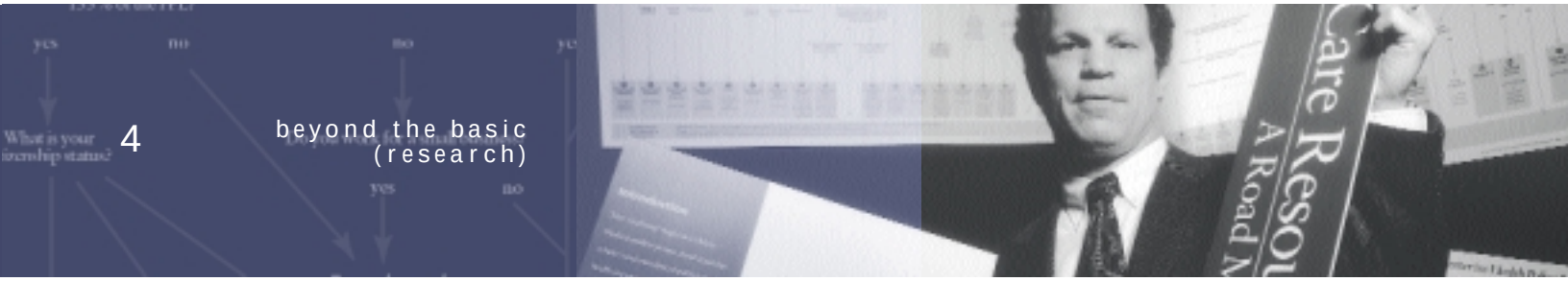

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News & Notes:

UMMS RISES IN THE NIH RANKS

The University of Massachusetts Medical School rose one notch to rank 40th among the nation's medical schools in attracting extramural funding from the National Institutes of Health (NIH). With more than $60 million received in FY '99, UMMS' NIH grant and contract awards grew approximately 15 percent from the FY '98 total of $52 million and more than doubled over the last decade from $29 million. In addition to its ranking nationwide, UMMS maintained its second place position among the Northeast's public medical schools in its receipt of NIH funding.

• Michael Czech, PhD, and Administrative Assistant Jane Erickson

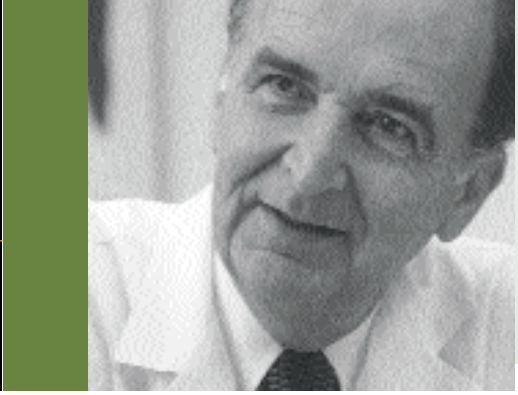
CZECH HONORED BY ADA FOR LIFETIME ACHIEVEMENT

Michael Czech, PhD, professor of biochemistry & molecular biology and director of the Program in Molecular Medicine at UMMS, will be recognized as the recipient of the 2000 Banting Medal for Scientific Achievement by the American Diabetes Association (ADA) at the association's annual conference in San Antonio this June. The highest scientific accolade given by the ADA, the award is named for Sir Frederick Banting, MD, discoverer of insulin, and honors individual, long-term achievement in the study of diabetes. Over the last 25 years, Dr. Czech has studied Type 2 diabetes (formerly known as maturity onset diabetes) which afflicts some 16 million Americans. As associate director of the UMMS Diabetes-Endocrinology Research Center, one of only 15 such centers across the country funded by the National Institutes of Health, Czech directs a lab of 20 scientists who attract approximately $1 million per year in extramural funding.

• Miriam Torres, a Next Step participant, with her Worcester Latino Coalition colleague, Daniel de la Torre, assistant director of the UMMS Office of Community Programs

NEXT STEP OFFERS ADVANCEMENT THROUGH DEGREES

The Next Step Initiative enables health care workers who lack college degrees to advance professionally by applying their prior work experience toward college credits. The program also gives these workers the means to take the courses needed to obtain their bachelor's degrees in community health. Initiated by the Worcester Latino Coalition and the UMMS Office of Community Programs, this unique collaboration offers participants the educational support of program partners Quinsigamond Community College, Worcester State College and the University Without Walls/UMass Amherst. Approximately 30 health care workers are taking part in the new program, with potentially hundreds more eligible to participate.



MAJNO RECEIVES HUMANISM IN MEDICINE AWARD

Guido Majno, MD, professor of pathology, was recognized as one of 44 physicians selected by medical students nationwide for the 1999 Association of American Medical Colleges (AAMC) Humanism in Medicine Award. Honoring medical school faculty/physicians who "embody the finest qualities in a healer who teaches healing," the annual award is sponsored by the AAMC and the Pfizer Medical Humanities Initiative.

• Guido Majno, MD

• Michele Pugnaire, MD

• Thomas Grisso, PhD

• Paul Appelbaum, MD

• Congressman James McGovern discusses WPC with Mary Clifford, North High School's Health Science Academy facilitator, and student Sayosala Shasanya.





MCQ™ CURRICULUM A NATIONAL MODEL

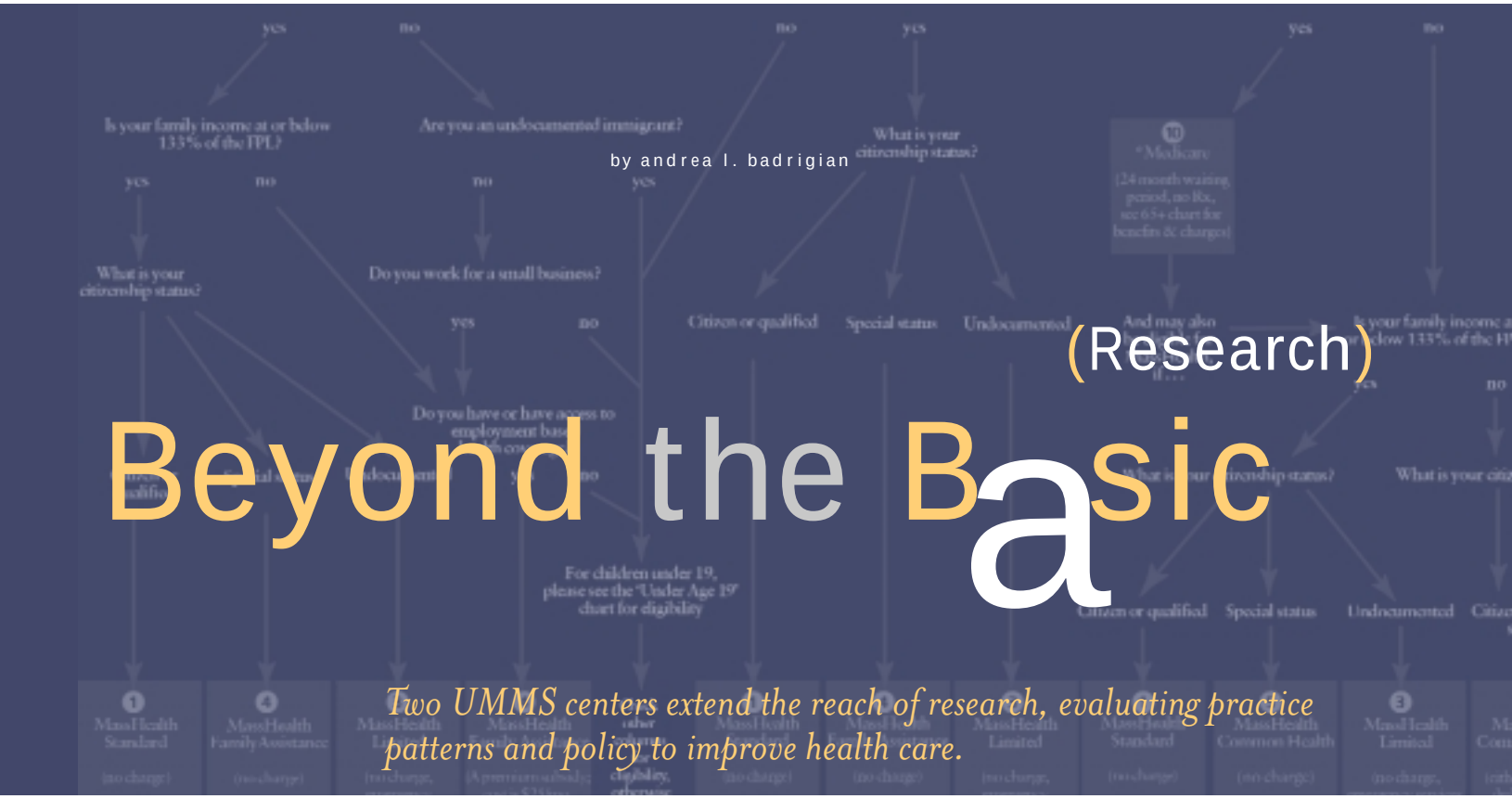
The Medical School recently filed for trademark protection of its McQ™ Family curriculum, which in 1999 was licensed for use by two New England medical schools. The curriculum features the fictional McQ™ family of standardized patients, each complete with a five-year medical and social history, that incorporates psycho-social as well as medical issues into a hands-on learning experience for students. Embraced by family medicine and community health students and faculty alike when it was created in 1994 by Vice Dean for Undergraduate Medical Education Michele Pugnaire, MD, then director of the third-year clerkship in family medicine, the McQ™ family has since achieved national prominence as a model teaching tool.

AWARD RECOGNIZES PSYCHIATRY FACULTY

Paul Appelbaum, MD, the Arnold F. Zeleznik Professor and Chair of Psychiatry, and Thomas Grisso, PhD, professor of psychiatry and coordinator of the Law and Psychiatry Program, were awarded the Manfred S. Guttmacher Award for their book titled *Assessing Competence to Consent to Treatment: A Guide for Physicians and Other Health Professionals*, published in 1998. Dr. Appelbaum is the only person to have received the Guttmacher Award three times, which is co-sponsored by the American Psychiatric Association and American Academy of Psychiatry and the Law, and presented annually for outstanding contributions to the literature of forensic psychiatry.

TECH CENTER LINKS PIPELINE COLLABORATIVE TO CLASSROOMS

A new technology center, housing telecommunications linking the Worcester Pipeline Collaborative's (WPC) City Campus laboratory with science classrooms throughout the community, has been established with a $50,000 Career Connection Grant from BankBoston. Established by UMMS in 1996, WPC is an educational partnership among local health care institutions, scientific companies, colleges and the Worcester Public Schools, designed to improve academic preparedness and career awareness for minority and economically disadvantaged youth. In November, public education officials at the national and state level visited Worcester to meet with WPC officials and participants and view aspects of the successful program, which includes mentoring, internships and job shadowing for students, and professional development and curriculum assistance for teachers.



by andrea l. badrigian

Beyond the Basic (Research)

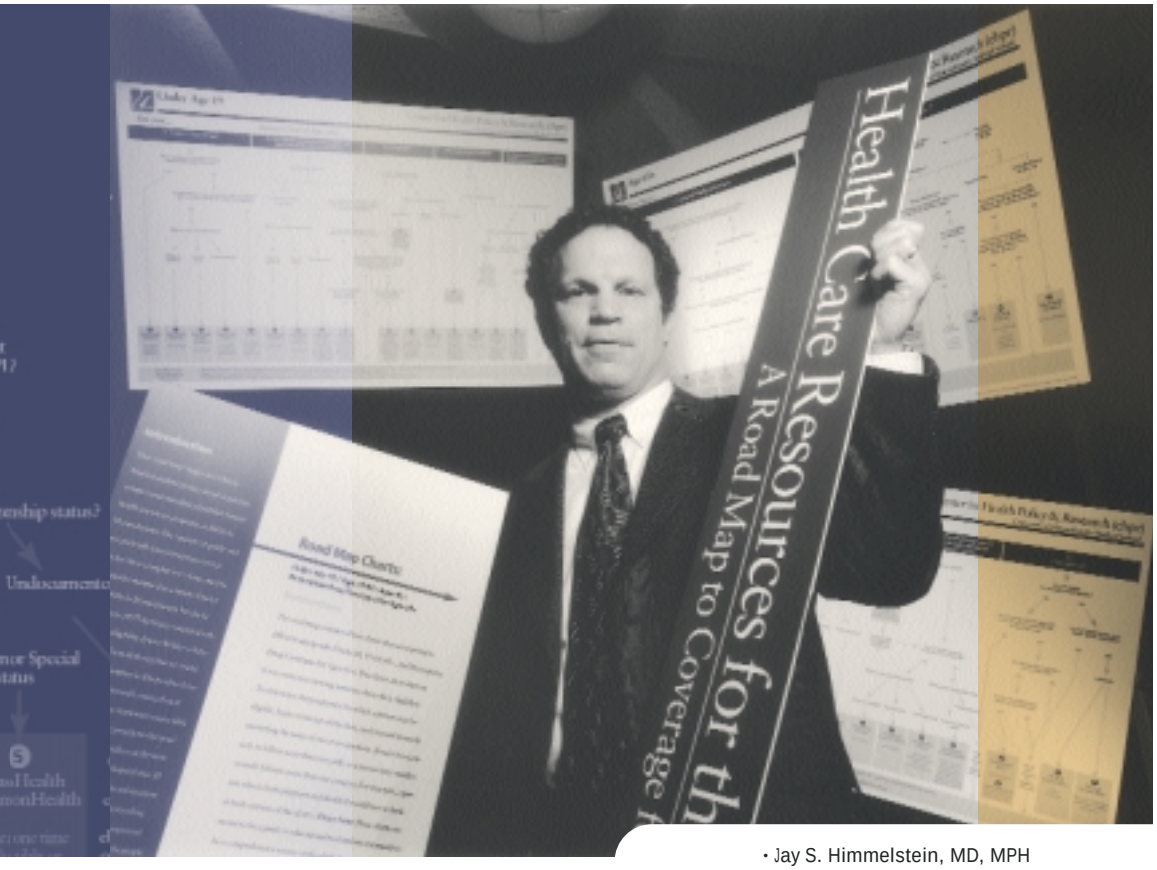
Two UMMS centers extend the reach of research, evaluating practice patterns and policy to improve health care.

Basic and clinical science investigators have conducted research at UMass Medical School for a generation, positively impacting the health of thousands through "conventional" use of microscopes and patient trials. But can the analysis of data and public policy enhance—even save—lives as well? Two innovative centers at UMMS conducting this kind of non-traditional research prove it can.

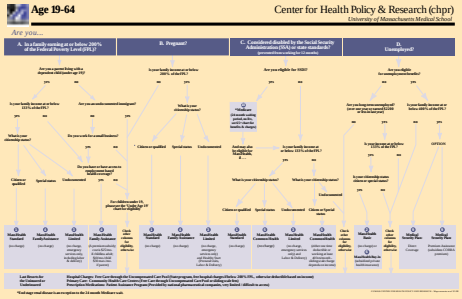
Heading the Center for Health Policy & Research (CHPR) and the Center for Outcomes Research (COR) are two creative thinkers who often compare notes with one another about the evaluative techniques they use and the trends they see in health care delivery and effectiveness. Jay S. Himmelstein, MD, MPH, assistant chancellor for health policy and director of CHPR, and Frederick A. Anderson Jr., PhD, research professor of surgery and director of COR, each possess the essential skills needed to sift through the complex information and issues surrounding health care, translating them for policymakers and practitioners alike.

AFFECTING POLICY

It seemed an appropriate setting for discussions about good health—Walt Disney World, a magical land promoting happiness and relaxation. Dr. Jay Himmelstein was there, but not on vacation with his family. Instead, he spoke before Fortune 500 decision makers who hoped to gain from his expertise in health care policy and health services research. "These employers were asking questions about how to improve productivity through a healthier workforce and about how to cope with a constantly evolving health care system," explained Himmelstein. "These are the kinds of issues we deal with here at the center for our primary 'clients,' which happen to be state agencies responsible for providing health services to the citizens of the commonwealth."



• Jay S. Himmelstein, MD, MPH



Himmelstein's center serves as a research and evaluation resource for the Division of Medical Assistance (DMA), the commonwealth's facilitator of the federal Medicaid program, and is currently in negotiations to deliver similar services for the Department of Mental Retardation and the Executive Office of Elder Affairs. "Medicaid spends over $4 billion a year, is responsible for more than 20 percent of the state budget and insures one out of every four children in the state," Himmelstein explained. "Yet, Medicaid and other state agencies have little in terms of research and evaluation capabilities. They don't have the modern data and analytical systems to help them make decisions like private employers do and they have limited access to consultants. As a result, they have come to UMass hoping to leverage our resources. Chancellor Lazare and Vice Chancellor for Operations and Commonwealth Medicine Thomas Manning have empowered our center to develop a public policy consulting group dedicated to state agencies and to improving the health and care of the people of the commonwealth."

Because Massachusetts is already considered a leader in public sector health services, the center has the unique opportunity to help set the standard for other states to follow, finding itself on the cutting edge of creative approaches state agencies can use to provide health care. Yet, CHPR is a young entity, born in 1997 from the mission to expand the Medical School's vision of its research potential and public responsibilities.

"Medical schools typically emphasize basic science and clinical research using clinical trials," said Himmelstein. "When we formed a task force to develop the center, we saw that UMass was doing pretty well already in the area of non-traditional research, but we felt we had to take the next step. So the center's mandate is to enhance health policy resources and productivity in the research, education and clinical sectors of the Medical School and UMass Memorial, the school's clinical partner.

• CHPR creates Road Map Charts like the one above to help health care practitioners steer their patients through the system.

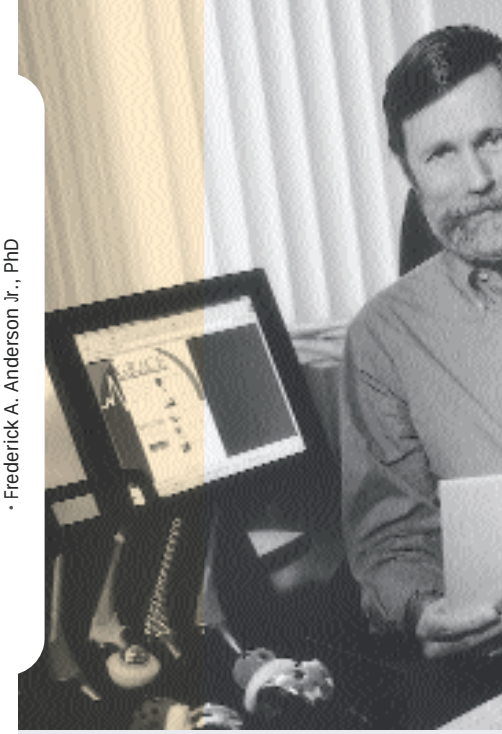
CHPR has the unique opportunity to help set the standard for other states to follow.

"Around the time of the task force's review," Himmelstein continued, "the head of the DMA was meeting with Chancellor Lazare, hoping to collaborate with the Medical School in addressing some of the agency's more complicated challenges. The timing of these discussions was perfect, and the center received initial funding from the agency, recognizing that there was an abundance of services that we could provide, driven by strong health policy analysis."

Originally setting a goal to undertake three projects annually for state agencies, CHPR currently has 15 projects underway, funded with an annual budget of $1.5 million, and has completed over 20 projects in its first two years. "One of the projects I am especially proud of is an ongoing one aimed at improving access for Medicaid patients to dental care," Himmelstein reported. "This has been a huge local and national problem, somewhat like the pharmacy crisis for seniors. Medicaid wasn't well designed to offer dental care, and in Massachusetts it garners frequent complaints of lack of access and poor quality. So we were asked two years ago to work with the DMA on revising its policy approach."

Through detailed evaluations of the current program, Himmelstein and his staff confirmed that dentists were dropping out of the Medicaid dental program at a high rate, and that access problems were severe and widespread. "We assembled a team of local and national experts and representatives of the Massachusetts Dental Association to help us understand the point of view of dentists, as well as patients and the DMA. We found some very striking things. For example, dentists told us that if they performed some of the services Medicaid paid for, they'd be committing malpractice. The rules were outdated and out of sync with modern dental practice." CHPR recommended actions Medicaid could take right away, including an application to the federal government to change the rules impacting dental care.

"Dentists also pointed out to us that, under the law, if they accept one Medicaid patient, they must accept any and all Medicaid patients. As a result, dentists weren't taking that first patient," said Himmelstein. "So we have worked with the agency to develop a waiver process whereby dentists could apply for an exemption to limit their practices to a certain number of Medicaid patients." CHPR's greatest coup was winning the support of Governor A. Paul Cellucci to increase program funding, allowing dentists to reap more appropriate fees as incentive to treat Medicaid patients. Current efforts to pass legislation that includes some of the center's recommendations are "very exciting," according to Himmelstein. "In addition, through the MassHealth Access Project, another component of Commonwealth Medicine, UMass is providing grants to community health centers to enhance their capacity to deliver dental health care. Not only can UMass participate in the state health policymaking process, we can follow programs through and help make the University part of the solution."



• Frederick A. Anderson Jr., PhD

Better outcomes

The research into patient outcomes after treatment, described in such terms as death, disease, functional status, well-being, satisfaction and cost, has become one of the most widely discussed topics in health care, eliciting strong interest from physicians, hospitals, insurers and medical societies, among others. Outcomes research, as Dr. Frederick Anderson defines it, "is the product of the evidence-based medicine movement, which has at its foundation randomized control in clinical trials. This movement has witnessed a change over the last ten years in how performance assessment of physicians in health care systems is viewed, and how the measuring and defining of the best care is assessed for a given medical condition.

"Outcomes research responds to this by taking the best evidence available and saying 'let's go beyond the definition of best practices.' We know what's effective in treating diseases A, B and C, but no one knows if those ideas are being applied in everyday patient care in the real world," explained Anderson.

Outcomes research findings can improve many practices and benefit many patients.

Anderson helps physicians address this uncertainty through the compilation and distribution of benchmark data reports gathered from questionnaires submitted by patients and physicians participating in national registries the center oversees. These reports provide objective feedback about the relationship between physicians' patterns of practice and their patients' outcomes. The data also allow for comparison of individual practice patterns and outcomes with the experiences of other physicians caring for comparable patients, throughout the country and world.

COR measures patient outcomes in four distinct disease categories using the ALS (Amyotrophic Lateral Sclerosis) Patient Care Database, the Hip & Knee Registry, the Glioma Outcomes Project and the Global Registry of Acute Coronary Events (GRACE), employing a similar data gathering and reporting process for each. Anderson's staff of 16 receive data from physicians or other medical staff and patients garnered through surveys, review and edit the data and create a database from which to distribute confidential, quarterly reports to participating physicians. Aggregate findings are also disseminated through journal articles and presentations at national and international meetings. "We've found that bringing this information to physicians' attention in a structured way can have a dramatic effect on practices," said Anderson. "This gives physicians something to take action on and very often leads to discussion with their colleagues, which in turn leads to process improvements, such as the development of standing orders for certain kinds of conditions. Approaches like this have improved many practices and benefited many patients."

The Hip & Knee Registry was the first registry created by Anderson at COR in 1995. "The whole idea came to me when I looked back on my experience some 20 years ago evaluating practices in the prevention of thrombosis. But NIH wasn't interested in funding the idea, because it doesn't involve the kind of case-controlled research NIH typically supports with grant money."

So Anderson sought out another source, one that was keenly interested in physicians' treatment practices: Rhône-Poulenc Rorer Pharmaceuticals Inc. of France, maker of a new drug for the prevention of blood clots following major hip replacement surgery. "Pharmaceutical companies would be excited about taking part because for them, this is a perfect complement to their other efforts to develop data about their products." Anderson continued to explore his unique idea and, at the same time, worked to allay physicians' fears surrounding physician and patient confidentiality. He convinced Rhône-Poulenc Rorer to provide the funding through an unrestricted educational grant, allowing UMMS to be the holder of all information, thereby maintaining the confidentiality of the parties concerned—patients, doctors, hospitals.

"The registries benefit everyone, including UMass patients and doctors, who are part of every one of the registries," explained Anderson. "We present each physician with a confidential tool to help them monitor their outcomes and, at the same time, we allow the pharmaceutical company access to aggregate data on clinical practices so they can better plan both clinical trials and marketing strategy."

COR plans each registry project with the help of a physician advisory board, while Rhône-Poulenc Rorer uses its marketing power to promote physicians' participation in the project. "Over 1,000 orthopedic surgeons, for example, have signed up for the Hip & Knee Registry throughout the U.S. and Canada, and they have over the years sent us data on about 25,000 patients who have had a hip or knee replacement," Anderson reported. "In return, we provide reports that are fresh and interesting to physicians, because they get different views quarter by quarter."

Anderson is currently focused on COR's newest registry, which is expected to provide critical information about treatment outcomes for the millions of patients worldwide who suffer from acute coronary syndromes (ACS), including myocardial infarction and unstable angina. GRACE is the first population-based, international data-collection registry for ACS, and its data may help determine, among other things, whether aggressive versus conservative treatment produces the same outcomes. GRACE will also show how cardiologists are using newer drug treatments with patients. "GRACE has been both challenging and exciting to create," said Anderson. "It is bigger than all of our other projects combined. We hope this will put UMass on the map as an international leader in outcomes research."

Collaborat

• CPACE students and faculty: Richard Boyajian, Graduate School of Nursing student; Mary K. Alexander, EdD, NP; Jane G. Zapka, ScD; Roger Luckmann, MD, MPH; and Susan Shepherd, Graduate School of Public Health student.

UMass faculty create educational and research opportunities for future practitioners who will combat cancer and advocate for public health.

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Against Cancer

by alison m. duffy

1

As UMass enters a new era with a broadened approach to cancer research, several faculty members are enhancing the way students learn about cancer, through the Cancer Prevention And Control Education program (CPACE).

By introducing and reinforcing basic science information, epidemiological evidence, and research and clinical application skills, CPACE lays the groundwork, preparing future physicians, nurses and public health practitioners to better assess and communicate a patient's predisposition to cancer, encouraging behavioral change to minimize risk.

Funded by a four-year, $900,000 grant from the National Cancer Institute (NCI), CPACE promotes a multidisciplinary, integrated curriculum developed by collaborating faculty from the School of Medicine, the Graduate School of Nursing (GSN) and the School of Public Health (SPH) at UMass Amherst. The program seeks to strengthen existing cancer education opportunities and create new initiatives for medical students and graduate students in public health and nursing programs. The ultimate goal is to promote improved education and research opportunities for doctors, nurses and public health practitioners, in order to provide them with the best tools for cancer prevention and control.

2

"We're integrating public health concepts, epidemiological models and evidence-based practices into the curriculum to teach students from all three schools how to think about the disease and its prevention," said Jane G. Zapka, ScD, professor of medicine in the Division of Preventive and Behavioral Medicine, and principal investigator of CPACE. "We believe students can learn a great deal from each other's perspective, to gain a broader picture of the nature of cancer, how it affects patients, and how it affects the public as a whole."

CPACE faculty, led by Dr. Zapka, Roger Luckmann, MD, MPH, Mary K. Alexander, EdD, NP, and Jacayln Coghlin-Strom, MD, MPH, profiled the curricula of the three schools, seeking areas in which student exposure could be enhanced. While excellent cancer-related content already existed in the curricula, the objective was to create further, specific opportunities to improve skills, better coordinate content across the courses and develop new learning modules.

3

Within the Medical School curriculum, faculty instructing students in their pre-clinical and clinical years designed a variety of new and improved learning tools. For example, standardized epidemiological materials were developed for use in oncology block lectures, including a graphic epidemiological summary for each of the major cancers—breast, lung, colon and prostate, among others. Epidemiology examines the occurrence of disease or other health conditions, states or events in specified populations. "It's important for students not just to have an understanding of the hard medical facts about cancer, but to know the epidemiological profile and the behavioral risks and to be able to relate them to their patients effectively," said Dr. Luckmann, assistant professor of Family Medicine & Community Health. Clinicians can help patients minimize and control their cancer risk through lifestyle change, such as smoking cessation and diet.

• Epidemiological summaries for major cancers allow students to be disease "profilers."

4

With the NCI CPACE resources, a new Cancer Prevention and Cancer Control subspecialty was developed within the GSN. The subspecialty emphasizes an epidemiological, evidence-based approach to program planning and clinical services, and a behavioral approach to health education and genetic counseling. "Given the expanded role of advanced practice nurses in the new century, we expect our CPACE nurses to play an integral part in teaching, clinical service and research," said Mary K. Alexander, associate dean and professor of nursing and professor of Family Medicine and Community Health. "The goal of the CPACE subspecialty in nursing is to prepare advanced practice nurses for roles in cancer prevention and early detection within adult patient populations. This is a very exciting time to be in cancer prevention."

5

Dr. Coghlin-Strom, coordinator of the UMMS-based Masters in Public Health program, worked to develop three coordinated courses in cancer epidemiology, applied behavioral epidemiology and evaluative research in prevention programs. Zapka, Susan Bauer, DNSc, RN (GSN), and Phil Nasca, PhD, (SPH/Amherst) collaborated on the three courses, which are open to students in all three schools, as well as to preventive medicine fellows.

According to Zapka, an exciting example of CPACE's interdisciplinary emphasis is the genetics inter-clerkship offered this spring. Nurse practitioner students participated in a primer on genetics and then took part in a two-day intensive course with medical and public health students. Led by Laurie Demmer, MD, assistant professor of pediatrics, the program provided knowledge about genetic technology and understanding of the ethical, psycho-social, legal, regulatory and spiritual challenges raised by genetic testing. It also enhanced skills for assessing familial history and analysis of pedigrees.

6

In addition to the clinical and public health aspects, there is a strong evaluative research component, teaching students to question and examine evidence, as well as learn research methods themselves. CPACE has supported mentored research experiences in all three degree programs. Student projects have included studies of improved screening practices in primary care, prevalence of colorectal cancer screening in Massachusetts, survey research methods applied to the study of breast cancer patients and applied statistical methods in cancer control studies.

As cancer prevention and control moves forward on a number of different fronts—nutrition, chemo-prevention, alternative medicine—CPACE is able to provide UMass students and practicing professionals with the most current information and training through its unique, interdisciplinary approach.

Chromosomal translocation directs a cell's genes to the wrong place at the wrong time. A UMMS researcher aims to set them straight.

Mixed Signals

by mark l. shelton

Gary S. Stein, PhD, has a practiced way of explaining his work in accessible and visual terms—he speaks of "road maps," "signposts" and "trafficking" and in analogies of stopping at a service station to ask for directions.

His explanations can be so accessible, in fact, that it takes a moment to realize that the "signals" and "regulatory factors" that he and his research colleagues work with are actually individual proteins that are regulated by and signaled for through the activities of genes within a body's cells—proteins so small that direct observation is impossible.

So when Dr. Stein, the Gerald L. and Zelda S. Haidak Distinguished Professor and Chair of Cell Biology and director of basic science research for the UMass Cancer Center, speaks of a moment of exquisite intranuclear balance, of it "being necessary for regulatory factors to be in *just* the right place at *just exactly* the right time," he's referring to a "right place" deep within a cell's nucleus, and a "right time" that is a moment immeasurable in the life of each of an organism's countless cells. Such a moment is all but impossible to imagine without analogies on a scale more familiar to us, as we try to picture the activity within the cells we call our own.

The science that makes Gary Stein's eyes light up

• Gary S. Stein, PhD

is something that came as a complete surprise.

Imagine for a moment a particular chromosome, representing the richly gathered thread of genes in each and every one of our cells, in a particular type of white blood cell. Now imagine a break, or a fracture as Stein calls it, in a particular place on that particular thread. A fracture sounds bad enough, but in this case, the fracture is followed by a fusion, where two sticky ends become a single bit of thread, right in the middle of the place where the chromosome directs the actions that make a normal white blood cell normal.

It sounds like serious trouble. Indeed, in about one out of seven cases of a type of leukemia called AML, this fracture and fusion is present, the so-called "8:21 translocation." (A piece of chromosome 8 and a piece of chromosome 21 fused together in a location where they shouldn't be.) "You have the information you need from one part of the chromosome," said Stein, "but what you've lost is the information that directs it to the right place. You have the directions, but you're in the wrong city, because the directions you have acquired as a consequence of the chromosomal translocation are to an entirely different place than you want to go. You see the signs, you can read the signs, you can read your directions, but because of that single bit of misdirection, you end up in the wrong place."

What energizes Stein and his colleagues of more than two decades —Janet L. Stein, PhD, Jane B. Lian, PhD, and Andrea J. Van Wijnen, PhD—about this regulatory wrong turn is how discrete and specific it is: a dangerous alley, perhaps, but clearly a wrong turn. And in a dazzlingly visual experiment, just how clearly this wrong turn can be seen through a standard light microscope. By tagging the various proteins with fluorescent markers of different colors, the "map" is suddenly clear as a bell. Tag the protein that is made by a normal chromosome 8 gene one color, a protein made by a normal chromosome 21 gene another, and if you pick red and green, anything yellow is "colocalized." Utilizing this approach, Stein and his co-investigators established that the 8:21 chromosomal translocation in AML leukemia causes proteins that control essential genes to be directed to incorrect locations within the cell nucleus.

The beauty of such a discrete and identifiable genetic error is that it makes an effective target for therapy, perhaps a drug, that leaves 8 and 21 alone, but blocks 8:21 from expressing itself. Yet, the science that makes Gary Stein's eyes light up is something that came as a complete surprise.

"We looked at a whole series of regulatory proteins in the white blood cells of a patient who had leukemia, and a whole series of regulatory proteins in the white blood cells of a patient *treated* for leukemia with chemotherapy. And what we saw were differences in how several of these regulatory proteins were distributed, exactly the same principle as can be seen in the fluorescent cells illustrating the 8:21 translocation, but in an actual case of leukemia.

"This was truly a serendipitous moment," continued Stein. "We weren't asking the question 'How do you direct regulatory factors in the nucleus?' at all, but when we could actually see that the regulatory sites were changed in someone who had been treated by essentially growing a whole new set of blood cells, we immediately asked, 'How can you direct these sites? How can you direct traffic?' in the cell nucleus. It's one thing to see this through the microscope; it's quite another to see it in a patient.

"This is a signpost for us, a road map for us to go back and look at these regulatory mechanisms and ask what the biological significance is of being at just the right place at just the right time for these proteins that direct genes to function correctly."

• Fluorescent proteins under the microscope

Formulating a Chemical Biology Program

by lynn c. borella

A prestigious research organization helps UMMS apply the power of chemistry to the molecular basis of disease.

• Michael Czech, PhD

The University of Massachusetts Medical School has received a four-year, $1.6 million grant from the Howard Hughes Medical Institute (HHMI) to establish and develop a Program in Chemical Biology.

According to Co-principal Investigator Michael Czech, PhD, director of the UMMS Program in Molecular Medicine, the funding will be used to recruit new faculty trained in chemistry and medicinal chemistry, as well as purchase core equipment for these chemists to perform their research.

"Our vision is to apply the power of chemistry to the molecular basis of disease, bringing basic research from the bench to the bedside," Dr. Czech said. "We will use these dollars to supplement funds from the Medical School in order to attract the best faculty who can apply their technology to some of the most exciting biological questions."

The grant will also be used to assist the Medical School in establishing the necessary infrastructure to recruit talented chemists. Like most medical schools, UMMS does not currently have a chemistry department; this grant will help build an excellent foundation for future growth in chemical biology here, while moving the Medical School to the forefront of this emerging field of research. "Providing a state-of-the-art set of instruments that allows chemists to work at the leading edge of their own fields will help the Medical School engage chemistry as a powerful force in pursuit of biomedical science," Czech added.

"This grant will help us implement our vision of a research enterprise that uses chemical biology to discover abnormal proteins responsible for diseases like cancer, diabetes and Alzheimer's disease, and to develop drugs for the treatment of these disorders," said John Sullivan, MD, director of the UMMS Office for Research. "And recognition by the Howard Hughes Medical Institute is another indication of the rising stature of UMass Medical School among the best medical schools in the country."

The Howard Hughes Medical Institute is a medical research organization whose scientists are world leaders in cell biology, genetics, immunology, neuroscience and structural biology, carrying out research at universities and academic medical centers throughout the United States. Its grant program is the largest private initiative in this country's history to enhance science education, from preschool to postgraduate training.

UMMS was one of 41 medical schools chosen to receive a portion of the $92 million distributed by HHMI through this most recent grant, bringing to six the number of HHMI grants awarded to the Medical School to date. In 1995, for example, UMMS received a $2.2 million, three-year grant to expand its genetics research and training programs. HHMI also supports two investigators at UMMS: Michael R. Green, MD, PhD, director of the Program in Gene Function and Expression, and Roger J. Davis, PhD, professor of biochemistry & molecular biology.

Grants & Research:

New and competitive renewal grants of $50,000 and up are listed here according to broad areas of research and funding sources.

CANCER

american cancer society

Michelle A. Kelliher, PhD, assistant professor of molecular genetics & microbiology: The role of the death domain kinase RIP in development and RNF signal transduction, two years, $437,000.

Jeffrey A. Nickerson, PhD, assistant professor of cell biology: Nuclear architecture and RNA splicing, three years, $375,000.

national cancer institute

Jane G. Zapka, ScD, professor of medicine: Breast cancer patients' relatives: Response over time, one year, $211,655; recommended for two more years, $477,995.

national heart, lung and blood institute

Pamela S. Becker, MD, PhD, associate professor of medicine and cell biology: Retroviral transfer of ankyrin for murine spherocytosis, one year, $182,643; recommended for three more years, $523,555.

national institute of diabetes and digestive and kidney diseases

Peter J. Quesenberry, MD, the Eleanor Eustis Farrington Chair in Cancer Research: Stem cell homing and motility, one year, $269,030; recommended for three more years, $856,483.

u.s. army medical research acquisition activity

Shuk-Mei Ho, PhD, professor of surgery and cell biology: Role of estrogen receptor-ß in growth regulation of an androgen-independent prostate cancer cell line and its expression in PIN lesions, two years, $381,466.

Mary Rusckowski, PhD, research associate professor of radiology: 99m Tc-peptides for detection of breast cancer, three years, $327,601.

COMMUNITY HEALTH

division of medicine, bureau of health professions

Daniel H. Lasser, MD, chair and associate professor of family medicine & community health: Establishment of departments of Family Medicine, one year, $214,376; recommended for two more years, $352,880.

substance abuse and mental health services administration

Linda F. Weinreb, MD, associate professor of family medicine & community health: Worcester homeless families health and support program, one year, $264,025; recommended for one more year, $276,435.

DIABETES & METABOLISM

national institute of diabetes and digestive and kidney diseases

Aldo A. Rossini, MD, the William and Doris Krupp Professor of Medicine: Experimental juvenile-type diabetes, one year, $458,500; recommended for four more years, $1.9 million.

INFECTIOUS DISEASES & IMMUNOLOGY

hiv/aids bureau, department of health and human services

Donna M. Gallagher, RNC, MS, ANP, instructor in family medicine & community health: National AIDS Education and Training Center grants, one year, $890,434; recommended for two more years, $1.7 million.

national center for research resources

Mario Stevenson, PhD, the David J. Freelander Memorial Professor in AIDS Research: The role of monocytotropism in HIV/SIV pathogenicity, one year, $405,164; recommended for four more years, $1.7 million.

national institute of allergy and infectious diseases

Leslie J. Berg, PhD, associate professor of pathology: T-cell development and the tyrosine kinase, ITK/TSK, one year, $261,670; recommended for four more years, $1.1 million.

Leslie J. Berg, PhD, associate professor of pathology: Thymic selection and T-cell lineage commitment, one year, $243,192; recommended for four more years, $1 million.

Francis A. Ennis, MD, professor of medicine and molecular genetics & microbiology: Virus infections: Pathogenesis and host immune responses, one year, $194,154; recommended for four more years, $762,453.

Alan L. Rothman, MD, associate professor of medicine: Pathogenesis of severe dengue infections in Venezuela, one year, $320,024; recommended for four more years, $1.4 million.

G. Wayne Zhou, PhD, assistant professor of biochemistry & molecular biology: Regulation and substrate specificity of SHP-1 and SHP-2, one year, $313,783; expected for four more years, $1.2 million.

LIVER & KIDNEY DISEASE

national institute of diabetes and digestive and kidney diseases

Herbert L. Bonkovsky, MD, professor of medicine, biochemistry & molecular biology and pathology: Regulation of hepatic heme metabolism, one year, $325,530; recommended for four more years, $1.5 million.

Cheryl R. Scheid, PhD, professor of physiology and surgery and vice chancellor for faculty administration: Urolithiasis: Role of nephron dysfunction/ injury, one year, $292,228; recommended for four more years, $1.2 million.

MOLECULAR GENETICS

muscular dystrophy association

Rossella G. Tupler, MD, PhD, instructor in biochemistry & molecular biology: Analysis of gene expression in FSHD-affected muscle, one year, $60,000; recommended for one more year, $60,000.

national institute of diabetes and digestive and kidney diseases

Dale L. Greiner, PhD, professor of medicine: Genetics of autoimmunity, one year, $312,120; recommended for three more years, $947,338.

national institute of general medical sciences

Michael R. Volkert, PhD, associate professor of molecular genetics & microbiology: Function and regulation of the *E. coli* AIDB genes, one year, $242,753; recommended for three more years, $757,479.

NEUROSCIENCE & PSYCHIATRY

the john d. and catherine t. macarthur foundation

Thomas Grisso, PhD, professor of psychiatry: National Youth Screening Assistance Project, three years, $200,000.

national institute of drug abuse

Sumner H. Burstein, PhD, professor of biochemistry & molecular biology: Nonpsychoactive cannabinoids with therapeutic potential, one year, $231,669; recommended for three more years, $736,392.

national institute of mental health

Philip J. Candilis, MD, assistant professor of psychiatry: Competence of human subjects to consent to research, one year, $90,210; recommended for four more years, $360,840.

national institute of neurological disorders and stroke

Neil Aronin, MD, professor of medicine and cell biology: Signaling mechanisms in neuronal degeneration, one year, $383,171; recommended for three more years, $1.2 million.

national science foundation

Craig F. Ferris, PhD, professor of psychiatry, cell biology and physiology; David P. Olsen, MD, PhD, instructor in psychiatry; and Jean A. King, PhD, assistant professor in psychiatry: Imaging brain activity during adaptation to stress, one year, $70,559.

OPHTHALMOLOGY

massachusetts lions eye research fund

Edward Chaum, MD, PhD, assistant professor of surgery, cell biology and pediatrics: Gene transfer into human retinal pigment epithelial cells: Control of growth factor transgene expression, one year, $55,000.

PHYSIOLOGY & MOLECULAR BIOLOGY

march of dimes birth defects foundation

Richard B. Vallee, PhD, professor of cell biology and the H. Arthur Smith Chair for Cancer Research: Role of cytoplasmic dynein in lissencephaly, one year, $65,034; recommended for two more years, $130,068.

national heart, lung and blood institute

Michael J. Sanderson, PhD, associate professor of physiology: Calcium signaling in airway epithelia and smooth muscle, one year, $325,979; recommended for three more years, $944,929.

national institute of environmental health sciences

David Kupfer, PhD, professor of pharmacology & molecular toxicology: Effects of chlorinated hydrocarbons on mammalian systems, one year, $337,963; recommended for four more years, $1.4 million.

national institute of general medical sciences

Harvey M. Florman, PhD, associate professor of cell biology: Structure/function of T-type calcium channels, one year, $220,339; recommended for one more year, $193,435.

George B. Witman III, PhD, professor of cell biology and the George F. Booth Chair of Basic Sciences: Molecular mechanism of flagellar motility, one year, $416,420; recommended for three more years, $1.2 million.

RESEARCH RESOURCES

merck company foundation

Robert J. Goldberg, PhD, professor of medicine: A pilot study to determine the feasibility of utilizing information in hospital and ambulatory care medical records to establish a monitoring system for fatality rates, treatment approaches and medical care utilization patterns associated with heart failure, two years, $58,000.

TOBACCO CONTROL

national cancer institute

Lori A. Pbert, PhD, assistant professor of medicine: Provider- and peer-delivered youth smoking intervention, one year, $351,801; recommended for three more years, $1.9 million.

robert wood johnson foundation

Joseph R. DiFranza, MD, professor of family medicine & community health: Strategies for youth to obtain tobacco and instruments for measuring tobacco availability, 17 months, $78,250.

Alumni Report:

A MESSAGE FROM THE CHANCELLOR/DEAN

It's spring, and discussion in the classrooms and laboratories around campus turns to graduation and its annual promise of new beginnings for our students. For many, the thrilling realization that they have finally reached a goal long pursued through dedicated study and field experience is enough to carry them through the emotionally charged day of celebration in early June—and into their first experiences as physicians, advanced practice nurses and researchers.

They should know, however, that although the receipt of a degree is an achievement that will seem to reverberate in June, the years ahead will continue to offer additional opportunities for new beginnings, new accomplishments. Our alumni are living proof of this phenomenon.

Michael Rich,
class of 1993, is a Nobel Peace Prize winner. This School of Medicine alumnus, who was spurred into a medical career through his Peace Corps experience, chooses to tend to the sick in disease-ravaged parts of the world with his colleagues from Doctors Without Borders, co-recipients of the Prize in 1999. His thoughts drift overseas as he studies for a degree in international health at Harvard.

Leah McKinnon-Howe,
GSN class of 1991, began as a nurse practitioner, became co-founder of an NP association that later merged with the Massachusetts Coalition of Nurse Practitioners (of which she is serving her second term as president), and is now contemplating doctoral study in health policy and maybe even a law degree—all in her continuing efforts to advance her field.

Cynthia Sparks,
GSBS class of 1995, uses her own experience as a doctoral student to serve as an effective recruiter for the GSBS, encouraging promising young researchers to make their own mark through their studies at the Medical School.

In the following pages you'll find these stories, and others, describing how fellow alumni are "reinventing" themselves, fostering new beginnings not only for themselves, but for their patients and society as a whole.

Aaron Lazare, MD

A NOBEL PRIZE–WINNING DOCTOR WITHOUT BORDERS

Michael Rich, MD '93

"I went to medical school for international health," said Michael Rich, MD '93. "I wanted to try to bridge the huge gap between rich and poor, not only in health care services provided but also in the health of people."

A result of Rich's commitment? Sharing the honor of the 1999 Nobel Peace Prize.

Rich won the Nobel Prize along with other members of Doctors Without Borders, the world's largest independent, non-profit organization providing medical relief to populations suffering the effects of war and natural disasters. Rich spent the first half of last year practicing medicine in Uzbekistan, a former Soviet republic in central Asia where poverty and infectious disease are rampant.

"The area is near the Aral Sea, which was the fourth largest inland sea in the world," he explained. "But it has shrunk to half its size; in order to support irrigation, the two rivers that feed it have been diverted and the results have been disastrous. Fishing communities have been left stranded, resulting in a very desolate area with many problems. Doctors Without Borders mostly concentrated on tuberculosis and childhood infectious illnesses affecting the people there."

It was Rich's stint in the Peace Corps in the mid-1980s that got him interested in medicine to begin with. "I was in Cameroon, West Africa, as a teacher," he said. "I saw my students get sick—four out of 90 died in the two years I was there. It got me thinking that I'd like to bring medical care to those who didn't have it."

After returning to the States, Rich worked as a carpenter while taking chemistry and biology at night to fulfill his medical school prerequisites. "I had to make a living, and I figured I could always be a carpenter if I didn't make it into medical school!" He was accepted at UMMS, his first choice because of the school's emphasis on primary care and community medicine.

Rich joined the Lynn (Massachusetts) Community Health Center after graduating from UMMS (during which time he spent a year in Honduras) and completing his residency in internal medicine at St. Vincent's Hospital in New York City. He worked at the health center full time for two years before joining Doctors Without Borders. He's now back at the center part time while earning a master's degree in international health at the Harvard School of Public Health. He graduates in June.

What's next? "I'm interested in working on tuberculosis programs, particularly multi-drug resistant TB," he said. "I'd like to work overseas in a program that helps a lot of people. I enjoy working with international staff, and it's tremendously rewarding to see patients get better." — RH

NURSING'S STRONG VOICE

"You need to be responsible for your own professional destiny, or someone *else* will be." That was one of the most important lessons that Leah McKinnon-Howe, MS, RNCS, ANP (GSN '91) learned while on the nurse practitioner track at the Graduate School of Nursing. And she's put it to good use.

After graduation, McKinnon-Howe joined the internal medicine practice of a physician in southeastern Massachusetts. "He hired an NP instead of taking on a partner," she said. "It was an economic decision, but he also wanted to bring the nursing perspective to the practice. It was pretty groundbreaking since there weren't many NPs working in the area at the time."

As McKinnon-Howe got to know other nurse practitioners from the area, they started meeting to discuss regulatory and political issues, forming the Metro South Nurse Practitioners Association. A hot topic was prescribing authority for NPs "which we didn't have then," she noted. At the same time, the statewide Massachusetts Coalition of Nurse Practitioners began to emerge. McKinnon-Howe became the liaison between the two groups, which eventually united. "This amplified the voice of nurse practitioners across the state by promoting maximization of resources and a unified image," she said of the merger.

McKinnon-Howe went on to serve in a number of roles with the Coalition, ultimately becoming president; she's currently completing her second term. "My passion lies in legislation and regulatory issues as they affect policy development," she said. "We passed a law [in Massachusetts] under which indemnity plans must reimburse NPs directly for the care that they provide. Now I'm involved in assisting managed care organizations to create policies around NP utilization and reimbursement. In addition, we're working with Blue Cross/Blue Shield to implement an NP credentialing initiative." McKinnon-Howe's passion and eloquence as a spokeswoman for her profession have earned recognition from her peers: she received the Massachusetts Nurses Association Image of the Professional Nurse Award in 1999.

Today McKinnon-Howe characterizes herself as "in transition." Last August, she took a position at Northeastern University's Lane Health Center and is considering doctoral study in health policy, maybe even a law degree. Her Coalition presidency is wrapping up, but she remains committed to working on reimbursement and regulatory issues.

"We still need more unity, to pull together and straighten out issues we've been working on for a long time, such as the basic educational requirements for entry to practice and standardization of nursing credentials," she noted. "What I like most about being a nurse practitioner is that it's constantly changing and challenging. Nurse practitioners can have a profound effect on people's lives, and it's a wonderful blend of the art and science of nursing and medicine. It's really a privilege to care for people."

— RH

Leah McKinnon-Howe, MS, RNCS, ANP (GSN '91)

QUEST FOR THE BEST

Cynthia Sparks, PhD '95

When Cynthia Sparks earned her PhD from the Graduate School of Biomedical Sciences in 1995, she planned to apply her knowledge to the bench, investigating the nuclear arrangement and division of the cell. Little did she know that her degree in cell biology would soon be applied to a very different endeavor: a quest to attract the best graduate students to UMMS.

Sparks set aside her research in the lab of Assistant Professor of Molecular Genetics & Microbiology Dan McCollum, PhD, after having twins in November 1998. Yet, when approached last spring to become involved part time in GSBS recruitment efforts, Sparks saw the need and agreed. "Graduate students are such an integral part of everyone's science program, that it's important to attract the most outstanding individuals. The school needed someone who knew the faculty and the program and, as a former student, I felt I could be that person."

Determined to uncover how the GSBS could continue to attract the best recruits, Sparks began compiling feedback from the previous year's Recruitment Weekend by personally calling each participating student and faculty member. "It was very important for me to learn firsthand what impressed potential students. What I found was that the opportunity to interact with our faculty was their top priority."

Armed with this information, Sparks set out to pair interested students with admired faculty and, in the process, asked many of the faculty to phone recruits personally. "Not one faculty member I asked said no," she said. "Although it takes time, they know how important it is to recruit the best students we can."

Thanks to these painstaking efforts, a day was added to this spring's UMMS Recruitment Weekend to accommodate the 70 participating students. Sparks commended the support of GSBS Dean Thomas Miller, PhD, Director of the Office for Research John Sullivan, MD, and the help of the Recruitment Committee with this near doubling of attendees over last year. "Students want to learn from great scientists. As our faculty continues to grow in number and caliber, so will our graduate program."

With such success, however, comes an urgency to do better. Sparks hopes to continue her efforts part time in pursuit of the best undergraduates, focusing on further developing the UMMS Web site, sending out more materials touting the school's research program and engaging faculty to promote the GSBS when invited to lecture at institutions nationwide.

But what of Sparks' return to the lab? "I'm of the opinion that investigators have to be willing to give more than 40 hours a week to their research, and I've made a very different commitment at the moment," she said. "When I can devote that kind of time again, I'll go back to the bench." — LCB

Class Notes:

1976

Peter G. Canaday, MD,
is assistant professor of radiology at St. Joseph/Creighton University in Omaha. He and wife Teresa have two children, Rachel (6) and Nathan (4).

1979

Douglas S. Levine, MD,
is chief medical officer for the Gastrointestinal Therapeutic Area at AstraZeneca in Wayne, Pa.

Kathryn Reilly, MD,
writes: "I am acting residency director at Oklahoma University while the director is on sabbatical. My husband Steve has moved from basic research to directing a program which influences bright high school students to enter the health care profession. Our son Tom is a senior in high school, looking for a good college where he can play soccer. His brother David will graduate from middle school in May and sister Kathryn will be in sixth grade next year. We have begun to raise alpacas on three acres just north of Oklahoma City, and Steve hopes to retire in several years to do that full time. If anyone is ever in the area, please drop in."

1980

Joseph E. Fuller Jr., MD,
served for a brief period as a physician in the U.S. Public Health Service in Newmarket, N.H. after completing his residency at Connecticut's Middlesex Hospital. A family practitioner in Old Saybrook, Dr. Fuller writes: "It's been very gratifying to practice daily medicine, although the increasing demands of managed care have made it more difficult to practice the full range of services I can provide. On a personal note, Elaine and I have a daughter Nora, 13, and son Kirk, 17. We are struggling with the demands of teenaged life, but otherwise enjoying personal contentment and the occasional adventure, including traveling on cruise ships, where I've signed on as Ship's Physician. Let the members of the class of 1980 and other alumni know that they will receive a warm welcome in Old Saybrook if they are passing through."

R. Brian Hennessy, MD, and
Abigail Adams, MD,
report they are "back from Maine! It was beautiful, but for family and job reasons we have returned to the Worcester area. We are happy to be back at UMass, where Brian is in cardiac anesthesia and Abby practices general medicine. We are also grandparents! Daughter Christy had a beautiful baby in July 1999 she named Cole."

1981

H. Gregory Ota, MD,
is attending the New England School of Acupuncture, accumulating over 500 course hours to date. He is on the medical staff of the Massachusetts Eye & Ear Infirmary at Massachusetts General Hospital and is co-editor of the chapter titled "Ear, Nose and Throat" in the recently published *Harvard Medical School Family Health Guide.*

1983

Gerard R. Cox, MD,
has been assigned as the Navy's physician to the White House, responsible for providing comprehensive health care services to the President, Vice President and their families, as well as caring for White House staff and visitors. He accompanies the President and Vice President on diplomatic missions and other official travel and helps develop contingency plans in the event of medical emergencies. The career Navy physician lives in Arlington, Va. with his wife Catherine and their two young children.

Paul Keough, MD,
is chairman of obstetrics/gynecology at South Shore Hospital in Weymouth, Mass. The hospital is one of the largest maternity hospitals in the state.

Nancy O'Neill, MD,
is a family medicine physician on staff at Aroostook Family Practice in Presque Isle, Maine.

1984

Libby Cone, MD,
writes: "My husband Tom and I are still living happily in Center City, Philadelphia. We sold our condo and moved into a townhouse a block away with our cats and dog. I am now an assistant professor in the Diagnostic Imaging Department at Temple University Hospital's Division of Nuclear Medicine. I miss our private practice! We fell victim to the Allegheny debacle."

To submit a class note, send your news to:

Office of Alumni Relations, University of Massachusetts Medical School | 55 Lake Avenue North | Worcester, MA 01655

or e-mail karen.e.shea@umassmed.edu call (508) 856 8300 or (508) 856 3372 fax (508) 856 5490

1985

Alison Sollee, MD,
is in her 12th year of part-time private practice in the Dover/Durham, N.H. area. She and husband Gary Ugher, MD, a neurologist, have two children, Jason (12) and Sara (8) and are keeping busy building a new home in Durham.

1986

Donna LaFontaine, MD,
has been appointed to the staff of Pawtucket's Memorial Hospital of Rhode Island Department of Obstetrics and Gynecology.

Michael Thompson, MD,
is a board-certified radiologist newly appointed to the staff of Milford-Whitinsville Regional Hospital in Milford, Mass. He lives in Shrewsbury with his wife Kathleen and three children, Sarah, John and Kevin.

Constance West, MD,
has been appointed director of ophthalmology for the Abrahamson Pediatric Eye Institute at Children's Hospital Medical Center in Cincinnati. An associate professor of ophthalmology at the University of Cincinnati, Dr. West is co-investigator for two national, multi-center trials focusing on retinopathy of prematurity.

1987

Ann C. Halbower, MD,
served as a pediatric pulmonologist on the faculty at the University of New Mexico Health Sciences Center from 1994-1997. In that year, she was hired by the University of Colorado School of Medicine and Children's Hospital in Denver to start the first Rocky Mountain Pediatric Sleep and Breathing Disorders Program, the only one of its kind in the Rocky Mountain Region. Dr. Halbower reports that "the program is booming and we are recruiting more pediatric pulmonologists, if you know of any!"

1988

Joseph J. Disa, MD,
is a plastic surgeon at Memorial Sloan-Kettering Cancer Center in New York City. He and wife Julie, an assistant provost at New School University, have two children, Michael (6) and Nick (3).

1991

Eileen C. Reilly, MD,
writes: "I'm working on an innovative project through the Massachusetts Department of Mental Health bringing psychiatric services to Boston's homeless men and women. This opportunity brings to fruition my dreams to provide medical care in the inner city, pursue academic interests through a major medical institution (Harvard Medical School) and work with dedicated colleagues."

1992

Hugh M. Cooper, MD,
is accepting patients at the newly constructed Ophthalmology Clinic at the Palmer Medical Center of UMass Memorial—Wing Memorial Hospital in Palmer, Mass.

Michael E. Marchetti, MD,
started his orthopedic surgery and sports medicine practice in July 1999 at South Shore Orthopedic Associates in South Weymouth, Mass.

Bonnie Faulkner Ryan, MD,
recently received fellowship in the American College of Emergency Physicians. A member of the UMass Memorial Emergency Department, Dr. Ryan is enjoying the "early years" with her children, Taryn (4) and Trevor (2).

1993

Scott L. Rosenzweig, MD,
began his practice in August 1999 at Greater Long Beach Orthopedics in Long Beach, Calif.

David Townes, MD,
is director of the Office of International and Wilderness Medicine within the University of Illinois' Department of Emergency Medicine.

1994

Jay R. Bernstein, MD,
practices emergency medicine at Bethesda North Hospital in Cincinnati.

1995

Michael Hamrock, MD,
is medical director for the Boston Fire Department, where he is attempting to start a health and fitness program. (He has run the Boston Marathon several times.) On staff at St. Elizabeth's Medical Center and a member of the Caritas Medical Group in West Roxbury, Mass., Dr. Hamrock has been an active member of the West Roxbury/Roslindale YMCA for the past 15 years, recently elected to its board of directors.

Anne Murray-Chiriboga, MD,
is practicing pediatric medicine at the Hospital de Zumbahua in Pujili, Cotopaxi, Ecuador.

Crystal Rainville, MD,
has joined the Department of Pediatrics at Good Samaritan Medical Center in Brockton and practices with Bridgewater Goddard Park Medical Associates.

Andrew J. Miller, MD '79
V-P/Treasurer, Alumni Association

Irvin H. Heifetz, MD '79
President, Alumni Association

Meera Grover

Neena Grover

Janice Zaleskas '01
Recipient of the Neil Grover Memorial Scholarship

Subhash Grover

Mary Nguyen

Thomas Thong N. Nguyen '03
Award Recipient

ALUMNI ASSOCIATION SCHOLARSHIP DINNER

HOAGLAND–PINCUS CONFERENCE CENTER | October 27, 1999

Alumni Association award recipients join Irvin H. Heifetz, MD '79 and Andrew J. Miller, MD '79. The Association has awarded over $350,000 in scholarships and loans to UMMS students.

Development Update:

DRIVE THRU BECOMES DRIVE ON—TO HEALTH

This summer, Ronald McDonald mounts some big wheels to help meet the health care needs of children in Worcester. The UMass Memorial/Ronald McDonald Mobile Health Clinic, a first for New England, will begin visiting sites throughout the city to provide free primary medical and dental care for underserved populations.

The national arm of Ronald McDonald House charities will provide the fully equipped mobile clinic, and the organization's regional arm, Ronald McDonald House Charities of Eastern New England, will provide funding to support operating expenses. Staff for the mobile clinic's exam rooms and lab will include a nurse practitioner working under the direction of a UMass Memorial physician, plus a part-time dental director and full-time dental hygienist.

Children will receive free routine physical exams, immunizations, hearing and vision tests, nutritional analyses, pregnancy testing and prenatal care and mental health counseling. Dental staff will perform exams, cleanings, X-rays, fluoride applications and other services, making referrals to area dentists and dental clinics. Health education materials in English, Spanish and other languages will be available in the wheelchair-accessible van.

The need for such outreach is rooted in the city's high teen pregnancy and infant mortality rates, and the fact that 31 percent of Worcester residents live below the poverty line. Lack of transportation prevents many people from seeking preventive medical care; instead, they rely on hospital emergency departments when a routine health concern develops into an acute problem. Thus, the mobile health clinic is expected to reduce the number of unnecessary and costly ED visits.

Peter H. Levine, MD, president and CEO of UMass Memorial Health Care, said the mobile clinic will "bring primary and dental care directly to children and families who cannot afford care, do not know how to seek it or have difficulty accessing it through the existing health systems." Clinic staff will work to connect low-income children and families to primary health care providers and other resources and help enroll eligible patients in appropriate state and federal insurance programs.

Each week, the McDonald's van will make scheduled stops at five targeted neighborhoods, identified in cooperation with the city, and is expected to serve 3,000 children a year in the first two years and up to 5,000 a year thereafter. Cathy Kahn Recht, RN, UMass Memorial vice president of community relations, credited the donor charities for making it possible "for us to get out on the streets where there is a real need. We're proud that they have selected UMass Memorial and the city of Worcester as partners in this important community outreach program."

In addition to offering a home away from home for families of seriously ill children undergoing treatment at nearby hospitals, Ronald McDonald House Charities has launched its mobile health program in an effort to reach as many families as possible across the country. "We are thrilled to be at the forefront of this national program to improve medical care for underserved children and their families," said Edie Stevenson, executive director of Ronald McDonald House Charities of Eastern New England. "This is a great example of how the local McDonald's owners and operators are committed to Worcester and to giving back to the community that supports their businesses."

For more information, contact Jenique Radin, director of development for the Children's Medical Center, at (508) 856-3507.

Architect's rendering of the cafeteria in the new research laboratory building

COMPELLED TO CAMPAIGN FOR RESEARCH

On the slim chance that passersby might not know what UMMS is building at the heart of its campus, a three-stories-high banner nearby tells the story in a nutshell: Groundbreaking Research. But beyond the steel and concrete of the 10-story building under construction, the point of the sign's message is the work that will take place inside those new walls.

That work—cutting-edge basic and clinical research—will get underway in the fall of 2001 when the building opens. And parallel to construction, a major capital campaign has begun to ensure that the research laboratory building meets the needs of the 100 principal investigators and their staffs who will occupy its 360,000 square feet.

UMMS and UMass Memorial Health Care have already given $30 million toward construction of the $100 million structure, and the Massachusetts AFL-CIO has pledged $5 million toward the Cancer Center to be housed there. To fund another third of the costs, UMMS is turning to private philanthropy.

The $33 million Campaign for Research is being chaired by Robert and Nancy Feldman of West Newton. The parents of fourth-year medical student Adam Feldman, they are also co-chairs of the Parents Council. "Our first step," said Bob Feldman, "is to put together a campaign steering committee, made up of people with various relationships to the Medical School, who share a commitment to UMass and to medical research, including representatives of Worcester's business and educational communities, civic leadership and patients of UMass Memorial."

Feldman said the committee also will be representative of UMMS interests statewide and beyond: "As much as the work being done here is great for both Worcester's economy and the Massachusetts health care environment, we want to make the point that this research will have far-reaching benefits for people everywhere."

Approximately $2 million has been raised or pledged to date. To introduce donors, friends, alumni and potential new friends to the Medical School's plans and the Campaign for Research, receptions are scheduled this spring in Florida, New York City, the Berkshires and other regions where these individuals reside.

The focus during this first year will be on securing leadership gifts from individuals interested in supporting the many areas of medical research at UMMS. "Our goal is to talk to people about what their special interests are and encourage them to invest in the campaign according to those interests," said Feldman.

The Campaign for Research offers an abundant range of named gift opportunities, he noted, for portions of the building, for expanding and accelerating current research programs and for funding major new initiatives. In addition, named gifts can fund such academic initiatives as endowed chairs, professorships, fellowships and lectureships.

"These are very exciting times at UMass Medical School. Nancy and I are proud, and even compelled, to be part of the Campaign for Research, the largest philanthropic effort ever undertaken by this young school.

"This campaign will help accelerate our already excellent progress toward combating major diseases like cancer, diabetes, AIDS and Alzheimer's disease, and will ultimately help us all live longer, healthier lives. To help us reach our goals, we are eager to meet and talk with friends of the Medical School all over the country during this campaign. We need their help and financial support."

For more information on the Campaign for Research, contact its director, Pat Bartram, at (508) 856-6515.

IACOCCA SUPPORT FUNDS 'SOME INTERESTING MOMENTS'

Twenty years after graduating from a Michigan secondary school, Kathryn Iacocca Hentz was invited to return and speak to its commencement audience. She remembers the trip as "an interesting journey" in terms of the years elapsed and, in a figurative sense, the distance traveled.

By this time she was a mother of three, living in the Boston area and serving as president of the Iacocca Foundation. But instead of talking about the foundation, as her listeners may have expected, she decided to tell the graduating seniors a few things about life and how it can "throw stuff at you....Whatever you think life is going to be, it will be different.... Adversity happens, and what matters is how you respond to it."

Hentz's remarks sprang, in part, from her family's experience with diabetes. But as it happened, the Iacoccas dealt with both the adversity of her mother Mary's illness and the phenomenal success of her father Lee's autobiography by establishing the Iacocca Foundation to focus on diabetes research. Since 1997, UMMS has been among the research organizations the foundation supports across the nation.

After an inpatient stint at Boston's Joslin Clinic, Mary Iacocca told her family of an emotional encounter with a mother whose newborn baby was starting life with diabetes. The incident helped to focus Mary Iacocca's wish to find a way to help people devastated by the illness. In the 1980s, not long after her death at age 57, the family began supporting research through a fellowship at Joslin.

Also during that decade, Lee Iacocca's first book, *Iacocca*, became a $10 million success story, and he asked his daughter Kathi to work with him in using the money to establish a foundation. "My life

Kathi Iacocca Hentz

took a different turn at that point," said Hentz, who is clearly optimistic about the potential of diabetes research being funded by the foundation.

With additional funds from her father and support from two major fund-raising events, the foundation has grown to nearly $40 million. It's now based in Boston and, according to Hentz, strives to "get involved in exciting and different areas of research." Two recent examples are its support of research conducted at UMMS by Aldo Rossini, MD, of whose pioneering work Hentz has long been aware. Rossini is the William and Doris Krupp Professor of Medicine and director of the Diabetes Division at UMMS.

A $250,000 Iacocca grant is currently helping fund human clinical trials in islet transplantation research, an area where Dr. Rossini and his team are poised to make a major breakthrough. The process attempts to restore insulin production in patients with diabetes, via transplantation of healthy, insulin-producing islet cells.

This work builds upon the results of successful preliminary studies also funded, in part, by a grant of $95,000 from the Iacocca Foundation. A related $207,000 Iacocca grant currently funds a career development award and an Iacocca postdoctoral fellowship for Rossini's team.

For Hentz, it's an emotional prospect to consider that her family name—long linked to those American favorites, Mustangs and minivans—may also become associated with winning the fight against diabetes. "We've had some interesting moments lately," she said, "with things looking so good that I actually got chills!"

YES, INDEED, THEY'RE WALKIN'!

At least 5,000 people will not be kicking back to relax on Labor Day this year. Instead, they'll demonstrate their determination to fight cancer by walking a five-mile loop around Lake Quinsigamond to raise funds for the UMMS Cancer Center. (A one-mile course will also be available this year.)

Backed by the Massachusetts AFL-CIO, the Walk to Cure Cancer on September 4 will support the Cancer Center's new facility to be located in the research laboratory building under construction at UMMS. For the second year in a row, the walk will bring together working families, community members and employees hoping that UMMS research will help find a cure for cancer.

Both the start and finish lines will be in sight of the new building's steel framework, expected to be in place by September and providing walkers with added inspiration to reach this year's goal of $500,000. An entire floor of the 10-story building, 35,000 square feet, will be devoted to cancer research.

Five flagship sponsors will take the lead in rallying union members to participate in the walk: IBEW Local 1505 (International Brotherhood of Electrical Workers), Mail Handlers Local 301, AFSCME/SHARE (American Federation of State, County and Municipal Employees/ State Healthcare And Research Employees), Teamsters Local 170 and UFCW Local 791 (United Food and Commercial Workers). In addition, teams will be recruited from other unions, corporations, businesses and organizations across the state. And, the walk's organizers hope Medical School and UMass Memorial employees will keep in step with other walkers by joining their ranks in ever larger numbers this year.

"It was very important to me personally to walk [last year], so that I felt in some small way that I was helping to cure cancer," said Carol Grenier, an employee in the School Fiscal Services Department at UMMS and a breast cancer survivor. "The feeling of hope that we walkers felt in terms of making a difference was overpowering."

Michelle Deignan, an immigration specialist in the UMMS Human Resources Department and a 12-year cancer survivor, chooses to walk because she sees "all the research being done here, and I realize that just wishing for a cure won't work—it's physically being involved that will."

A kickoff breakfast will take place on June 22 at the Hogan Center of the College of the Holy Cross, where the honorary co-chair of the walk, Dottie Manning, will enlist additional participants and support. Having lost her husband Dan Manning Sr. and son Dan Jr. to cancer, Mrs. Manning is the driving force behind the Cancer Center's official fund-raising arm, the Our Danny Cancer Fund.

For more information about the walk, contact Cathy LaRocca, coordinator, at (508) 856-1634.

Last year's walkers wind their way through Lake Quinsigamond neighborhoods.

The Last Word:

by irving s. and betty brudnick

OUR DREAM

This month, the dream that has been long held by Betty and me, UMass Medical School, its Chancellor and Dean Aaron Lazare and its entire famed psychiatric staff finally became a reality with the opening of the Irving S. and Betty Brudnick Neuropsychiatric Research Institute, on the grounds of Worcester State Hospital, one of the oldest public psychiatric facilities in the United States.

Featuring the latest in state-of-the-art laboratory technology and staffed by some of the most talented experts in the various fields of mental illness, the institute is poised to rapidly take its place in the top tier of the few research centers of its kind in the country.

Because of my own personal history, Betty and I have long wished to establish such a facility that would have as its mission the objectives of not only seeking the causes of and cures for mental illness, but also providing the latest in effective treatments for suffering patients and their families. What better place to carry out these objectives than at UMass Medical School, well known for its philosophy of caring.

The institute will "hit the ground running," anxious to fulfill its mission under the guidance of its most capable executive director, nationally renowned Dr. Edward Ginns, recently of the National Institute of Mental Health.

These are, indeed, exciting times at the University of Massachusetts Medical School, and Betty and I are so proud to be part of it all.

ABOUT THE INSTITUTE

The institute's research and training programs will help accelerate neuroscience initiatives and collaborations between the Medical School's basic and clinical scientists. Research will focus on understanding the biological basis of mental illness and the development of more effective treatments and methods of prevention.

In their studies of the brain and behavior, Dr. Ginns and his colleagues will utilize the tools of neuroscience, behavioral science, imaging, genetics, cell biology and molecular biology to unlock the mysteries of mental illness. The institute's research into the causes, treatment and prevention of mental disorders will be complemented by its training programs, aimed at attracting more basic and clinical researchers with expertise in a variety of fields to mental health research. Institute seminars and education programs will strengthen the efforts between physicians, basic science researchers, patients and their families to understand and reduce the burden of mental illness.

In 1998, Irving S. and Betty Brudnick contributed $2.5 million toward the institute's establishment. According to Executive Director Ginns, "The tremendous effort that the Brudnicks and their colleagues have put together to help make this research institute possible will have a major impact on mental health research."

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Readers are invited to comment on the contents of the magazine, via letters to the editor. Please address correspondence to:

Editor, Vitae
Office of Public Affairs & Publications
UMass Medical School
55 Lake Avenue North
Worcester, MA 01655

www.umassmed.edu

University of Massachusetts Medical School

UMass Medical School 55 Lake Avenue North Worcester, MA 01655

Current resident or: