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# Vitae:

The magazine of the University of Massachusetts Medical School

Fall / Winter 1999 Vol. 22 No. 1

UMass Medical School 55 Lake Avenue North Worcester, MA 01655

Current resident or:



WELCOME TO THE RESEARCH NEIGHBORHOOD 8

**INSIDE:** students serving their communities (page 4),  
extending our family eastward (page 11),  
and alumni, far and wide (page 17)

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**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.



WELCOME TO THE  
RESEARCH  
NEIGHBORHOOD

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EXTENDED FAMILY

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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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# News & Notes:



## FACULTY SELECTED FOR REVIEW BOARDS

Two UMMS faculty members have been appointed to review boards for the U.S. Department of Health and Human Services Center for Scientific Review. **Joel D. Richter, PhD**, professor of molecular genetics & microbiology, and **Leslie J. Berg, PhD**, associate professor of pathology, will serve on separate study sections, which review National Institutes of Health grant applications and make recommendations on applications to the appropriate NIH national advisory council or board. Study sections also survey the status of research in their fields of science and provide a unique opportunity for members to contribute to the national biomedical research effort.

Dr. Richter will serve as a member of the Molecular Biology Study Section, while Dr. Berg will serve on the Immunobiology Study Section. Richter and Berg were selected based on their achievements in their scientific disciplines and will continue as members of their study sections until June 2002.

## UMMS LINKS WITH K-12 STUDENTS

The medical school's Office of Science Education (OSE) recently received a four-year, \$300,000 grant from the Howard Hughes Medical Institute (HHMI) to enhance existing programs geared toward making science stimulating for K-12 students. According to James E. Hamos, PhD, associate professor of cell biology and director of OSE, the funding will expand upon partnerships created between UMMS and Worcester's North Quadrant public schools over the last five years — partnerships that were accelerated with a previous HHMI grant of \$175,000.

"At UMMS, we want to align ourselves with progressive views of science education. The gifts we offer as a medical school — linkages involving highly trained faculty, staff and students, mentoring, teacher workshops, internships and other hands-on activities — are crucial because they make science come alive, not just a subject to be learned," said Dr. Hamos.



## AOA INDUCTS 16 GRADUATES

Sixteen new graduates were inducted into Alpha Omega Alpha, the national honor medical society founded in 1902 to recognize and perpetuate excellence in the medical profession. The new student members, who were elected from among the top 25 percent of their 1999 class, are: **Jenai Beland, Ethan Samuel Brackett, Terry Ann Fortin, Eric K. Ganguly, Peter F. Graves, Nancy Ellen Hardiman, Annie Helgason, Patty-Ann Krajewski, Rebekah Christina Mannix, Walter P. Mutter, Todd M. O'Brien, Mark Daniel Rutstein, Alicia R. Sanderson, Jeffrey Schneider, Jesse B. Smith and Robert M. Whitehouse.**

## COMMENCEMENT CELEBRATES 135 GRADUATES

At its 26th annual commencement exercises held June 6, the School of Medicine awarded 95 doctor of medicine degrees, including two MD/PhDs; the Graduate School of Biomedical Sciences, six doctor of philosophy degrees; and the Graduate School of Nursing, 26 master of science degrees, six post-master's certificates and two joint doctorate degrees in conjunction with UMass Amherst.

**Jordan J. Cohen, MD**, president and CEO of the Association of American Medical Colleges, delivered the commencement address.

Dr. Cohen was awarded an honorary degree during the ceremony, as was **Purnell Choppin, MD**, president of the Howard Hughes Medical Institute.

Additional highlights of the ceremony included special recognition for **Lillian Goodman, EdD**, dean of the Graduate School of Nursing, for a lifetime of achievement in her field, and parting words from class speakers Henry L. Danis of the School of Medicine, Maryellen Wrubleski of the Graduate School of Nursing and Christine Patricia Donahue of the Graduate School of Biomedical Sciences.

## HIV/AIDS RESEARCHER HONORED

**John L. Sullivan, MD**, professor of pediatrics, pathology, and molecular genetics & microbiology and world-renowned AIDS researcher, was recently honored with a Therapeutic Intervention Special Recognition Award at the second conference on Global Strategies for the Prevention of HIV Transmission from Mothers to Infants, held in Montreal. Dr. Sullivan played a key role in what has been called possibly one of the most important breakthroughs since the AIDS virus was isolated.

Sullivan and his UMMS colleague, **Katherine Luzuriaga, MD**, associate professor of pediatrics and medicine, were involved in the

discovery of the anti-retroviral drug nevirapine in 1989, and it was at UMass that nevirapine was first given to adults and children with HIV infection two years later. This, along with Sullivan's hypothesis that nevirapine could prevent mother-to-infant transmission, laid the groundwork for further investigation of the drug. Most notably, the National Institute of Allergy and Infectious Diseases recently sponsored a large-scale efficacy trial in Uganda which showed that a short course of nevirapine, when given to HIV-infected mothers in labor and to their babies within three days of birth, can reduce the HIV transmission rate by half.

The findings signaled the first bit of hope for the 600,000 to 800,000 HIV-infected infants born each year, most in the developing world where other HIV treatment regimens are far too expensive to be used broadly. Nevirapine costs approximately \$4 for the treatment course, (compared to nearly \$700 for the most common alternative, AZT treatment) and can be given in a single dose because it stays in the bloodstream for days.

The Global Strategies Organizing Committee recognizes key individuals whose foresight, scientific abilities, dedication and compassion contribute to prevention of perinatal HIV transmission.

- 1 Leslie J. Berg, PhD
- 2 Jordan J. Cohen, MD
- 3 James E. Hamos, PhD
- 4 John L. Sullivan, MD

# Responsibility to serve



*Student involvement in public service is a matter of course and mission.*

BY SANDRA L. GRAY

**P**roviding medical care to people without health insurance. Initiating new public service programs for local communities. Igniting interest in youth about careers in science.

No one has counted them, but they're out there: UMMS students of the School of Medicine, Graduate School of Nursing (GSN) and Graduate School of Biomedical Sciences (GSBS) are volunteering en masse, adding to their already brimming schedules to serve the communities and citizens of the commonwealth.

The "Goals and Objectives of Medical Education Leading to the Medical Degree at the University of Massachusetts Medical School"

lists the knowledge, skills, values and attributes of a successful medical student. Developing an understanding of the doctor/patient relationship, the needs of diverse patient populations and the economics of health care is enhanced through students' involvement in community service.

And involved they are. Mai-Lan Rogoff, MD, associate dean of student affairs, estimates that as many as 90 percent of students have been volunteers at some point during their School of Medicine experience, many in leadership roles. "It starts with the kind of students we pull in," said Dr. Rogoff. "Admissions looks for evidence of a team player with a

real interest in people. One such piece of evidence is community involvement."

Case in point: Every Monday evening, medical and nursing students join other volunteers for the Worcester Evening Free Medical Services Program. They gather in the basement of Epworth United Methodist Church to see every patient who arrives throughout the evening, no appointment needed.

Founded by Paul L. Hart, MD, an associate in the Department of Family Medicine & Community Health, this was the first of several such programs in the area. In the past five years, the volunteer staff has treated over 10,000 uninsured



Students learn about volunteer opportunities at the medical school's annual activities fair (above). Opportunities are put into action as students tend to patients at the Worcester Evening Free Medical Services Program.

patients. Students conduct the initial interview, then consult with Dr. Hart and other volunteer providers, including nurse practitioners and physicians. "Students get to be the patient's first contact, which is a great opportunity for both learning and serving," said Hart.

"We experience first-hand mechanisms to meet the needs of the underserved," said Lloyd Fisher, '02. "It's exciting to know I'll be able to do this as a physician." In addition to working at the program, David Blehar, '02 coordinates student volunteers. "Scheduling is easy because so many students want to participate. Last year, I didn't have enough slots for everyone," he enthused. Theresa Arpin, '02 added, "I like the philosophy of the program and want to be a part of it. It's very inspiring."

Hart sees that inspiration in action. "Every student is compassionate, top-notch, dedicated. They show up even when they're preparing for exams, the night after exams and all through the summer. The program couldn't operate without them."

Cheri Burrer, MS, NP, a 1999 graduate of the GSN, is looking forward to returning to the program as a volunteer, reliving her days when, as a student, she "worked alongside volunteers who were happy to be a part of the program. Helping the needy confirmed my feeling that I entered the right field of work," Burrer added.

Direct clinical care is an obvious way for future caregivers to contribute, but not the only way. Marni Silverstein, '02, one of three student leaders for the Department of Pediatrics' Book Buddies Program, enjoys reading stories to young inpatients because "kids enjoy a visit from someone who doesn't do anything that hurts them." She feels the children give back as much as they receive. "You can get caught up in studying and lose sight of why you're in medical school. Volunteering provides perspective and balance."

This fall, Mandy Coles, '02, a volunteer counselor for AIDS Project Worcester, takes over the Students Teaching AIDS to Students (STATS) program. With its goal of providing basic HIV and AIDS education to roth graders in the Worcester public schools, STATS offers Coles an opportunity to "do something that will make a difference even before I become a doctor."

The Division of Pediatric Endocrinology's Juvenile Diabetes Halloween Party gets a big boost from student volunteers. Former nurse, School of Medicine graduate and resident Patty-Ann Krajewski, MD, wanted to help after her godson was diagnosed at age five. Dr. Krajewski secured donations and recruited plenty of student manpower to produce an annual gala that is organized and staffed entirely by students. They come fully costumed and ready to fethe the young diabetics with fun, games and sugar-free treats.

#### RESPONSIBILITY TO SERVE

Community service is so important at the GSN that it's part of the curriculum. The service requirement was added several years ago because "nurses need to know they have a responsibility to serve their community," explained Dean and Professor Lillian R. Goodman, EDD. Nurses first learn how to conduct a community needs assessment through coursework. In their clinical year, they select a community, conduct an assessment and identify services that can be offered by master's-level nurses.

Carol Kerwin-Mushnick, RN, a GSN geriatric nurse practitioner candidate, planned a service project to help elders in her hometown of Millis. Kerwin-Mushnick and project partner Jennifer Critchlow, RN, developed "Don't Get Caught in the Cold!" — a presentation that educates seniors about the dangers of hypothermia. "No matter what I do, whether professionally or personally, I want it to have meaning and significance, to make a difference," said Kerwin-Mushnick.

#### IT'S IN THE CAMPUS CULTURE

All GSBS students receive a stipend to serve the commonwealth full-time as research assistants. Such an assignment can mean 16-hour workdays, including time spent conducting research and teaching. Yet many of these gifted scientists embrace a more hands-on approach as volunteers. Dean Thomas B. Miller Jr., PhD, has observed the campus culture evolve over the years. "Under Chancellor Aaron Lazare's leadership, we have become a more caring institution. People want to help and serve their community."

For the past two years, predoctoral candidate Carlo DiBonaventura has been a hit with students at North High School, where he mentors via the Worcester Pipeline Collaborative. While the collaborative is a funded, staffed UMMS initiative, student volunteers are the lifeblood of several of its K-12 science education programs. DiBonaventura visits health classes to talk about education, careers and anything else on students' minds. He is pleased that such activity "allows me to reach a lot of kids in my limited time."

With the hope of making it easier for UMMS students and community agencies to connect, GSBS student Laurie Boyer and School of Medicine student Jennifer Keating are collaborating to establish UMass CAREs (Community Awareness, Responsibility and Education). They envision the organization will provide a means by which students campuswide can link with volunteer programs, building on existing methods like the annual student activities fair and Serving the Underserved, a student-written grant.

UMass CAREs promises to help busy medical, nursing and basic science students squeeze in one more commitment, help one more person. "As individuals we want to contribute," Boyer summed up. "The schools help make this possible in many ways."



# Welcome

to the research neighborhood

BY MARK L. SHELTON



The view from Belmont and Plantation streets (left) and the view from across the "quad."

The UMass research enterprise will soon have room to grow with construction of a new research laboratory building on campus.

When the University of Massachusetts Medical School breaks ground in December on a new research laboratory building for the Worcester campus, the landscape will change both literally and figuratively. With 10 floors and more than one third of a million gross square feet, a dramatic glass "curtain wall" overlooking the original granite buildings, and a key position at the gateway to the campus, the new building will instantly become the signature UMMS structure for the new millennium.

Metaphorically as well, the new laboratories will herald a change in the research landscape — not just for the medical school, but for the region and beyond. When the building is fully occupied, more than 100 principal investigators at the cusp of great scientific change will lead UMMS in an unprecedented expansion of its mission.

"There is a national expectation by Congress and by the National Institutes of Health that medical schools provide leadership in research," said Chancellor and Dean Aaron Lazare, MD. "As our researchers continue to make discoveries and explore new avenues of inquiry, we recognize that in order to continue to fulfill our mission, our research enterprise must grow. And in order to grow, we simply need more space."

The new building will not only have ample space, it will have efficient space: An innovative laboratory design and layout will maximize lab bench space while providing unprecedented opportunities for collaboration and sharing of resources. The lab layout — described as a "linear equipment" design by GPR Planners Cooperative, which is programming and planning the laboratories — will attain the maximum amount

of usable research space from the structure; more than 200,000 square feet of research space when fully fitted.

Surrounding those lab benches will be a building that architect Carol Chiles AIA, the project executive for Tsoi/Kobus & Associates, believes will change the image of the campus by finishing the "quadrangle" implied by the medical school and hospital buildings. "The new building is an opportunity to create indelibly a new 'first impression' of the medical school," she said. "This is an exciting project for Tsoi/Kobus & Associates because it is an opportunity to transform the campus and create a building that gives something to the entire campus through its public spaces and meeting rooms — a building that surprises people a little by being more than they expected."

The new building completes the quadrangle (left). Inside, a marvelously efficient floor plan.



Building images © Tsoi | Kobus & Associates

The public spaces on the first and second floors are integral to the habitability of the building. Plans include a walkway connecting the new facility to the parking garage, a 200-seat dining complex, and several conference and meeting rooms. Above the second floor, the laboratory floors are connected by open atria surrounding the central staircases, in an effort to promote collaboration and community. (Chiles refers to these as “research neighborhoods.”) Faculty and graduate student offices fill the curtain wall in the front of the building, facing the quad; laboratories and research space face Plantation Street.

“Part of the challenge of the design comes from, first, the prominence of the site, and second, from the need to ‘face’ in two directions,” explained Chiles. “At urban campuses, new buildings are often buried in a forest of existing structures, whereas here, the new building will command attention. Too, while the entrance of the building faces the quadrangle,

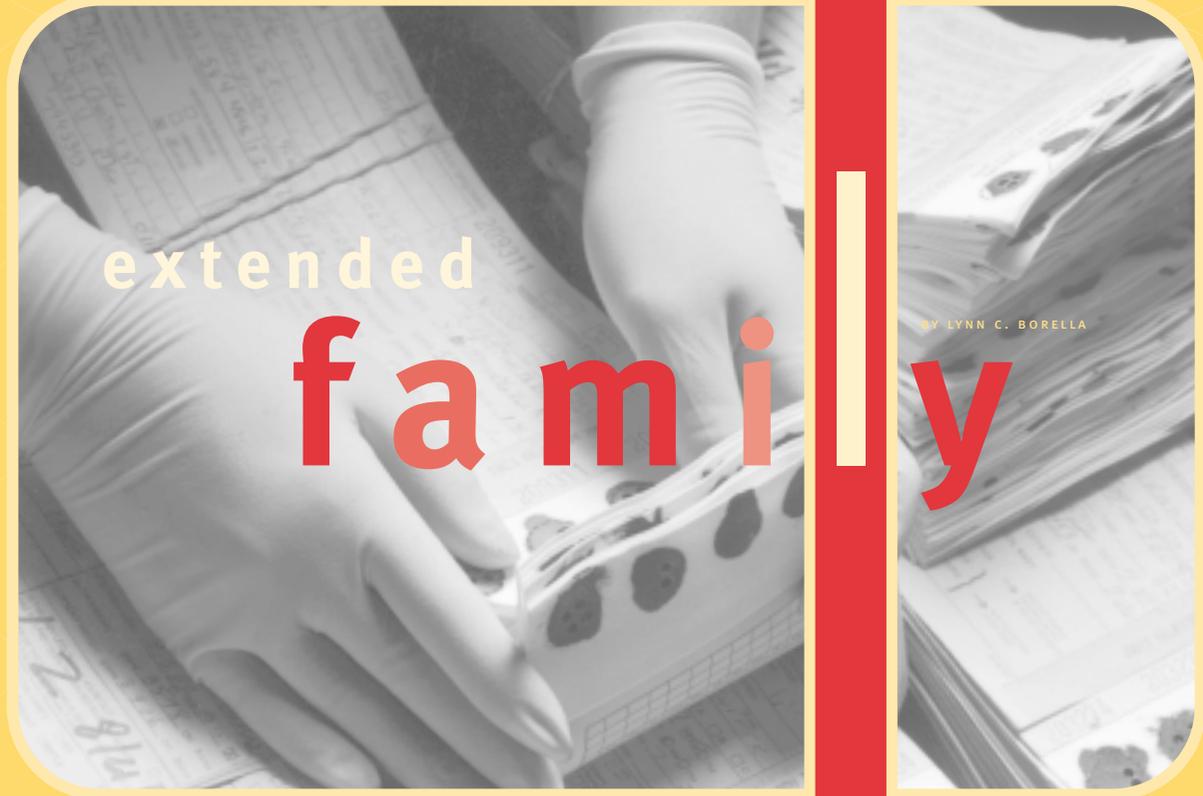
there’s also a ‘front’ on Plantation Street, because that’s such an important thoroughfare for UMMS and the biotechnology park.”

“We’re going to fill this building with great researchers and great scientists,” enthused Dr. Lazare. “Some of them are already on the faculty, and others will ‘recruit themselves’ to Worcester as they see all of the exciting things happening around our research enterprise. We know that research growth is necessary to retain and recruit the best faculty; research growth is essential for outstanding education, for the success of our clinical partner, UMass Memorial, and for the success of our efforts to cure disease and eliminate human suffering. At a time when medical schools like ours are recognized as key to the advancement of biomedical science, this building will be a key part of the future of UMMS.”

Groundbreaking for the new building is scheduled for December 1999; occupancy is planned for September 2001. The estimated \$100

million cost will be paid for in part by philanthropy. A fundraising campaign for the building is anchored by a \$5 million pledge from the Massachusetts AFL-CIO for cancer research programs within its new walls. In addition, \$30 million in funding for cutting-edge research was pledged by UMass Memorial Health Care at the time of the merger of Memorial Health Care with the UMass clinical system in 1998.

Tsoi/Kobus & Associates of Cambridge is an architecture firm with a national reputation for laboratory and academic building design. Beacon Skanska, USA, one of the foremost construction design firms in the world, will be the lead contractor. BR+A was chosen as the mechanical systems contractor, while GPR Planners of Purchase, N.Y., is designing the laboratory layout.



extended

family

BY LYNN C. BORELLA

At UMMS' campus to the east, vaccine production and disease-screening procedures help ensure the health of New Englanders.

In the 1950s, "Mr. Tetanus" Bill Lentham prepares the virus for vaccinations at the Massachusetts Biologic Laboratories, where he was an employee for 36 years.



Blood samples from New England's newborns are sorted and stored at NENSP (left). NENSP's Tom Zytkovicz, PhD, chief of laboratories; Roger Eaton, PhD; and George Grady, MD, discuss the state-of-the-art screening capabilities of the tandem mass spectrometer.

**A**lthough situated more than 40 miles east of the UMass Medical School campus, the state laboratory complex in Jamaica Plain plays an integral role in the school's public service mission. The UMMS-operated facilities, housing the Massachusetts Biologic Laboratories and the New England Newborn Screening Program, are beneficiaries of the natural interface between the medical school and the state's primary public health provider, the Department of Public Health, whose labs are also located within the facilities.

Equally noteworthy, the staff at the Jamaica Plain campus — who became UMMS employees in 1997 — truly embody the public service and research aspirations of the medical school. It is these 240 individuals — employees dedicated to ensuring that safe and effective vaccines and plasma products are publicly accessible and that newborns are screened early for treatable disorders — who are making this transition a positive one for UMMS.

#### A LONG, RICH HISTORY

Projecting a family atmosphere, the employees of the Massachusetts Biologic Laboratories (MBL) work toward a common goal: "making the best products in the world," according to Roger Anderson, PhD, MBL senior director of process development and technical services. This philosophy has driven the labs' success for more than 100 years and created their unique position as the only publicly-operated, FDA-licensed vaccine manufacturing facilities in the country.

Since 1894, when the DPH established the facility, the laboratories have introduced vaccines to prevent diphtheria, pertussis, tetanus and other diseases. Employees also pioneered the use of immune globulins, a class of proteins taken from the blood plasma of humans immune to a specific disease. These immune globulins provide passive protection against diseases.

According to MBL Director Donna Ambrosino, MD, UMMS' acquisition of the laboratories affords the state a unique opportunity to combine cutting-edge research, education and health care. "These are wonderful facilities that have served the public in so many important ways," noted Dr. Ambrosino. "We bring to the medical school a long, rich history of bright scientists and committed workers who display exceptional quality and inventiveness."

The first UMMS-appointed director, Ambrosino said she and Deputy Director Jeanne Leszczynski, MD, plan to use their expertise to enhance the labs' current capacities to develop new products. MBL Senior Director Anderson concurred. "UMass is supportive of our need to expand. This support has helped me tremendously in performing my job — creating and validating the processes that convert research ideas into licensed products." Plans are also underway to expand the laboratories' physical plant to better accommodate current and future manufacturing opportunities.

#### A STAFF FAVORITE

The New England Newborn Screening Program (NENSP) occupies a warm spot in the hearts of many Jamaica Plain employees. Since its inception in 1962, the former DPH program — now administered by UMMS — has provided health screening for over 3 million infants in Maine, Vermont, New Hampshire and Rhode Island, as well as Massachusetts, and identified nearly 2,000 newborns with significant clinical disorders.

"No one likes to carry the news that a baby has a disorder," said Program Coordinator Cecelia McGonagle, a 23-year veteran of NENSP. "But to know that we detect problems early enough to prevent clinical complications is probably the most rewarding part of the job."

The technicians and physicians who work at NENSP strive to afford newborns the opportunity to develop to their fullest potential. The staff analyzes blood specimens taken from newborns at Massachusetts' birthing hospitals and hospitals in the four other states the NENSP serves and tests the specimens for a series of disorders that, if left unrecognized and untreated, could compromise a child's health. The staff undertakes aggressive tactics to find any baby suspected of having a disorder.

"I feel like I'm making a difference in someone's life, even if it's an indirect one," said Melody Rush, manager of specimen processing. Rush's job, orchestrating the flow of specimens to the appropriate labs, increased in complexity this past February when the DPH directed the NENSP to expand testing through several pilot studies. To meet modern standards regarding patients' rights and pilot studies, NENSP included mechanisms for parents to participate in the decision as to whether their babies are tested for these "pilot study disorders." The expanded screening increased the number of tests from nine to 30, and an informational outreach campaign was launched, including development of a Web site and brochure. In addition, special presentations and mailings targeted nursery managers and other health care providers, ensuring that these key personnel understood the expanded program and its implications for the state's newborns and their families.

"Massachusetts was already screening its population for more disorders than any other state in the country; implementation of the newly expanded screening extends this program's leadership role into the future," said NENSP Acting Director Roger Eaton, PhD.

#### FUTURE PROMISE

Throughout its two-year presence on the Jamaica Plain campus, UMMS has worked to maintain a stable environment for MBL and NENSP staff. James Hill, assistant vice chancellor for Commonwealth Medicine, plans to use his experience as former DPH associate commissioner to make this "cohabitation" continue to work. "Because of my background, I have a unique opportunity to serve as the bridge between DPH and UMMS. My challenge is to take the administrative structure that has been created and make it so routine that it allows the day-to-day business function to recede into the background."

George Grady, MD, a 30-year veteran of the labs who is now medical director for NENSP, offers a special perspective on UMMS' administration of the campus. The former director of the MBL, NENSP and several other DPH programs, Grady admits that laboratory science was a "bit of an orphan" under a state agency. He added, "Historically, legislators and policy people were not mentally programmed to think of science existing anywhere but within a university. By taking over operation of most of the complex functions of the laboratories, UMass is giving us presumed legitimacy to not only analyze specimens, but also to conduct research. I'm hoping for the best of both worlds."

enabling the  
**promise**  
 of research

BY MARK L. SHELTON



The new licensing agreement between one of UMMS' leading researchers and a leader in biotechnology foretells lifesaving breakthroughs.

Research by Aldo A. Rossini, MD, the William and Doris Krupp Professor of Medicine, and his colleagues in the UMMS Division of Diabetes has been licensed to Cambridge-based biotechnology giant Biogen. The research and clinical relationship will include more than \$1 million in sponsored research, licensing and milestone fees and royalties on future product sales.

The research agreement, negotiated by the Office of Commercial Ventures & Intellectual Property, covers discoveries by Dr. Rossini and Professors of Medicine Dale Greiner, PhD, and John Mordes, MD, that indicate a new mechanism by which transplanted organs and tissues may survive without being rejected by the recipient. The work is a further extension of research

that induced long-term tolerance for transplanted islet cells in mice — work that *The Harvard Health Letter* called “one of the top ten medical advances of the year” when published in 1995.

“Dr. Rossini and his colleagues are among the most creative and innovative researchers in the entire field of immunology, and this licensing agreement with one of the top companies in the biotech field is a concrete example of the promise that basic science research holds,” said Chancellor and Dean Aaron Lazare, MD. “Aldo’s work may very well lead to a whole host of life-saving clinical applications, including his career-long effort to effectively eliminate the scourge of diabetes.”

The research licenses cover methods which “trick” a person’s immune system into long-term acceptance of foreign tissue, such

as an organ transplant. The work may have wide implications for organ and bone marrow transplantation, including treatment for diabetes. In addition, recent refinements by Rossini’s lab hold broad promise for successful human applications; so promising that Biogen and Rossini anticipate human clinical trials to begin sometime this year.

Rossini has devoted much of his medical career to finding a cure for diabetes, which afflicts an estimated 16 million U.S. residents and millions more worldwide. He is known internationally for his expertise in islet cell transplantation, immune system response to pancreas cell transplantation and the immunological basis for organ rejection.

# Grants & Research:

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

## ALCOHOL ABUSE

**NATIONAL INSTITUTES OF HEALTH**  
**Alejandro M. Dopico, MD, PhD**, research assistant professor of pharmacology & molecular toxicology: Ethanol actions on SLO channels for arteries vs. brain, one year, \$108,456; recommended for four more years, \$430,720.

## ARTHRITIS/ RHEUMATOLOGY

**NATIONAL INSTITUTES OF HEALTH**  
**Robert B. Zurier, MD**, professor of medicine, cell biology and pathology: Rheumatology research training programs, one year, \$135,961; recommended for four more years, \$521,244.

## ARTHRITIS FOUNDATION

**Peter E. Newburger, MD**, professor of pediatrics and molecular genetics & microbiology: Gene expression in blood and joint fluid neutrophils, one year, \$90,000; recommended for three more years, \$270,000.

## CANCER

**LEUKEMIA SOCIETY OF AMERICA**  
**Anthony N. Imbalzano, PhD**, assistant professor of cell biology: Analysis of the human SWI/SNF complex in mammalian cells, five years, \$350,000.

## SUSAN G. KOMEN BREAST CANCER FOUNDATION

**Susan M. Bauer, DNSc, RN**, assistant professor, Graduate School of Nursing: Disclosure: effects on women with metastatic breast cancer, one year, \$249,923.

## NATIONAL CANCER INSTITUTE

**Terry S. Field, DSc**, assistant professor of medicine and associate director of the Meyers Primary Care Institute: Increasing effective cancer prevention and control efforts among HMO subscribers, four years, \$800,000.

**Donald J. Hnatowich, PhD**, professor of radiology: Amplifying TC99M in tumor using PNA polymers, one year, \$286,590; recommended for three more years, \$881,021.

**Kenneth L. Rock, MD**, professor and chair of pathology: Vaccine strategies for immunotherapy of cancer, one year, \$207,109; recommended for three more years, \$669,593.

## U.S. DEPARTMENT OF ENERGY

**Donald J. Hnatowich, PhD**, professor of radiology: Tumor imaging with radio-labeled antisense DNAs, one year, \$200,000.

## CHARLES H. HOOD FOUNDATION

**Peter E. Newburger, MD**, professor of pediatrics and molecular genetics & microbiology: Umbilical cord blood stem cell banking and research, one year, \$270,065; recommended for two more years, \$550,000.

## NATIONAL INSTITUTES OF HEALTH

**Gary S. Stein, PhD**, Gerald L. Haidak, MD, and Zeldia S. Haidak Distinguished Professor in Cell Biology and chair: Identification of human histone gene regulatory sequence, one year, \$381,248; recommended for three more years, \$1.1 million.

## CELL BIOLOGY

**NATIONAL INSTITUTES OF HEALTH**  
**James Reid Gilmore, PhD**, professor of biochemistry & molecular biology: Assembly and transfer of N-linked oligosaccharides, one year, \$307,210; recommended for three more years, \$911,759.

**Craig C. Mello, PhD**, assistant professor of cell biology: RNA mediated genetic interference in *C. elegans*, one year, \$261,514; recommended for three more years, \$764,347.

## CHOLESTEROL

**NATIONAL INSTITUTES OF HEALTH**  
**Jorge L. Yarzebski, MD**, research assistant professor of medicine: Physician and patient attitudes toward cholesterol, one year, \$125,100; recommended for four more years, \$501,650.

## DIABETES

**NATIONAL INSTITUTES OF HEALTH**  
**Dale L. Greiner, PhD**, professor of medicine: Prothymocytes and diabetes mellitus in BB/W rats, one year, \$198,385; recommended for four more years, \$856,233.

**Michael P. Czech, PhD**, professor of biochemistry & molecular biology and director of the Program in Molecular Medicine: Properties of the high affinity insulin receptor, one year, \$371,008; recommended for four more years, \$1.5 million.

## FAMILY PRACTICE RESIDENCY TRAINING

### BUREAU OF HEALTH PROFESSIONS

**Peter C. McConarty, MD**, assistant professor of family medicine & community health: Graduate Training in Family Medicine – Fitchburg Family Practice Residency, one year, \$160,880; recommended for two more years, \$259,200.

**Vance M. Brown, MD**, assistant professor of family medicine & community health: Graduate Training in Family Medicine, one year, \$151,200; recommended for two more years, \$253,800.

## INFECTIOUS DISEASES

### NATIONAL INSTITUTES OF HEALTH

**Raymond M. Welsh Jr., PhD**, professor of pathology and molecular genetics & microbiology: Immunity and virus disease, one year, \$319,804; recommended for four more years, \$1.3 million; Virus-induced immunopathology, one year \$338,890; recommended for four more years, \$1.4 million.

## LIVER/ GASTROINTESTINAL DISEASES

### NATIONAL INSTITUTES OF HEALTH

**Herbert L. Bonkovsky, MD**, professor of medicine, biochemistry & molecular biology and pathology: Hepatitis C clinical trial – Clinical Centers, eight years, \$2.7 million.

## MOLECULAR GENETICS & MICROBIOLOGY

### NATIONAL INSTITUTES OF HEALTH

**Peter E. Newburger, MD**, professor of pediatrics and molecular genetics & microbiology: Gene expression in mature neutrophils, one year, \$460,660; recommended for four more years, \$1.9 million.

### AMERICAN CANCER SOCIETY

**Celia A. Schiffer, PhD**, assistant professor of pharmacology & molecular toxicology: Conformational adaptability and molecular recognition, one year, \$375,000.

## NEUROBIOLOGY

### NATIONAL INSTITUTES OF HEALTH

**Peter Grigg, PhD**, professor and vice chair of physiology: Stretch sensitivity of mouse cutaneous afferent neurons, one year, \$354,569; recommended for four more years, \$1.4 million.

### AMERICAN HEART ASSOCIATION

**Ann R. Rittenhouse, PhD**, assistant professor of physiology: M-Muscarinic stimulation, coordinator of acute and long-term changes in sympathetic neurons, one year, \$75,000; recommended for three more years, \$225,000.

## NEUROSCIENCE

### NATIONAL INSTITUTES OF HEALTH

**David Paydarfar, MD**, associate professor of neurology and physiology: Dysrhythmias of the respiratory oscillator, one year, \$226,091; recommended for three more years, \$666,759.

**Charles G. Sagerström, PhD**, assistant professor of pharmacology & molecular toxicology: Molecular analysis of hind brain formation, one year, \$216,481; recommended for three more years, \$593,279.

**John V. Walsh MD**, professor of physiology and pharmacology & molecular toxicology: Local CA<sup>++</sup> signaling in smooth muscle, one year, \$435,058; recommended for three more years, \$1.4 million.

**Zuoshang Xu, MD, PhD**, assistant professor of pharmacology & molecular toxicology and cell biology: Disease progression and oxidative stress in ALS, one year, \$364,600; recommended for three more years, \$1 million.

## OPHTHALMOLOGY

### NATIONAL EYE INSTITUTE

**Edward Chaum, MD, PhD**, assistant professor of surgery, cell biology and pediatrics: Directed gene transfer into RPE cells, one year, \$154,786; recommended for three more years, \$464,358.

### 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.

## RESEARCH EDUCATION/ RESOURCES

### NATIONAL CENTER FOR RESEARCH RESOURCES

**Walter Carrington, PhD**, associate professor of physiology: Computer for 3D image restoration of fluorescent cells, one year, \$205,200.

### NATIONAL SCIENCE FOUNDATION

**John C. Fray, PhD**, professor of physiology and **Jack L. Leonard, PhD**, professor of radiology and physiology: SGER – Functional analysis of signaling, trafficking and secretion in the mouse renin system: A didactic tool for the integration of research education, one year, \$93,025.

## SMOOTH MUSCLE FUNCTION

### NATIONAL INSTITUTES OF HEALTH

**Roger W. Craig, PhD**, professor of cell biology: Structural basis of smooth muscle contraction, one year, \$351,171; recommended for three more years, \$1.1 million.

**Mitsuo Ikebe, PhD**, professor of physiology: Role of protein kinases on smooth muscle regulation, one year, \$453,678; recommended for three more years, \$1.3 million.

## SURGICAL RESEARCH

### NATIONAL INSTITUTES OF HEALTH

**Carol L. Miller-Graziano, PhD**, professor of surgery and molecular genetics & microbiology: Is aberrant M $\theta$  stimulation pivotal in post-trauma mods? one year, \$357,150; recommended for three more years, \$1.1 million.

# Alumni Report:



## A MESSAGE FROM THE CHANCELLOR / DEAN

One of the great joys of late summer is welcoming new students. Each year, I am struck again by how wonderful our students are. My enthusiasm is sharpened by the fact that these young men and women share a passion for public service. What impresses me, year after year, is their generosity of spirit, their commitment to do something for the community, their need to “pay dividends” on what they consider their own good fortune.

Our students volunteer with the homeless, the disadvantaged, the mentally and physically abused and the powerless of every age. As I reviewed the articles written for this issue of *Vitae*, I was struck by something I always intuited, but never examined — these remarkable traits are carried through into the choices they make after they graduate. The three graduates featured on the following pages illustrate my point.

### Frank Sacco,

class of 1980, is trauma director and chief of surgery service at Alaska Native Medical Center in Anchorage. The medical center is the first in the nation to be run for Native Americans by Native Americans, and it serves as the health care hub for over 100,000 Native Alaskans.

### William Mallon,

class of 1987, is director of the emergency medicine residency program at the Los Angeles County/University of Southern California Medical Center in Los Angeles. He uses bedside teaching methods to instruct the residents in his program on ailments that afflict the city's indigent population, including tropical diseases and the fallout from gang-related activity.

### Rosemarie Stebbins,

GSN class of 1997, works with developmentally and mentally challenged patients, including 16 years at the Monson Development Center, and now through her new position with the state Department of Mental Retardation. In her “spare time” she is a major in the U.S. Army Nurse Corps Reserves.

This, after all, is the reason UMass Medical School can claim a special niche in the state's rich educational firmament. Education is the linchpin of our mission, and it is important to do it well. You are all examples of that commitment.

### Aaron Lazare, MD, Chancellor and Dean

## A BEAUTIFUL AND WILD PLACE

"I really enjoy going to work each day," said **Frank D. Sacco, MD '80**, trauma director at the Alaska Native Medical Center (ANMC) in Anchorage. "This is such a beautiful and wild place, the Alaskan Natives are delightful folks, and the people I work with are very collegial and cooperative. It's a wonderful combination."

Dr. Sacco first visited Alaska during medical school, spending two summers in the Yukon Territory working on a high-altitude physiology study with the Arctic Institute of North America. After completing a two-year U.S. Public Health Service (PHS) scholarship payback on a New Mexico Navajo reservation, he spent three months in 1983 as a PHS *locum tenens* at Alaska's remote Kotzebue Hospital. He then completed a surgical residency rotation in Alaska, finally moving there in 1991 as a general surgeon with the ANMC.

"This is a great job for a general surgeon," said Sacco of his current position. "I get to perform a tremendous variety of surgery — thoracic, vascular, pediatric — because we have so few specialists." He also flies to remote hospital locations several times a year to care for patients there, teaches surgical residents on rotation and takes part in clinical research with the on-site office of the Centers for Disease Control (CDC).

The ANMC is operated by the Alaska Native Tribal Health Consortium, making Alaska the first state to have all its health facilities for Native Americans run by Native organizations. The most medically advanced facility in the nation's system of Native health care, it serves as the health care hub for all 100,000 Alaska Natives as well as six regional hospitals funded by the Indian Health Service. It's also the state's first and only trauma center.

"Trauma is the leading cause of death among Native Alaskans," Sacco noted. To combat that statistic, he's been active in establishing the state's trauma system and developing injury prevention programs — earning commendations from the PHS for his efforts.

He's also been involved in CDC research to study the unusually high incidence of the bacteria *H.pylori* in the Native population. "We see a lot of stomach cancer, so now we're looking at whether *H.pylori* could be associated with that.

"We also see a lot of liver cancer associated with high rates of hepatitis B," he continued. As a result, the ANMC initiated an aggressive surveillance program, screening carriers every six months and vaccinating the Native population at birth. "There are no new cases of hepatitis B now," he added.

An additional bonus Sacco reaps through his practice: "I don't spend a lot of my time worrying about billing and collections up here," Sacco said. "It's a nice way to practice medicine."

— RH



Frank D. Sacco, MD '80

## CULTURES AND CRITICAL CARE

**William K. Mallon, MD '87**, FACEP, FAAEM, treats patients whose medical conditions are reflected in a variety of customs, not all of them common. As an emergency medicine physician at Los Angeles County/University of Southern California Medical Center (LAC+USC) in the heart of ethnically diverse Los Angeles — a crossroads between cultures and critical care — Dr. Mallon tends to those in the ER with a wide variety of cultural conventions, including gang members who use graffiti and tattoos as forms of expression.

As director of residency training at LAC+USC, Mallon helps interpret the messages these "languages" provide for the physicians training in his program.

"We teach emergency physicians to recognize who their patients are, what cultures and subcultures they come from, so they can treat them better and form a strong doctor-patient alliance," explained Mallon, an associate professor of clinical emergency medicine at USC School of Medicine. Los Angeles is a major point of entry for immigrants from Central and South America and the Pacific Rim. As a result, Mallon sees patients suffering from a variety of tropical diseases such as malaria, tetanus and Chaga's Disease, a parasitic infection that affects the heart and other organs. "We jokingly say that training and treating patients here is like a tropical medicine fellowship with facilities that flush!"

Mallon encourages residents to understand the alternative medicine techniques their patients may use — methods familiar to them in their countries of origin, but ones that may lead to an emergency room visit to LAC+USC. "Emergency physicians need to ask what their patients are doing and not in terms of being judgmental, but to form an alliance. Only then will a trusting

relationship develop which promotes compliance with your care."

Physicians learn to recognize "coining" skin lesions, for example, to avoid drawing the wrong conclusion about their patients' medical problems. "Coining involves rubbing a circular object dipped in tiger balm on the skin, raising a reddish wheel that is believed to treat all kinds of maladies," explained Mallon. Failure to recognize these skin lesions can lead to the inappropriate suspicion of child abuse or other trauma.

Mallon and his residents interpret marks on skin of a different kind as they treat gang members rushed to the hospital from graffiti-laden neighborhoods surrounding the medical center. "LA has exported its gangs to other parts of the country and world," said Mallon, who recently lectured on the language of tattoos and graffiti to members of London's Scotland Yard. Mallon and fellow UMass graduate and USC faculty member Marie Russell, MD, compared their notes on tattoos and graffiti and found that one form of communication can sometimes translate the other. "A fair amount of information with medical relevance to patient lifestyle and disease risks can be determined," explained Mallon. "For example, a large tattoo with the numbers 15550 represents the California penal code chapter for possession of drugs with intent to sell. This tells us that the patient is heavily involved in the drug culture and may even be advertising his intent to sell drugs."

The unique interpretive skills Mallon fashions in his residents eventually benefit patients outside of Los Angeles, as over 400 graduates are now in practice throughout the country. "I love doing my research, but the real product if you are a program director is the people you graduate." — ALB



William K. Mallon, MD '87, FACEP, FAAEM

# Class Notes:

## DUAL CAREER TRACKS



Rosemarie Stebbins, MS '97, RNC, ANP/ACNP

You could call [Rosemarie Stebbins, MS, RNC, ANP/ACNP](#), goal-oriented.

She holds a master's degree in nursing (GSN '97) as well as certification as an adult nurse practitioner and acute care nurse practitioner. She has spent nearly two decades working with developmentally and mentally challenged individuals, including 16 years at Monson Developmental Center, a long-term care facility run by the Commonwealth of Massachusetts, and now through her new position with the state Department of Mental Retardation. And that's just her civilian career.

Stebbins is also a major in the U.S. Army Nurse Corps Reserves, where she's an OR nurse and recently completed Command and General Staff Officer College, a two-year program that's equivalent to earning a master's degree in military leadership. She plans to stay in the Reserves another eight years (to reach a total of 20) and aims to attain the rank of "full-bird" colonel.

"I'd always been interested in the military," said Stebbins of her decision to sign up. "I wanted to serve my country and, if needed, be there to care for our fighting men and women."

"I started out in a 1,000-bed general hospital; then, after Desert Storm, my unit became a 296-bed mobile hospital made up of boxes and tents. It covers several acres and takes three days to set up," she explained. "I really enjoy the work and have had the opportunity to go on humanitarian missions to Guatemala and Panama."

Meanwhile, her civilian career has also evolved.

"I started at Monson in the late 1970s as a part-time nurse," she said. "At that time, they were using nurse practitioners because they had a difficult time attracting physicians to that setting. I had the opportunity to go to NP school through the state. When I graduated, I owed the state time, so I stayed at Monson to pay it back and found that I loved working with developmentally disabled individuals."

"It was a great experience," Stebbins continued. "I worked very independently and managed a wide variety of health care problems. In that environment, you see abnormalities you wouldn't ordinarily see. And there were no malingerers — if there's something wrong, it's serious."

While working full time at Monson — and continuing to fulfill her military commitment — she decided to earn her master's from the Graduate School of Nursing, knowing it would help her advance on both career tracks. She recently transitioned into a new role with the state, dealing with the same population as at Monson but in a community setting, serving as a consultant-educator to DMR staff and staff in group homes, and as a health care advocate for the individuals she serves.

Stebbins' goals for the future include attaining the position of chief nurse or commander of an Army medical unit and continuing to work to improve the lives of those with developmental disabilities. — RH

**1976** [Bruce Karlin, MD](#), was appointed assistant professor of medicine at UMMS.

**1978** [Rachel Bergeson, MD](#), is sub-boarded in adolescent medicine and is associate clinical professor in pediatrics and internal medicine at University Hospital, SUNY/Stony Brook.

[Ed Donovan, MD](#), wrote, "I was able to take time off from my real life as an ENT surgeon last year to climb Denali and Aconcagua, the highest mountains in North and South America, respectively. I also climbed the Grand Teton in Wyoming and Cannon Cliff in New Hampshire. I highly recommend mountaineering as a way of facing — or more accurately, a way of avoiding facing — a midlife crisis!"

[Ralph Sama, MD](#), was named Fallon Clinic's 1998 Physician of the Year. He practices at Primary Care Physicians, a Fallon affiliate in Spencer, Mass.

**1979** [Richard Jacobs, MD](#), is medical director of medical imaging services for Parexel in Waltham, Mass.

**1983** [Mary Ellen Foti, MD](#), is medical director for the Massachusetts Department of Mental Health's Metro/Suburban Area. She is an associate professor at UMMS and the principal investigator of a Robert Wood Johnson grant titled "End of Life Care for Persons with Serious Mental Illness."

[Karen Harvey-Wilkes, MD](#), is director of neonatology at Melrose-Wakefield Hospital. She spends three months each year at New England Medical Center's NICU and the rest of the year at Melrose-Wakefield, establishing a Level II nursery and helping expand its infant/maternal services.

[Peter Lindblad, MD](#), is medical director of the Hitchcock Clinic at Dartmouth-Hitchcock Medical Center in New Hampshire.

**1984** [Lori Circeo, MD](#), practices anesthesia/critical care medicine at Baystate Medical Center in Springfield. She has two children, Ian and Katharine.

[Paul Gentuso, MD](#), and his family returned this year from Cote d'Ivoire, West Africa, where Paul had been serving as a missionary physician with Free Will Baptists since 1991. The family now lives in Nashville, where Paul is an urgent care physician for Baptist Care Centers.

**1985** [Diane Savarese, MD](#), was appointed associate professor at UMMS.

[Laura Scoville, MD](#), and husband David Mako have three "beautiful" children and live in the small mining community of Elko, Nev. An internal medicine physician in a rural clinic, Laura must practice in numerous subspecialties, from women's health to plastic surgery. In their spare time, Laura and David oversee the Ruby Mountain Brewing Company as part owners.

**1986** [Elenie Chadbourne, MD](#), is medical director for MetaWorks Inc. in Boston.

[Julia Matthews-Bellinger, MD](#), was appointed associate professor of clinical psychiatry at UMMS.

[Thomas Synan, MD](#), practices internal medicine at the Medical Group of Manchester in New Hampshire.

**Susan Upham, MD,**

wrote, "I have established a new occupational and environmental medicine clinic in Portland, Maine with two osteopathic physicians. Our practice, Bayside Employee Health Center, specializes in all aspects of occupational and environmental medicine, physical medicine and rehabilitation, physical therapy and on-site osteopathic manipulation. I became very disillusioned by the management approach of my previous employer, a large 'business run' occupational medicine provider whose bottom line was the corporate profit margin, not costs savings or quality care for patients or their employers. This is an exciting opportunity for us to make the health of the patient the bottom line, to practice according to our values and principles and to take back control of our careers. I have also served as a visiting lecturer in occupational medicine and epidemiology at the University of New England Medical School. I live in Kennebunk, Maine with my husband **Paul Upham, MD '87**, also an occupational medicine physician, and my son Matthew (4)."

**1988** **Mary Dowd, MD,**

opened a private medical practice in Yarmouth, Maine. She lives in Yarmouth with her husband and four children, ages 3 to 18.

**Paula Kelsey, MS, RN,**

joined Wing Memorial Hospital and Medical Centers as an adult nurse practitioner.

**Ronald Rubin, MD,**

joined Milford-Whitinsville Regional Hospital as an obstetrician and gynecologist.

**Paul Haley, MD,**

has been appointed to the medical staff of Western Massachusetts Hospital.

**Marcia Ormsby, MD,**

in private practice in Annapolis, wrote, "My new office operating suite has expanded my practice beyond my expectations. Please visit my website at [www.surgery.com/be/vita/mormsby](http://www.surgery.com/be/vita/mormsby). My son is living in the San Francisco area and gives me an excuse to visit California. Last year we visited the Greek Islands and Athens. The people and the country are exquisite!"

**Robert Scheuch Jr., MD,**

is pleased to announce the arrival of Chloe Ann Scheuch on 8-24-98 to join Bobby (6) and Evan (3). Bob's two-man pulmonary group continues to be very busy. He is also director of the ICU at Southampton Hospital and remains "the last pulmonologist on Long Island 'til you hit Bermuda!"

**1989** **Douglas Burd, MD,**

is a radiologist at UMass Memorial.

**Carol (DiGuisto) Burd, MD,**

is an internist at Harvard Vanguard Medical Associates in Wellesley, Mass. Douglas and Carol live in Weston with their daughter Rachel.

**Henry Madden, MD,**

relocated his office from Merrimack, N.H. He is a member of Foundation Medical Partners, affiliated with Southern New Hampshire Medical Center in Nashua.

**Scott Stephen, MD,**

has been chair of the department of radiology at Houston Medical Center in Warner Robbins, Ga., for three years. He is a member of a six-person practice and has been a full partner in Radiology Associates of Houston County, Pa., since late 1997. Scott wrote, "My wife Janell and I have two beautiful children, Heather (2) and Derrick (5 months)."

**1990** **Tad Baum, MD,**

recently performed the first corneal transplant for Deaconess Nashoba Hospital in Ayer, Mass.

**Patricia Davis, MD,**

is director of the Department of Pediatrics at Carney Hospital in Dorchester, Mass.

**G. Forrest Quimby, MD,**

was recently board certified in urology.

**1991** **Heather Gallo, MD,**

was appointed assistant professor of medicine at UMMS.

**Eli Rosenthal, MD,**

will complete an interventional cardiology program at the University of Colorado Health Sciences Center next year.

**Elizabeth Steiner, MD,**

is spending time at home with Mira (3) and Emma (6 months) and husband Michael Hayward. She will begin teaching at Oregon Health Sciences University, where she is the co-curriculum director of Principles of Clinical Medicine.

**1992** **Rebecca Jones, MD,**

wrote, "I'm working in Springfield as a dermatologist at New England Dermatology and engaged to **Paul Haley, MD '88**. I have a standard poodle and a Rhodesian ridgeback, Franklin and Subi, respectively."

**Neal Keeshin, MD,**

joined Weeks Memorial Hospital in Lancaster, N.H., as an emergency room physician.

**James Paskavitz, MD,**

was appointed assistant professor of neurology at UMMS.

**Jeffrey Zawacki, MD,**

completed his fellowship in colon and rectal surgery at Mayo Clinic and accepted a private practice position in the Chicago area. He wrote, "I have two beautiful children, Danny (2) and Katie (16 months)."

**Thomas Regan, MD,**

has been named director of medical student education for the department of emergency medicine at UConn. Tom wrote, "Things have really come full circle. The only thing I can't figure out is how these students got to be so young!"

**Kevin Moriarty, MD,**

practices pediatric surgery in Springfield at Baystate Medical Center and Shriner's Hospital.

**Mary Valliere, MD,**

has joined the medical staff at Fairlawn Rehabilitation Hospital in Worcester.

**1993** **Robert Faberman, MD,**

practices at Radiology Associates of Norwood, Mass.

**1994** **Yamo Deniz, MD,**

wrote, "Currently in my second year of fellowship in pediatric allergy and immunology at Duke. (I even had the opportunity to see a few Blue Devil basketball games.) I plan to go back to Sweden for six months to work at the Karolinska Institute Hospital in Stockholm."

**Lorna Prince, MS, RN,**

works at Massachusetts General Hospital as the executive assistant to the senior vice president for Patient Care Services.

**1995** **Ian Bach, MD,**

lives in Colorado and wrote, "Completing residency was the last of several exciting events in 1998! I met Robin Burnelle, a beautiful and witty physical therapist who made me the happiest man in the world when she agreed to marry me. We're expecting our first child. Of course, finding a great practice in Lakewood, Colorado certainly qualifies as great news as well."

**Beth Cerce, MD,**

is an internist at Compass Medical Associates in Taunton, Mass.

**Cathy Lynne Johnson, MS, RN,**

lives in Boxford, Mass., with Carl, Gregory, Garret (and pets), and is an adult nurse practitioner at an internal medicine practice in Newburyport.

**Laura Kalayjian, MD,**

is a fellow at the Neurological Institute in New York City.

**Beth Koester, MD,**

practices at St. Mary's Family Health Center in Poland, Maine, for Community Clinical Services.

**1996** **Carol Addy, MD, & David Albert, MD,**

were appointed instructors in medicine at UMMS.

**1998** **Jennifer (Lindwall) Schwab, MD,**

enjoys residency in Hartford at the Connecticut Children's Medical Center along with **Sophia Zervas, MD**. Jenny wrote, "Sophia and **Sharon Bachman, MD**, recently returned from a ski trip to Breckenridge, Colo. Congratulations to **Gregg Kaupp, MD**, and Cara Douville, 'oo on their engagement." Jenny and her husband Jim visited **Andrea Agnello, MD**, in Houston and were "thrilled" to learn that Andrea and **Paul (P.J.) Pettinato, MD**, are engaged and that P.J. would be transferring to Texas this year.

BOSTON AREA  
ALUMNI RECEPTION  
AT MISTRAL  
June 17, 1999



Tina Miller

Andrew Miller, MD '79

William M. Bulger,  
University President

Sandra Beling,  
Director of Alumni Relations



Aaron Lazare, MD  
Chancellor & Dean

Robert Lee, MD '76

Susanna Lee, MD '78

Janice Powell, MD '78



Anthony Wilson, MD '90

Julie Kaufman, MD '89

Donna Cooper, MD '84

Jay Sorgman, MD '88

# Development Update:

## MAJOR CAMPAIGN PLANNED FOR NEW BUILDING

It's a goal that measures up to the new millennium. The UMass Memorial Foundation has announced a campaign to raise \$33 million from private philanthropy toward construction of a new research laboratory building on the UMMS campus. Volunteer leadership for the campaign will be announced later this fall, according to M Howard Jacobson, chair of the foundation.

With groundbreaking scheduled for December 1999, plans call for a fast-track construction schedule that will have the 350,000-square-foot building ready for occupancy in September 2001. Its size, purpose and central location (*see story beginning on page 8*) make it the most significant construction project on campus since UMass Hospital opened in 1976.

The foundation's fundraising component for the building — approximately one-third of the overall cost of \$100 million — will include major gifts solicited as naming opportunities. For example, in addition to the naming of the building itself, a specific research center, an entire floor of the building, or an individual laboratory can be named in honor of a donor or memorial gift.

UMass Memorial Health Care has already committed \$30 million in support of construction. The Massachusetts AFL-CIO has pledged to raise \$5 million for the Cancer Center, which will be relocated to the building. The remainder of the building's cost will be realized through sales of Massachusetts HEFA bonds, to be retired through the use of cost reimbursements that are part of federal research grants.

Fundraising for the building is a major component of the foundation's capital campaign being planned for the new century. The multi-faceted campaign will support and advance the strategic priorities of both the UMMS academic system and UMass Memorial's clinical enterprise.

For more information on the new research laboratory building campaign, contact its director, Pat Bartram, at (508) 856-6515.

## MEMORIAL DEDICATION IS UNIQUE TRIBUTE

This summer's dedication of the Jacqueline F. Lazare Amphitheater at the medical school wove together elements that left both participants and audience uplifted with hope for the future of school endeavors.

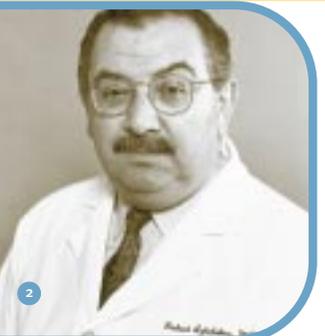
Naming of the auditorium, in memory of the first child adopted by Chancellor and Dean Aaron Lazare and his wife Louise, is in recognition of the Lazare family's endowment gift of \$250,000 to the Center for Adoption Research and Policy.

The Lazare family, which grew to include eight adopted children in all, joined UMMS participants for the dedication. It was the family's interest in adoption problems and solutions that helped bring about establishment of the UMass system's Center for Adoption Research and Policy at the Worcester campus in

Chancellor and Dean Aaron Lazare, MD, Louise Lazare, and Kathleen Lenoff, Jacqueline Lazare's birth mother.



The Office of Development is responsible for fundraising on behalf of UMass Memorial Health Care and the University of Massachusetts Medical School through the UMass Memorial Foundation, and for basic research fundraising through the Worcester Foundation for Biomedical Research.



1 Nancy and Robert Feldman, Parents Council chairs

2 Richard V. Aghababian, MD, chair, Department of Emergency Medicine and member of the class of 1974

3 Investiture of seven faculty members into newly endowed professorships took place in June on the Worcester Foundation campus. Among those invested was Mario Stevenson, PhD, as the David J. Frelander Memorial Professor in AIDS Research. Here he is flanked by I. Robert and Aviva Jacobson Frelander of Worcester, who established the professorship to honor their son, an artist who died in 1987. The Frelanders are known for their humanitarian efforts on behalf of individuals with physical and mental disabilities, as well as their advocacy in the visual arts.

1996. The center is the first of its kind in the country and already an important resource for the public as well as professionals.

Now, Dr. Lazare noted, the state-of-the-art auditorium will “bring my family and my work together.” As part of the new Goff Learning Center on the first floor of the school, the auditorium provides a setting that is more intimate than traditional amphitheatres.

### LIBRARY GIFT HONORS DR. SOUTTER

In honor of founding Dean Lamar Soutter, MD, an anonymous gift to the library named for him will launch a fundraising campaign to enhance and modernize the library. Planning for specific use of the \$250,000 gift is under way, according to Elaine Martin, director of library services for the Lamar Soutter Library.

Enhancements being considered include expansion of print and electronic collections, and renovation of existing facilities to meet the demand for collaborative and group-learning space.

The only public medical library in the commonwealth, the Lamar Soutter Library serves UMMS faculty, students, affiliated sites and health care professionals throughout the region. Dr. Soutter, the school's first employee, served as dean from 1963 until 1975. Called the “father of UMass Medical School,” he died in 1996. His wife Mary, a resident of Concord, remains a devoted friend of the school.

For more information on ways to support the library, contact Brandt Henderson at (508) 856-4266.



### IDENTIFYING THE FOUNDATION

The UMass Memorial Foundation (whose new graphic identity is shown above) is a dynamic organization that combines the fundraising responsibilities and capabilities of its predecessors, the foundations of the former UMass Medical Center and Memorial Health Care.

The foundation's mission is to support and advance the lifesaving work being done at the University of Massachusetts Medical School and UMass Memorial Health Care. It raises funds, sponsors educational programs, and serves as a constant advocate for UMMS and UMass Memorial. In doing so, the foundation seeks to advance innovations in research, patient care and education — innovations that will improve the health of people throughout New England and beyond.

Board leaders are Aaron Lazare, MD, president; M Howard Jacobson, chair; John Nelson, vice-chair; John Whelan, treasurer; R. Norman Peters, Esq., secretary; and an executive committee including Janet Birbara, Russell Fuller, Peter Levine, MD, Cynthia Pitcher and H. Brownell Wheeler, MD.

### NEW CHAIRS NAMED FOR PARENTS COUNCIL

In collaboration with the Office of Development, the Parents Council sponsors activities and events to welcome parents of medical students into the UMMS family. The council also offers parents an opportunity to learn about the challenges of the medical education experience and to participate in the tremendous growth of the school.

This year Robert and Nancy Feldman, whose son Adam is a member of the class of 2000, have graciously accepted the role of chairs of the council's executive committee. The Newton couple said they are happy to take a leadership role with the council and to work with other parents in advancing support of the medical school.

In August, the executive committee sponsored an orientation program for parents of students in the class of 2003. The council, formed in 1993 through the efforts of Paul and Mimi LaCamera, also helps raise funds to support all academic initiatives. “Some of our most enthusiastic supporters raise considerable philanthropic support each year for the school,” noted Kevin Courtney, associate vice chancellor for development.

“We're very excited about being involved with this wonderful institution,” said Bob Feldman, who praises the learning environment and “atmosphere of total cooperative effort” among faculty, staff and administration. “Medical school is a challenging time for students — an opportunity for them to realize their potential and find their place in the medical community.”

For Nancy Feldman, the role of parents can be summed up through her own experience: “From our son's first day, I've felt that we parents are tremendously privileged to have our children receive their medical education at UMass. The Parents Council helps keep us connected with the school and with our children's extraordinary experience.”

### 'PIONEER PRIDE' PROMPTS MAJOR GIFT

Always a pacesetter, the medical school's pioneer class of '74 will be the first to observe its 25th anniversary milestone — and will do so with gusto. The class has invited alumni of the classes of '75 through '77 — the three whose students shared those early years with the pioneers — to join its October reunion dinner celebration.

And Richard V. Aghababian, MD '74, one of the 16 who comprised the first class, is making a milestone gift for the occasion. In honor of his class reunion, he and his wife Ann have pledged \$100,000 to establish an endowment fund for a professorship in emergency medicine. Now professor and chair of emergency medicine at UMMS, Dr. Aghababian is one of the first UMMS graduates to make a gift at this level.

Besides the pioneer status of the medical school itself, Aghababian said, “Another source of pioneer pride is that UMMS was the first medical school in New England to establish a department of emergency medicine as an academic specialty. I hope we'll also be the first to have an endowed professorship in emergency medicine.”

With this gift, he also hopes to set a tone for alumni giving. “I'm very proud of this place — from the first graduating class onward, UMMS has produced hundreds of excellent physicians and scientists. I would hope that by the time graduates reach their 25th reunion, they've reached a level of professional achievement that will allow them to consider making a contribution to their alma mater. For myself, I thought the appropriate gift was to establish an endowed professorship in my field.”

It's easier for an individual to make a substantial gift over time, added Aghababian, whose \$100,000 pledge spans five years. “But there are many ways for alumni to give — toward general funds, or research and scholarship funds, as well as toward a professorship. The important thing is for us to set a tone for the classes going forward.”

### WFBR TRUSTEES ASSUME NEW ROLE

The Board of Trustees of the Worcester Foundation for Biomedical Research — an organization supporting basic biomedical research at UMMS — has eagerly accepted the invitation of Chancellor and Dean Aaron Lazare, MD, to serve as lay advisory council for matters relating to the research enterprise at the medical school.

In this role, WFBR trustees will act as counselors to the chancellor on research-related matters including strategic planning, research affiliations, finance and philanthropy, commercial ventures and intellectual property, and the physical plant and special equipment.

Many medical schools have such advisory groups, according to Dr. Lazare. “We are at a point in our growth where we can use the advice and wisdom of this body of esteemed individuals who have long been associated with biomedical research,” he said. “I am very pleased that the Worcester Foundation board has accepted this new challenge and look forward to working together toward great things.”

Meetings of the Worcester Foundation Research Advisory Council will become part of the WFBR board's regularly scheduled sessions, three times a year. A subcommittee on commercial ventures, formed at the annual meeting of the WFBR in May, is already at work, and other subcommittees will function as needed.

WFBR trustees serve as officers of the council and include Morton H. Sigel, chair; John M. Nelson, vice chair; Edward Bresnick, PhD, president; Christopher W. Bramley, treasurer; and Diane G. Dalton, secretary.

# The Last Word:



BY STEPHEN J. DOXSEY, PHD,  
Assistant Professor of Cell Biology and Biochemistry & Molecular Biology;  
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When I accepted a faculty position at UMass Medical School six years ago, I was impressed by the outstanding scientific research and potential for rapid growth in the research enterprise. I never imagined how rapid and extensive that growth would be.

The most recent example is the construction of a new research laboratory building over the next year and a half that will effectively double the space for scientific research at this institution and provide opportunities to attract additional world-class scientists. (See story beginning on page 8.) The building's presence on campus will promote the well-established interdisciplinary nature of the educational program here as well as the tradition of scientific collaboration amongst colleagues.

Indeed, this collaborative atmosphere facilitated a project soon after I arrived between my laboratory and German Pihan, MD, an assistant professor of pathology and a clinical oncology researcher in the Department of Pathology. Our research challenge: to identify pre-malignant prostate lesions that will progress to deadly prostate cancer. With life-threatening disease at an early stage of tumor development, treatment can be targeted to these individuals.

Our initial work was made possible through small pilot grants from the Massachusetts Department of Public Health and the Our Danny Cancer Fund. But based on our observations that centrosomes — tiny organelles

that orchestrate the segregation of chromosomes during cell division — perform differently in malignant tumors than in normal tissue, we recently received a \$450,000 grant from the U.S. Army to continue searching for answers to two important questions raised by our research: Can centrosome defects contribute to prostate cancer and can they predict which prostate tumors will become malignant?

No method currently exists to effectively predict which prostate cancers or pre-cancerous lesions of the prostate will develop into malignant tumors. With no prognostic indicator available, most patients with prostate cancer are treated by excision of tumor tissue and chemotherapy, usually in combination.

Thankfully, this approach has a high success rate if patients are treated early during disease development, but it has several drawbacks. Most patients receive treatment unnecessarily because most tumors remain benign and asymptomatic. For this reason, men and their families are subjected to the mental anguish of treatment for a disease that most likely would not prove fatal. Moreover, surgery often has serious side effects. Finally, the annual cost of treating 170,000 men unnecessarily is enormous. Thus, our challenge.

The collaboration between my laboratory and Dr. Pihan was established to study prostate cancer using both basic science and clinical approaches.

We found that by increasing the levels of a centrosome protein called pericentrin, we could make normal cells have either fewer or more than the normal number of chromosomes — features similar to a tumor cell. We next asked if pericentrin levels and centrosomes were abnormal in tumor cells and found that nearly all the malignant tumors we analyzed had centrosome defects. Can centrosome defects predict which prostate tumors will become malignant? Although we do not yet know the answer, our evidence is provocative.

Perhaps most interesting is our observation that pericentrin levels are elevated in prostate tumors and more importantly, in pre-cancerous lesions. Since our studies show that pericentrin levels induce abnormal levels of chromosomes in normal cells, it is tempting to think that a similar mechanism may be working in prostate cancer to drive tumor development. We are currently testing this idea.

It is our belief that basic research combined with clinical applications provides a powerful approach to understanding human disease. With the new research laboratory building serving as the backdrop to research conducted by world-class scientists working collaboratively, UMMS shows its commitment to fostering liaisons that lead to crucial breakthroughs — breakthroughs that can help relieve heartache on the part of those affected by cancer and other deadly diseases.

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