

Vitae:

The magazine of the University of Massachusetts Medical School

Spring / Summer 19**99** Vol. **21** No. **2**



UNMENTIONABLE, IMMEASURABLE 4

What's new? The name of our magazine,
the tools engineered in-house for faculty surgeons (page 10),
a special alumni section (beginning on page 21), and more!

Vitae: *L., the plural of life*

The new 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

contents:

UNMENTIONABLE, IMMEASURABLE

Her work with medical students and her own writing give a UMMS professor singular insight into grief, bereavement and facing death.

4

8



EVERYBODY'S BUSINESS

New NIH rankings reveal not only UMMS' rank among U.S. medical schools but also the impact of research funding on the campus, the community and the nation.

NEW NEEDS, NEW TOOLS

UMass researchers, their industry partners, and some of the most creative clinicians in medicine are working together to make surgery shorter, scars smaller and stays briefer.



10

14



MED SCHOOL IN A BOX

An intricate process of design, development and innovation results in a new UMMS website that's also a gateway to the wealth of medical information in cyberspace.

2 NEWS & NOTES

17 DEVELOPMENT UPDATE

21 ALUMNI REPORT

29 GRANTS & RESEARCH

32 (not) THE LAST WORD

News & Notes:



For her outstanding student service, **Laurie A. Boyer** receives the first Graduate School of Biomedical Sciences Dean's Award from Dean **Thomas B. Miller Jr., PhD**. He called Boyer, a fifth-year student in biochemistry & molecular biology, "an outstanding student, leader and contributor to the GSBS, the Medical School and the community."

UMMS APPROVED FOR HEART TRANSPLANTS

UMMS and its clinical partner, UMass Memorial, have been granted approval to begin the first Massachusetts cardiac transplant program outside the city of Boston. The approval by the Department of Public Health brings to UMMS the full complement of transplantation services and heralds a new era in health care for central and western Massachusetts.

Surgeons in the division of cardiothoracic surgery expect to be prepared to perform the first transplant this summer. In approving the program for an initial period of one year, the DPH set volume standards for the number of cardiac transplantations to be performed and specified continued active participation in organ donor awareness programs.

GSN IS AMONG 10 NAMED NATIONALLY FOR PARTNERS PROGRAM

The Graduate School of Nursing, together with Worcester's Homeless Outreach Advocacy Program (HOAP), have been selected as one of 10 programs nationally to participate in Partners in Caring and Community, an initiative of "Community-Campus Partnerships for Health" sponsored by the Helene Fuld Health Trust.

As participants, the GSN and HOAP will facilitate the integration of service-learning into the curriculum of nursing education programs, increase the understanding of and support for service-learning in nursing education, and disseminate new knowledge and information about best practices and models in service-learning.

DEANS RECOGNIZE EDUCATIONAL EXCELLENCE

Calling educational excellence "the cornerstone of the campus mission," Chancellor/Dean Aaron Lazare, MD, announced 46 faculty members and students as recipients of the 1999 Educational Recognition Awards this spring. "These awards are made especially meaningful because the honorees are selected by their peers and colleagues," he said, "and I congratulate them all for the commitment each shows to educating the next generation of physicians, scientists and nursing professionals."

Awards and recipients include:

THE LAMAR SOUTTER
AWARD FOR
EXCELLENCE IN
MEDICAL EDUCATION

Barbara F. Banner, MD, a professor of pathology who has been on the UMMS faculty since 1991, and
David M. Clive, MD, associate professor of medicine and faculty member since 1981.

THE GRADUATE SCHOOL
OF BIOMEDICAL
SCIENCES DEAN'S
AWARD

Raymond M. Welsh Jr., PhD, professor of pathology and molecular genetics & microbiology.

THE GRADUATE SCHOOL
OF NURSING DEAN'S
AWARD

Mary K. Alexander, EdD, associate dean and professor, and
Patricia M. Navin, EdD, assistant professor.

PRESIDENTIAL ADVISOR'S LECTURE CELEBRATES BLACK HISTORY MONTH

Henry W. Foster Jr., MD, senior advisor to President Clinton on teen pregnancy reduction and youth issues, presented a talk on "America and Social Justice: The Medical Perspective" as part of UMMS and UMass Memorial's 1999 observance of Black History Month.

Dr. Foster is professor of obstetrics and gynecology at Meharry Medical College, Nashville, and a former senior program consultant to the Robert Wood Johnson Foundation. His work at the foundation, relating to high-risk young people, led to a teen pregnancy reduction program that was recognized as one of President George Bush's "thousand points of light." Earlier in his career, at Tuskegee University, Foster pioneered what has become a national model for regionalized perinatal health care systems.



UMMS AWARDED \$1.4 MILLION TO FUND ENDOSURGERY CENTER

UMMS has received a \$1.4 million grant from the United States Surgical Corporation to fund the University of Massachusetts Endosurgery Telemedicine Center.

Endosurgery — minimally invasive surgery performed through tiny incisions — is being hailed as one of the most revolutionary advances in 20th-century medicine; surgeons can perform major operations with minimal bleeding and reduced risk of complications.

Telemedicine — the use of telecommunications technology to transfer medical information from one site to another — is also a significant teaching tool. The Center is equipped with state-of-the-art audiovisual technology that allows viewers to observe surgical techniques from remote locations, just as if they were beside the surgeon in the operating room.

UMMS RANKS FIFTH IN PRESTIGIOUS REVIEW

UMMS has once again earned high marks for primary care education from *U. S. News & World Report*. In the weekly news magazine's annual review entitled "America's Best Graduate Schools," UMMS ranked fifth, up from eighth last year.

UMMS also debuts this year in *U. S. News & World Report's* list of the 50 best overall medical schools in the nation, coming in at number 41. Rankings of the nation's 124 accredited medical schools and 19 schools of osteopathic medicine are based on measures of academic quality, which are weighted by reputation among medical school faculty and residents, research activity, student selectivity and faculty resources.

SULLIVAN SPEAKS AT MLK OBSERVANCE



Louis W. Sullivan, MD, president of Morehouse School of Medicine and former U. S. Secretary of Health and Human Services, speaks at a spring tribute to the Rev. Dr. Martin Luther King Jr., presented by UMMS and UMass Memorial. Sullivan addressed the topic of "The Challenge of Leadership for Health Professionals in a Diverse Society."

CERVICAL CANCER STUDY CONTRIBUTES TO NEW TREATMENT GUIDELINES

Findings by UMMS researchers that compare different ways of treating cervical cancer are going to change the way the disease is treated, according to an April announcement from the National Institutes of Health (NIH).

The NIH's National Cancer Institute (NCI) advised that strong consideration be given to adding chemotherapy to radiation therapy in the treatment of invasive cervical cancer. Previously, surgery or radiation therapy alone was considered the standard treatment for this form of cancer.

The studies were conducted by the Gynecologic Oncology Group, a multi-institution clinical trial consortium that is one of several NCI-sponsored networks of institutions and physicians that conduct trials jointly using the same protocols. Harrison G. Ball, MD, professor of obstetrics & gynecology at UMMS, was the UMMS site investigator.

Unment

Medical humanities and the arts shape one professor's insight into death and dying throughout history and across cultures.

Sandra Bertman, PhD, is a collector of, among other things, epitaphs — the always brief, often moving, sometimes pithy, inscriptions on gravestones. Other pieces in her collection include slides of paintings and sculptures, photographs, greeting cards, cartoons, video clips from 30 years of television drama and comedy, books of poetry and plays, novels and essays, student drawings and writings, and more.

Dr. Bertman uses all these visual and literary images as catalysts to help future and practicing health care providers explore human

suffering, loss, dying and death — what she calls “the unmentionables and immeasurables” of medicine — for their patients and themselves. Long recognized as a pioneer in the modern field of thanatology — the psychology of death, dying and grief counseling — Bertman is professor of medical humanities in the Department of Medicine and director of UMMS’ program, Medical Humanities and the Arts in Health Care.

From offering elective and “brown bag” seminars, to becoming the founding director of UMMS’ original Program in Medical

Humanities in 1979, her work as a death educator has continued to evolve. She has taught in the School of Medicine and Graduate School of Nursing since the mid-1970s, and is also a faculty member for the New England AIDS Education and Training Center.

Bertman is author of numerous publications, including her acclaimed book, *Facing Death: Images, Insights and Interventions, a Handbook for Educators, Health Care Professionals and Counselors*. For her counseling and group work with patients, she received the all-campus

ionable, immeasurable

Distinguished Professional Public Service Award marking the University of Massachusetts' 125th anniversary. She also played a key role in establishing the Palliative Care Service, originally at UMass Medical Center and now run by the Visiting Nurse Association.

Bertman tirelessly advocates for a human-centered model of care for the dying that is based on the precepts of hospice and palliative care, including therapies that treat the emotional, existential and spiritual aspects of health within mainstream medicine. She believes ongoing nourishment to the clinician's own psyche is

necessary, if one is to provide optimum care while practicing the art as well as the science of medicine. "Nurses and physicians, caretakers of every kind, are dealing with multiple death, losing people they care about all the time," she says. "I was very interested in how physicians' and nurses' own attitudes toward death influenced their interactions with patients."

She found a natural ally in Sandy Marks, DDS, PhD, professor of cell biology and radiology, who also felt strongly that first-year medical students should have support for the dissection experience. Their collaboration

resulted in the course "On Death, Dying and Dissection." Other courses she has created include "Far Worse than the Tumor: Coping with Cancer," "The Language of Grief and the Art of Consolation," "The Handling of Bad News: An Ongoing Dialogue," "The Agonies and Ecstasies of Aging," "Children, Families, and Death," and "The Changing Images of AIDS."

A former dancer and choreographer, Bertman is a lifelong lover of the arts who has drawn upon these worlds in all her professional endeavors. After graduating with a bachelor's in English, she began teaching the



subject in high school. She quickly discovered her love of teaching and went on to earn her master's in education. Later, as she integrated her work as a teacher and thanatologist, Bertman became a licensed social worker and earned a PhD in medical humanities.

Just as she had turned to the visual, dramatic, musical and cinematic arts to teach English, she drew heavily on fiction, narrative and poetry to form a syllabus for her first thanatology course, "Perspectives on Death and Dying." Offered through the Cambridge Center for Adult Education, this course was the first of its kind in the Boston area.

Championing the role of right-brained ways of knowing in scientific mainstream medicine, she believes that the skills involved in therapeutic and aesthetic competency are one and the same: perceptiveness, discrimination, tolerance, empathy and self-awareness. Indeed, balancing intellect with intuition, synthesis with analysis, "is critical thinking and anything but 'new age,'" according to Bertman.

Sandra Bertman, PhD, professor of medical humanities and director of UMMS' program, Medical Humanities and the Arts in Health Care.



Compassion (1894), Edvard Munch. Drypoint and aquatint, 210 x 213 mm. Nasjonalgalleriet, Oslo, Norway. Photograph by Jacques Lathion, Nasjonalgalleriet. (This image from Dr. Bertman's 1991 book, Facing Death: Images, Insights, and Interventions, is reproduced with permission.)

“Since grief is not a cerebral problem but a subjective experience, we understand grief only and entirely as we filter and interpret it through our own experience. Initially it captures us, but we can capture it back and reshape it; and the expressive arts and therapies function beautifully as vehicles to help us reshape grief.” From Sandra L. Bertman's introduction to her latest book, *Grief and The Healing Arts: Creativity As Therapy*

“The experience and events of illness are not black and white. Suffering cannot be resolved with simple answers, platitudes and narrowly applied skills. The paradox of self-knowledge is our capacity to find ourselves by losing ourselves; art encounters are the best way I know to disentangle ourselves from the rote, routine ways of seeing and acting.”

Naturally gifted in the language of art, Bertman has committed herself to demonstrating the way aesthetic, narrative and spiritual competencies can be used to refresh the clinicians' own souls. “I feel strongly that you don't have to be a literary critic or an art historian to interact with a work of art. Being willing to engage is the only prerequisite.”

Discovering the possibilities in caring, and the ways the arts inform our understanding and behaviors, continues to be a joyous challenge for Sandra Bertman. For more than 30 years, she has used her gifts as a teacher and her passion for the arts to help people cope with even the

worst-case scenarios of chronic and terminal illness, aging, disability and death.

Her latest book, *Grief and the Healing Arts: Creativity as Therapy*, is an anthology of stories, expressive therapies and essays, including “On the Nature of Suffering” by UMMS Chancellor/Dean Aaron Lazare, MD. The book's purpose is the same as her own, as she writes in its introduction, “to refuel therapists, counselors, social workers, physicians, nurses, clergy and all others who are committed to providing support to those in grief.”

Bertman is “interested in self-discovery for medical and nursing students. It's important for them to integrate all the wonderful science they're learning with their humanity, and it's a joy to see them respond — I've been very lucky,” she says with a smile. — S L G

Everybody

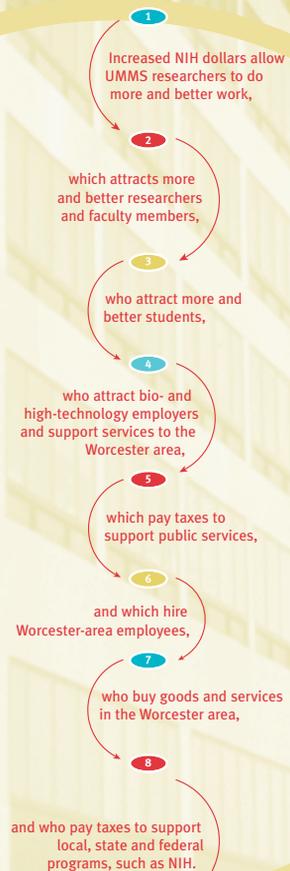
As UMass Medical School rises in

Having opened in 1970, the University of Massachusetts Medical School is still relatively in its infancy. Yet within the span of just 28 years, the school has become a major force in research.

According to the new National Institutes of Health ranking, UMMS now ranks number 41 among the nation's 124 medical schools, having garnered \$52.2 million in research grant awards in FY98. Taken together with sponsorships received from private industry, foundations and other funding sources, UMMS attracted a total of \$92.2 million in research grants for the year.

Research at UMMS has already led to exciting advances in the treatment of disease and injuries, and the future promises many more health care delivery breakthroughs. And while patient application is the ultimate goal of UMMS research, economic spinoff to the surrounding region is a significant and important byproduct.

How does the surrounding Worcester area and central Massachusetts economy benefit when UMass Medical School rises in the NIH rankings? Follow along on the research-fueled economic impact loop:



y's business

the NIH research rankings, so too does the regional economy.

As Mark Roosevelt, president of the Worcester-based Massachusetts Biomedical Initiatives, has said, "University research is increasingly the R&D arm for industry. Having a public university in a position to attract and retain companies is a critical advantage, as we have seen here in Worcester with the alliance of UMass Medical School and Smith + Nephew."

It was just a few years ago that UMMS and Andover-based Smith + Nephew Endoscopy announced an innovative research and development partnership. Facilitated by the University's Office of Commercial Ventures and Intellectual Property, Smith + Nephew's investment of \$3 million in research at UMMS has already resulted in 24 invention disclosures submitted by faculty, 21 patent applications filed, six technologies identified for commercialization and four license agreements (see related story beginning on next page).

Such immediate results and promising prospects for long-term success are what prompted Chancellor/Dean Aaron Lazare, MD, to make research the underpinning of his new vision for the institution.

While UMMS remains as committed as ever to its pursuit of national distinction in education and public service, Lazare asserts that significant growth in research is necessary "to achieve and sustain most aspects of this vision. The NIH is planning a 100-percent increase in funding over the next five years. We will have to double our activity during that time to keep pace with our competitors."

Continually attracting more research dollars makes good economic sense not only for UMass Medical School, notes Lazare, but also is vitally important to ensure that its clinical partner, UMass Memorial Health Care, and the surrounding region continue to thrive. "As UMMS rises in the NIH rankings, Worcester — now ranked 49TH among the top 100 cities receiving NIH support — and all of central Massachusetts will ultimately share in the success." — RJP

GOING UP

UMMS' NIH ranking by **total growth** over the last three years, among 124 medical schools: 12

UMMS' NIH ranking by **rate of growth** over the last three years, among 124 medical schools: 2

YEAR	NATIONAL RANK	NUMBER OF RESEARCH GRANTS	\$ (in millions)
1994	46	141	35.4
1995	47	143	35.2
1996	43	155	43.4
1997	42	190	49.2
1998	41	201	52.2

REWARDS REAPED

Over the past 10 years, UMass Medical School has grown its National Institutes of Health research funding by **78 percent**. Above are the last five years' results.

new **Noeds!**



By combining the small incisions of minimally-invasive surgery with the sensory skill of the surgeon's hand, HandPort, invented at UMMS, will change forever the way surgeons work.

new Tools!



“Commercially viable” is not a term that most would associate with academic research. Yet, over the last several years, as competition for federal research dollars has increased, academia has turned to industry to sponsor not only lifesaving research, but also marketable products.

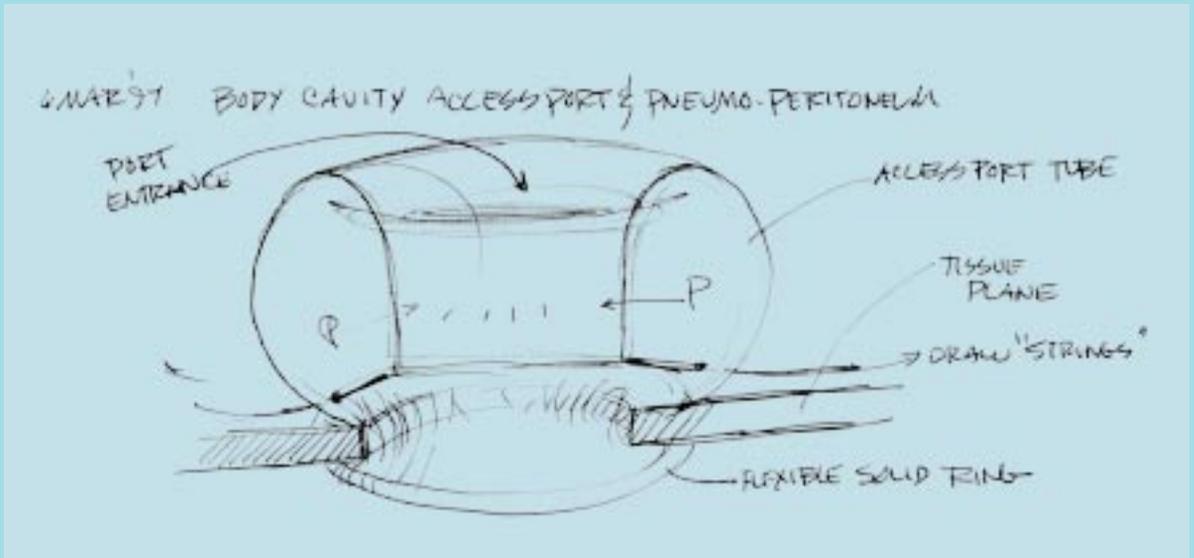
UMMS is no exception. In fact, its relationship with Andover-based Smith + Nephew Endoscopy is unique. The collaboration — established in 1995 as the UMass/Smith + Nephew Center for Research in Endoscopic Surgery — is redefining the way surgery is performed by pairing the clinical expertise of the surgeon with the problem-solving capabilities of the engineer.

H. Brownell Wheeler, MD, professor and founding chair of surgery at UMMS, was a key figure

in launching the Center and now is its administrative director. “It’s difficult to acquire research dollars for medical devices,” he explains. “This research requires collaboration with engineers and machine shops in order to prepare device prototypes. With this partnership, Smith + Nephew supplies the professional manufacturing and engineering expertise as well as the dollars.”

The UMass/Smith + Nephew Center employs a team of surgeons and four full-time engineers who work together to create innovative solutions to surgical problems. UMass provides the clinical facilities and physicians, Smith + Nephew the engineers and financial support.

“I don’t know of any other medical school that has invited full-time, corporate staff into its facilities to foster daily interaction,” says Wheeler.



Biomedical engineers make ideas into tools; sketches like these bridge the inventor's conception and the world of the reproducible, solving intricate problems along the way.

“By providing surgeons and engineers with a means to collaborate on a day-to-day basis, the UMass/Smith + Nephew Center allows viable ideas for new products to be formulated rapidly.”

Take cardiac bypass surgery. Every physician knows that complications and difficulties in post-surgical rehabilitation often result from two necessities of heart surgery: cardiopulmonary bypass, which permits the surgeon to stop the beating heart in order to stitch the bypass grafts onto the coronary arteries, and the large chest incision through which the surgeon must work. Inventions under development like the retractor pictured on page 13 can make those “necessities” unnecessary for many patients – a slotted “foot” holds the beating heart while the surgeon stitches the graft, eliminating the need for cardiopulmonary bypass. The adjustable paddles of the retractor permit a smaller incision. Who would’ve thought? UMMS surgical researchers and the biomedical engineers at the Smith + Nephew Center.

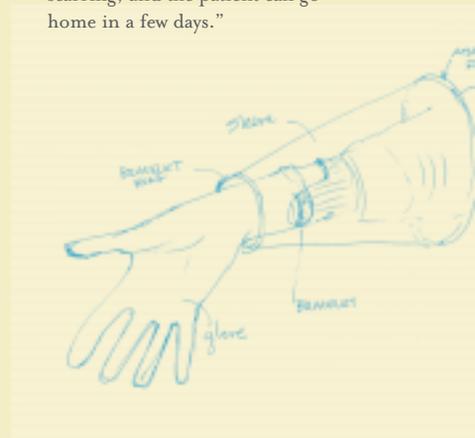
The real innovation is this: Engineers in close proximity with surgeons offer UMass and Smith + Nephew the luxury of developing products and creating prototypes in weeks rather than months, expediting the manufacture, as well as the regulatory and legal approvals needed to market an invention.

For example, HandPort, the Center’s first success, evolved from initial concept to marketed product in less than two years. Designed to facilitate laparoscopic surgery by allowing the surgeon to “get a hand in” to the endoscopic site, HandPort was suggested by William C. Meyers, MD, professor of surgery and Wheeler’s successor as chair. Demetrius Litwin, MD, associate professor of surgery and medical director of the UMass/Smith + Nephew Center, advanced the device through clinical development.

Using roughly a seven-centimeter incision (the breadth of the surgeon’s palm), the base retractor of the device is attached to the skin and abdominal wall of the patient forming an air-tight seal. The surgeon places his hand in a plastic sleeve that attaches to a bracelet secured on the surgeon’s wrist.

The hand is then introduced into the incision and the wide end of the sleeve is attached to the base retractor. The surgeon now can use his hand to palpate an organ, dissect, or compress a bleeding vessel.

“HandPort gives surgeons a tactile sensation, allowing them, for example, to pick up additional lesions or fibroids on tissue not seen when performing exclusively laparoscopically,” Meyers says. “In addition, patients on whom HandPort is used act more like they have undergone a purely laparoscopic procedure — they have less pain than an open procedure. Cosmetically, there is also less scarring, and the patient can go home in a few days.”





This retractor plays a key role in another type of minimally-invasive surgery: The “foot” in the center of the device holds the beating heart at bay while the cardiac surgeon sews a bypass graft.

When he arrived at UMass, Meyers — who was involved in collaborations with industry while at Duke University — pitched Smith + Nephew the concept of HandPort’s plastic sleeve, as well as a method of getting instruments onto the surgeon’s hand. Engineers Steven Ek, Richard Beane and Allison Niemann, UMMS’ onsite design team, were armed and ready to take on the engineering challenge. At the same time, Meyers persuaded Litwin to join the surgical staff and become the Center’s medical director, adding Litwin’s international reputation as a leading surgeon in minimally-invasive procedures to the credibility of products developed by the Center.

HandPort has been available in Europe since last fall and in Canada since February. In the U.S., information from a feasibility study — in which 40 surgeons nationwide acted as investigators — was compiled and submitted last winter to the FDA, which granted its approval in April.

“The feasibility study allowed the physicians to use HandPort for any type of operation they thought appropriate,” says Meyers. “Many surgeons selected procedures that had not previously been done laparoscopically, such as difficult cancer operations and organ removal and transplant procedures, to gauge the full potential of the product.”

Both Meyers and Litwin have developed courses and conferences where HandPort has been used. In mid-February, a kidney transplant surgery performed by Litwin was transmitted live to 300 surgeons at a site in Florida. “The surgeons were wowed by what could be done with HandPort,” Meyers says. “Enthusiasm from both general and endoscopic surgeons is widespread.”

The Center has also created a website, www.sncenter.com, which is a great tool for surgeons worldwide. In addition to written tutorials, video is available of actual procedures using the device.

Since July 1998, when the website came online, hits have been identified from 50 different countries, with surgeons enthusiastically communicating their results with the product.

What does the future hold for HandPort and the UMass/Smith + Nephew Center? Meyers surmises that future generations of HandPort may be marketed, but calls the premier concept “pretty near perfect.” He says that a number of new instruments are in the works that relate to HandPort, as well as some instrumentation concepts in other specialty areas of endoscopic surgery.

Wheeler confirms that more products are in the works, adding, “The beauty of the whole experience is that it’s a win-win situation. If Smith + Nephew’s products sell well, the University gets royalties as well as funding for more research, and the company gets the profits. Most importantly, however, the patient gets better care from the technology developed.” — L C B

Med School in a



BOX

How do you fit a medical school inside a computer? You might find the answer at www.umassmed.edu, UMass Medical School's new website. As a result of its great content, innovative design and easy-to-use features, the site is fast becoming a virtual medical community serving UMMS students, faculty, alumni and the community at large.

No website can be successful if it doesn't contain material that people need. And the new UMMS site seems to have something for everyone. For prospective and current students, the new site makes class selection and course registration a breeze. Students can learn about academic departments and view course descriptions online, as well as register for classes, download class materials, e-mail their professors and discuss assignments with peers through newsgroups or chat rooms.

For faculty, the site offers interesting new angles on teaching and allows them to adapt to the same changing technology environment as their students. "The web is fast becoming a supplement to teaching," says Anthony Carruthers, PhD, professor and interim chair of biochemistry & molecular biology, who represented the faculty perspective on the committee planning the UMMS site. "I started my own website years ago to store lecture notes for medical and graduate students. Now I am finding that students in my biochemistry class will go to the course laboratory page, download biochemistry handouts and then discuss the materials with each other."

Carruthers believes his students have been eager to integrate the computer and the web into their medical studies for some time. "I recall a few years ago I asked my graduate students to graph something. I handed out graph paper and they didn't know how to use it. But they knew how to use computer graphing programs! I think the same trend toward electronic teaching tools, via the web, is already here."

The UMMS site also acts as a gateway to the wealth of information in cyberspace, making it possible to do important research without a trip to the library. Through the site, members of the UMMS community can set up Medline accounts, conduct literature searches at any UMass library, read scholarly journals, check out research at the National Institutes of Health and other research institutes or find the latest international research in a given discipline.

"How many times have I gone to the library to discover the journal I want is checked out? Now," says Carruthers, "if I log onto the website, I can always access the journal right on my computer screen." In addition, the site contains a seminar and event database with up-to-the-minute information about department-sponsored research symposia, panels, seminars and other events.

The site also provides unique opportunities for UMMS to further the goals of its public service projects, such as the New England Newborn Screening Program (Jamaica Plain campus). Among other things, the web pages allow the program to provide comprehensive information on newborn screening online — and the ability for parents to download it in up to eight different languages.

"We've received positive feedback from parents, hospitals, laboratories, oversight agencies and the Massachusetts Department of Public Health," says Deputy Assistant Vice Chancellor John Munies. "Our program is a great example of how the website can supplement the printed material we disseminate to parents."

But all this great material isn't any good unless it is put in a form that is accessible and easy to use. And creating a website that is easy to use is no easy task. It took six months of planning, involved various constituencies throughout the campus, a dedicated Information Services Department spearheaded by Ralph Zottola, PhD '95, UMMS' director of academic computing, and careful balancing of benefits, needs and capabilities.

Although the site is new, Zottola has a long history of running websites at UMMS. As a graduate student, he ran one of the school's first sites off his personal computer; now, he's a little bemused to find himself helping to create his alma mater's showcase site. Under his leadership, the UMMS webmasters have built an infrastructure that took into account all the current campus needs and has the flexibility to add projects and components over time.

"We were lucky to have a commitment from UMass to get the new site off the ground," says Zottola. That commitment translated into powerful servers, a high-speed network, support for users to develop the actual web pages, and powerful desktop computers throughout the campus so that people could access the site. "Our goal was to create a new and better site that was easy to navigate, visually appealing, and flexible enough to add pages as other members of the campus community wanted to get on board," he explains.

As good as the site is now, improvements and enhancements are already in the works. Zottola and his webmasters are planning a virtual alumni network, which would enable graduates to connect with classmates and

professors via the website. Alumni features will include class note pages, reunion information and a calendar of alumni events. Plus, the team has only begun to tap the capacity of the new network and servers. "By housing our own servers," Zottola notes, "we will have the capacity to let anyone in the UMMS community put up their own web page on the site, start a newsgroup or set up chat room discussions."

Most of all, the website's developers want it used often. As Zottola puts it, "We hope more and more members of

the community will bookmark the new site so that it can become a useful communication, educational and research tool for the entire UMass Medical School community." — WL



Development Update:

MAJOR CAPITAL CAMPAIGN BEING PLANNED

The Office of Development is in the early stages of planning a major, multi-faceted capital campaign that will support and advance the strategic priorities of both the UMMS academic system and the UMass Memorial clinical system. While the details of the campaign have not been finalized, some of the priorities it will address are:

DEVELOPMENT MOVES TO FOUR BIOTECH

The Office of Development recently moved its offices from the University campus to Four Biotech, across the street in the Massachusetts Biotechnology Park. Located on the third floor of Four Biotech, the new suite of offices has enabled the department to consolidate its program in one area. The new address is: Office of Development, University of Massachusetts Medical School, Four Biotech, Suite 315, 377 Plantation Street, Worcester, MA 01605. The main telephone number, (508) 856-5520, and staff extensions remain the same.

Construction of a major research building on the University campus:

The 300,000-square-foot structure will house a number of basic science programs, the Cancer Center and other research programs still to be identified. The new facility will allow UMMS to markedly increase its research capacity and productivity, in keeping with Chancellor/Dean Aaron Lazare's goal for the Medical School to become one of the top research institutions in the U.S.

Three strategic clinical initiatives to enhance the quality of care at UMass Memorial:

The creation of a new ambulatory surgery center at the Hahnemann campus, a state-of-the-art cardiac catheterization center on the University campus, and a new Women's Center/ Comprehensive Breast Center to be located at 67 Belmont Street.

A substantial increase in the current number of endowed professorships and chairs at UMMS:

These endowments support faculty engaged in cutting-edge research and clinical care. They also are important resources in recruitment of nationally prominent researchers and clinicians.

REAL ESTATE GIFT SUPPORTS NEUROPSYCHIATRIC INSTITUTE

Grateful to LifeFlight and University campus for treating his heart ailment three years ago, Robert Nelson has donated his New Salem home and 20 acres of former farmland to the Brudnick Neuropsychiatric Research Institute at UMMS, now under construction on the Worcester State Hospital grounds. With no children or heirs, Mr. Nelson decided to donate unitrust funds from the sale of his property to the Institute in honor of his brother, who died of complications from Parkinson's disease.

In addition to his own home, originally bought by his father and relocated to New Salem to make way for the Quabbin Reservoir, the gift includes his late sister's house on the same property.

Noting that he hadn't seen a doctor from the time he served in World War II until he experienced heart trouble at age 77, Nelson says he wishes to give back to the hospital because he considers each day of life as a gift.

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.



At check presentation creating the H. Brownell Wheeler, MD, Distinguished Lectureship are, from left, Hooks Johnston, vice president of Smith + Nephew Endoscopy; William Meyers, MD, UMMS professor and chair of surgery; Ron Sparks, president of Smith + Nephew; Richard Stanton, UMMS deputy chancellor for finance and administration; and Dr. Wheeler.

SMITH + NEPHEW SUPPORTS WHEELER LECTURESHIP

Andover-based Smith + Nephew Endoscopy, maker of minimally invasive surgical equipment, has donated \$50,000 to the campaign to create the H. Brownell Wheeler, MD, Distinguished Lectureship. Dr. Wheeler is professor and founding chair of surgery at UMMS.

Last winter, Smith + Nephew donated \$1.4 million to support research and development at the UMMS/Smith + Nephew Center for Research in Endoscopic Surgery based at UMMS (see story on page 10). Wheeler is administrative director of the Center, which is investigating new, minimally invasive techniques to improve surgical procedures, as well as reduce pain and recovery time for patients.

Fondly referred to as "Brownie" by many, Wheeler has been a mentor and teacher to hundreds of students and residents over the years. Notes Aaron Lazare, MD, UMMS chancellor and dean, "He has always emphasized the compassionate, human side of medical practice, as well as its science. An ongoing educational

program in his honor is an appropriate way of expressing our gratitude for his many years of distinguished service."

Born in Louisville, Kentucky, in 1929, Wheeler attended Vanderbilt University and graduated from Harvard Medical School in 1952. After surgical training in Boston and London, he joined the Harvard faculty and surgical staff of Peter Bent Brigham Hospital. He also served as chief of surgery and chief of staff at West Roxbury Veterans Administration Hospital.

In 1964, he was recruited as the school's first faculty member by UMMS Founding Dean Lamar Soutter. Wheeler next served as chief of surgery at Saint Vincent Hospital in Worcester until UMass Hospital opened in 1976.

The founder and executive director of the Center for Advanced Clinical Technology at UMMS — it matches industry and resources with academic expertise to improve patient care — Wheeler also serves in several national leadership and local voluntary capacities. Among them,

he is a trustee of the Worcester Foundation for Biomedical Research (now part of UMMS), trustee and chair of the advisory board of the Hospice of Central Massachusetts, and founding chair of the Worcester District Medical Society Committee to Improve End-of-Life Care.

Wheeler's colleagues have joined his friends, former students, former patients and family to commemorate his exceptional career. Their goal is to build an endowment to support the H. Brownell Wheeler, MD, Distinguished Lectureship. Each year, an internationally known surgeon will serve as the H. Brownell Wheeler, MD, Visiting Professor. The honored individual will conduct an intensive three-day educational program for faculty and students, including formal presentations and informal discussions of clinical challenges.

The lecture will present a broad overview of a major topic in health care, including humanistic themes so important to Wheeler, as well as scientific advances. Additionally, UMass residents and research fellows will have the opportunity to present and discuss their recent clinical and basic research projects. The interested lay public will be invited to attend and learn more about the art and science of medicine.

To learn more about the Lectureship, or to make a tax-deductible contribution, please call Laura Zickell at (508) 792-8056.

DATA GENERAL GIVES 'VIRTUAL' SERVER FOR ONLINE CURRICULUM

Data General Corporation has donated a \$57,000 computer server to provide the infrastructure and capacity for a new, online Curriculum Resource Center at UMMS. The "virtual medical school" provides course overviews on the UMMS website, designed for use by students, alumni and faculty, but available to anyone who has Internet access (*see story on page 14*). The online curriculum supplements and reinforces actual classroom instruction, and includes text and high-resolution photos and slides.

The company, whose employees utilize UMass Memorial in large numbers, provided UMMS with the new server as a good-will gesture from a corporate citizen of central Massachusetts. Because Data General serves the information technology needs of 25 percent of U.S. and Canadian hospitals, many doctors, nurses and professionals are already encountering its medical information technology. The computer server will supplement those services at UMMS.

'LABOR DAY WALK TO CURE CANCER'

The UMass Cancer Center and the Massachusetts AFL-CIO (American Federation of Labor — Council of Industry Organizations) are gearing up for a fundraising Labor Day Walk to Cure Cancer, to be held September 6 on the University campus. With the backing of the 400,000-member labor organization, the first annual walk promises to raise substantial funds to combat cancer.

The AFL-CIO has pledged to raise \$5 million over the next five years to help construct a new research building, which will house the Cancer Center's research laboratories. A June breakfast at Worcester's Centrum Centre is planned to rally community members to join AFL-CIO volunteers, UMass Memorial and UMMS employees in the walk.

The walk has already attracted three chief AFL-CIO sponsors: the American Federation of State, County and Municipal Employees, AFSCME-SHARE (State Healthcare and Research Employees), of UMass Memorial; the IBEW Local 1505 (International Brotherhood of Electrical Workers); and Mail Handlers Local 301. Mark Cummings, director of development for the Cancer Center, says the goal of the first annual Labor Day Walk is to attract a minimum of 5,000 walkers.

The AFL-CIO leadership was first drawn to assist the Cancer Center when Dan Manning Sr., former director of Public Safety at UMass Worcester and a friend of AFL-CIO President Robert Haynes, fell victim to cancer in 1996. Two years earlier, Dan and his wife, Dottie, had established the Our Danny Cancer Fund at the Cancer Center to benefit cancer research and treatment after their son, Danny Jr., died of leukemia.

To donate or participate in the AFL-CIO Labor Day Walk to Cure Cancer, please call the Cancer Center at (508) 856-1318.

CLINTON HOSPITAL RECEIVES NYPRO GIFT

The Clinton Hospital Foundation's capital campaign has received a cornerstone gift of \$100,000 from Nypro Inc., a precision plastics injection molding company in Clinton. To be distributed over five years, the Nypro funds will be applied to construction costs of Clinton Hospital's major addition and renovation project, now underway.

The 108-year-old hospital's three-story, 30,000-square-foot addition will house a new ambulatory care center, outpatient surgery center, rehabilitation and occupational health center, Women's Health Center with a new mammography unit, physician offices, visitor's lobby and gift shop. With the addition slated for completion this summer, renovation of the existing inpatient floor will continue through the fall.

Overall, the goals of the \$5.5 million capital project are to provide centralized outpatient services in an attractive setting that's both efficient and convenient, consolidate physician offices into one location, and update the hospital's infrastructure and facilities.

According to Charles Guida, director of development for UMass Memorial members Clinton and Marlborough hospitals, Nypro president Gordon Lankton "is tremendously dedicated to Clinton Hospital and the Clinton area. He has kept Nypro's headquarters in Clinton, as well as its manufacturing, and he provides significant jobs and opportunities to area residents."

Says Lankton, "As a former hospital board member, and with 1,100 employees in Clinton, I always have felt that we need a strong hospital in Clinton." Further attesting to Nypro's commitment, Peter Marshall, executive assistant to the president and director of external affairs, serves on the hospital foundation's board of directors.

Development Update:

ROSE FAMILY SUPPORTS DIABETES RESEARCH

William "Bill" Rose, former owner of The Fair department stores, has pledged \$100,000 over five years to support the innovative diabetes research of Aldo Rossini, MD, professor of medicine and director of the Division of Diabetes at UMMS. As part of the gift, Dr. Rossini's suite of offices at Two Biotech has been named in honor of Rose's parents, Ralph and Shirley, as indicated on a plaque at the suite entrance.

Dr. Rossini has attracted international attention for his expertise in pancreas cell transplantation, immune system response to such transplants and the immunological basis for organ rejection. In the laboratory, he has shown that insulin-producing pancreatic islets can be transplanted without using anti-rejection drugs, which carry the risk of serious side effects. Pending FDA approval, he will soon begin human therapy trials.

Rose's sister, Diane Cartegenova, co-owner of Arturo's Ristorante, is supporting Dr. Rossini's research in another way: The popular Worcester restaurant will host a series of dinners as public awareness events during National Diabetes Month in November. *For more information, call the Development Office at (508) 856-5520.*

NEW APPOINTMENTS

Three new professionals recently joined the Office of Development, reflecting the department's commitment to increase and diversify its fundraising activities to support the initiatives of UMMS and UMass Memorial:



LYNDA S. RIVARD has been named director of development systems. The Douglas resident comes to UMMS from Harvard Law School, where she was computer coordinator in its development office for 10 years. At UMMS, Rivard is responsible for the development, implementation, and oversight of computer systems and technology to support fundraising activities. In addition, she oversees the office's operating budget, manages the administrative and technical staff and coordinates special events.



PAT BARTRAM has been appointed both director of development for biomedical research and director of development for the Worcester Foundation for Biomedical Research. A native of Shrewsbury and resident of Boylston, Bartram was previously director of major gifts at the Joslin Diabetes Center in Boston. She is charged with raising private support for basic research. A priority of Bartram's is to serve as capital campaign director for the new 300,000-square-foot research facility to be built on the University campus.



JENIQUE RADIN has been named director of development for the Department of Pediatrics and the Children's Medical Center. The Worcester resident was formerly associate director of alumni and development at Bancroft School in Worcester. At UMMS and UMass Memorial, Radin will be responsible for securing funding and developing collateral material to support the programs and initiatives of both the Department of Pediatrics and the Children's Medical Center.

Alumni Report:



A MESSAGE FROM THE CHANCELLOR/DEAN

I am pleased to introduce this new, expanded alumni section. I hope you will find the feature stories and news of your classmates interesting, informative and — most important — worth your time.

As I approach the end of the first decade of my tenure as Dean, I cannot help but look around me at all that is happening and take pause. In the last year alone, this institution has made an astounding leap forward — and it is my expectation that you will share in the pride I feel as you learn more about our recent achievements.

It goes without saying that our graduates are the building blocks on which this great campus was founded. We are fast emerging as a leadership institution in health professional training, research and community service. We have learned that one key to success as an academic health center is the melding of excellence in clinical training with national distinction in research. The intersection of these two elements — teaching and research — has helped to foster an air of intellectual energy. Students from our three schools work in close proximity to basic science researchers and clinical experts. At the same time, UMMS and its clinical partner, UMass Memorial, continue to collaborate in achieving the gold standard in health science and medical education, patient care and innovative treatment.

Success attracts success. As our national reputation grows, we are able to retain and recruit outstanding faculty. We have long been known for promoting innovative classroom techniques and supporting multi-disciplinary research. We are also blessed with a creative and visionary administration and an unusually talented student body with a strong passion for community service.

If you have not seen a map of the Worcester “campus” recently, you are in for a surprise. In the past few years, we have purchased two buildings in the adjacent Biotechnology Park, primarily to expand our research laboratories. We also lease a good part of a third building there for the same purpose. Last year, after our merger with the Worcester Foundation for Biomedical Research, we converted its Shrewsbury campus into multiple research and training uses, as well as a center for continuing education programs. At about the same time, the commonwealth asked us to take over the Massachusetts Biological Laboratories and the New England Newborn Screening Program in Jamaica Plain.

This fall, we will dedicate our new neuroscience institute on the Worcester State Hospital campus. And some few months beyond that, girders will rise, marking the site of our new 300,000-square-foot research building — to be dedicated in the year 2001.

Within the original building, some of you may not have seen our Goff Learning Center, which augments the three amphitheatres most familiar to you with two smaller amphitheatres and a number of intimate breakout rooms. There is more, and I will share details of these and other changes in a report on campus achievements to be mailed in the fall. As always, I invite your comments and suggestions. I would like this message to spark the beginning of a stimulating and ongoing dialogue. Even more important — come back and visit! I look forward to showing you around.

Aaron Lazare, MD, Chancellor and Dean

A ROOFTOP FOR WOMEN

When women talk, Barbara Ciak, MD '79, listens. So, as medical director of the one-year-old Women's Pavilion at Milford-Whitinsville Regional Hospital, she plans to make sure the facility pays attention to what women are saying. And she has definite ideas about what else she wants to accomplish in Milford, where she first practiced after completing her ob/gyn residency in Worcester.



Barbara Ciak, MD '79

"It was sort of like coming home again," says Ciak, who — after 11 years with an ob/gyn group in Framingham — returned to Milford to develop the facility because "the need is there. The whole issue of women's health is addressing a growing need. As this large volume of baby boomers age and become menopausal, they find themselves having to consider the issue of using estrogen. We need to focus on their quality of life and length of life."

The MWRH pavilion serves a dozen towns near Milford and southward to the Rhode Island border. Dr. Ciak believes that more women in the area's "exploding" population will be drawn to the UMass Memorial affiliate's expanded pavilion, which now occupies a kind of "penthouse" addition on top of the hospital. And when they do visit, she asserts, "they'll know they're being heard!"

For example, a patient who comes in with a breast lump can have a tissue sample taken by the end of the day. The goal is to have a diagnosis for her in 24 hours, to avoid what Ciak calls the torture of waiting. Radiologists and surgeons have been trained in the latest diagnostic equipment, including a stereotactic device that precisely locates a breast lesion revealed by a mammogram. If the patient is a candidate for this procedure, it produces a three-dimensional image with guided sampling that eliminates the need for an uncomfortable needle-localization procedure. And if the lump is malignant, the pavilion brings together all physicians, including subspecialists, for discussion with the patient and her family.

A breast cancer patient herself five years ago, Ciak says the pavilion monitors patients with heart disease and bone loss, as well as those with breast and gynecological cancer. Physician suites and procedure rooms also accommodate specialists in reproductive endocrinology/infertility, perinatology and general surgery.

Besides breast health, Ciak's particular interest is natural hormone therapy: "I've become very frustrated with the standard estrogen replacement therapies. The more we're learning, the more confusing it becomes. I spend a lot of time on hormonal issues — whether or not to take them."

Her involvement with every pavilion patient's case has meant "a dramatic increase in homework" for Ciak, but "it's a good problem to have — my finger's on the pulse of every patient, and it better not slip!" — J H M

'The whole issue of women's health is addressing a growing need. We need to focus on their quality of life and length of life.'

HIS LIFE'S WORK

In search of a research project to complete his undergraduate degree at Worcester Polytechnic Institute in the mid-1970s, Bruce D. Minsky called a professor of biochemistry and molecular biology at UMMS. It was the start of a mentoring relationship — and friendship — that exists to this day.

Frank Chlapowski, PhD, the professor he called, remembers Minsky's "tremendous enthusiasm for biomedical research and science...it was a natural alliance. He started working in my lab, as an undergraduate, on how the membrane works in the urinary bladder. He continued to work with me during medical school and actually solved the problem."

Minsky's enthusiasm for his work has not abated. The 1982 UMMS graduate is now an attending radiation oncologist and chair of institutional quality assessment at Memorial-Sloan Kettering Cancer Center. He is also a professor of radiation oncology at Cornell University Medical College.

If that weren't enough, he continues to conduct clinical research on various aspects of cancer management, including Phase III clinical trials for the National Cancer Institute. He serves on a half-dozen editorial boards and no fewer than 17 national committees, publishes extensively, and combines his love of travel with a robust lecture schedule.

A recent talk on his work with cancer patients attracted a standing-room-only audience at UMass Memorial. "I'm extremely lucky to be in a position of doing what I love to do, to have a career I truly enjoy," says Minsky of his life's work. "And each area I'm involved in complements the other. It can be extremely difficult to work with cancer patients, but I do get involved with my patients. Even when a patient has incurable cancer and all I can do is listen to his fears, that's still a service we can provide as doctors. And I design clinical trials developing new therapies, because it's a way to contribute and push the field forward, so that a few years down the line patients might have better outcomes."

Minsky is "one of those rare individuals who combines good science with being a practicing MD," says Chlapowski. "That's difficult to do these days. He's highly regarded . . . one of the few leaders in his field. He also manages to keep his wonderful sense of humor."

"Working with cancer patients has taught me to appreciate life," says Minsky. "I live every day with the philosophy that if tomorrow were my last day, I could look back and say I'd do it the same way all over again." — R H



Bruce D. Minsky, MD '82

'I'm extremely lucky to be in a position of doing what I love to do, to have a career I truly enjoy.'

THOSE 'AHA!' MOMENTS



Diana Bergin, MS, RNC, ANP/ACNP '89

"So many of the elements of nursing practice have changed since I left Peter Bent Brigham [now Brigham & Women's Hospital] 30 years ago as a diploma registered nurse," says Diana Bergin, MS, RNC, ANP/ACNP.

"To keep pace with the changes — and because so many more creative avenues of practice had opened to nurse practitioners — I chose to return to school." Bergin earned her master's from the UMass Graduate School of Nursing in 1989 and joined the former UMass Medical Center as a nurse practitioner in Family Health Services. In 1997, Bergin also joined the faculty of GSN as a part-time clinical instructor.

"It's the best of both worlds," she says of her dual roles. "Family Health Services grounds my practice — I'm able to assess, diagnose, treat and monitor patients, as well as provide the latest research information that may affect their course of treatment.

"Through teaching, I have the opportunity to mentor students from diverse backgrounds, and they contribute their talents to a profession that's constantly evolving," she continues. "It's challenging and refreshing to monitor their progress from doing a simple patient history and physical in the first semester, to managing a patient with multiple health care and educational needs by their last semester.

"And I really enjoy watching students experience an 'aha' moment," Bergin adds. "That's when a patient, an instructor or a manager serendipitously teaches them an important life lesson and it just *clicks*. You see it in their faces...and this newfound knowledge becomes incorporated into their practice."

Bergin has leveraged her education and experience to create her own "aha!" moments by taking advantage of the many creative avenues of practice she's found available to her as a nurse practitioner. "What other profession could have given me the opportunity to run a hypertension screening program in industry — funded by the Department of Public Health? It continues today as an occupational medicine service for community businesses. Or to take the first certifying exam for diabetes nurse educators? That enabled me to work shoulder-to-shoulder with endocrinologists who are making extraordinary strides in managing diabetes and thyroid disorders."

Recently, she participated in a review of diabetes management and insulin administration protocols for the special population served by the state's Department of Mental Retardation. "It's work like this that fosters a solid standard of care, promotes access and individualized attention to health care issues, and allows people to maintain their independence and dignity," Bergin asserts. "That's what nursing is all about...that, and the next opportunity for an 'aha' moment!" — R H

'And I really enjoy watching students experience an 'aha!' moment. That's when a patient, an instructor or a manager serendipitously teaches them an important life lesson and it just *clicks*.'

Class Notes:

1977

Gordon Saperia, MD, has been appointed associate professor of clinical medicine at UMMS.

1978

George Burke, MD, a transplant surgeon at Jackson Memorial Hospital in Miami, was recently named to the editorial board of *Transplantation*.

1979

Anne Arey, MD, at Kaiser Permanente in Kansas City for eight years, is chief of family practice there. She has one daughter, Kelsey (14), "a midwest native who thinks of Boston as 'back east.'"

Brian Battista, MD, is part of a multi-specialty group in Weymouth called Harbor Medical Associates. He had a visit from Chris Jordan in September and reports he "looked great."

Husband and wife Chris Jordan, MD, and Elaine Kubota, MD, are alive and well in Tacoma. Elaine is president of Allenmore Anesthesia Associates this year, and Chris is doing lots of general surgery.

Doug Levine, MD, joined Astra Merck in 1997 as director of clinical research/gastrointestinal. His wife, Barbara, has become director of gerontological nursing at the University of Pennsylvania Health System.

Elizabeth Regan, MD, has two daughters: Katie (6) and Melissa (4). She is regional chief of orthopedics for Kaiser in Denver. Her husband, George, continues to work as a system engineer and gets a kick out of taking his girls to ski and hike.

Mary Beth Weathersby, MD, placed sixth at the 1998 Head of the Charles Regatta, in Women's Senior Masters singles, after assessment of 30 seconds in buoy violations... "It was a sudden gust of wind, sirs, my apologies."

James Whynot, MD, has been promoted to vice president, medical policy and assessment, at Private Healthcare Systems, a national medical management company.

1980

Robert Atkins, MD, and his wife, Naomi (Sheiman), have two children: Jonathan (10) and Zachary (4). They moved to Philadelphia 10 years ago in search of career advancement and "a better major league baseball team...OK - how about just career advancement?" Robert is now assistant professor at Temple University School of Medicine and author of "Selected Medical Complications of Anesthesia" in *Merli & Weitz's Medical Management of the Surgical Patient*.

Joel Pessa, MD, is director of the cleft lip program at the University of Texas Health Sciences Center in San Antonio.

John Pippin, MD, established a new cardiovascular medicine department at the Cooper Clinic in Dallas. He arrived in Texas in early 1998 after six years in Tulsa as director of nuclear cardiology and director of cardiovascular research at Hillcrest Medical Center.

1981

Federico Gonzalez, MD, is leaving academic practice at the University of Kansas Medical Center to go into private practice in the Kansas City area.

1982

Brian Dempsey, MD, has joined the staff of Berkshire Physicians and Surgeons specializing in pediatric and adolescent medicine.

Gregory McSweeney, MD, has been named vice president of medical affairs at Carney 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. 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!"

1983

Spencer Amesbury, MD, has been appointed director of geriatric services at the Beverly Hospital family practice residency program.

Jerry Gurwitz, MD, has been named full professor of medicine at UMMS.

1984

Lori Circeo, MD, practices anesthesiology at Baystate Medical Center and has two children, Ian Lewis (4) and Katharine Lewis (1).

Jay Daly, MD, moved to North Cumberland Memorial Hospital in Maine in 1997 and is the father of two girls (2 1/2 and newborn).

Pamela Hoyt, MD, has been named associate professor of psychiatry at UMMS.

David Lovett, MD, specializes in medical oncology/hematology at Cape & Islands Regional Cancer Center in Hyannis. He is married to Kathleen Dietz-Lovett, who just completed her NP program at Mass General. He writes, "We have two beautiful children, Kathryn (5) and Christopher (2)."

1985

Diane Kaufman, MD, and David Gitlin, MD, wrote, "Diane left Harvard Community Health Plan/Harvard Vanguard Medical Associates last August after working there the past nine years. She has joined a practice affiliated with Beth Israel Deaconess Medical Center in Chestnut Hill. Dave is still at UMass working as director of consultation psychiatry and an associate professor in both psychiatry and family medicine & community health."

Alison Solle, MD, practices internal medicine in southern New Hampshire. She and her husband, Gary, have two children, Jason (11) and Sara (7). Alison wrote, "Please call or stop by if you're in the area. We're right on the way to the Maine/New Hampshire seacoast or the White Mountains."

1986

Mark Goldberg, MD, is vice president of Parexel International Corp. and currently directs Parexel's newly created Advanced Technology Group.

Susan Lynch, MD, wrote, "After much deliberation, I have left my pediatric practice at the Lahey-Hitchcock Clinic and am now reflecting on my future career in medicine. I was experiencing tremendous frustration trying to practice primary care in today's climate of patient-unfriendly medicine. I have become more active on boards of several health-related and other community organizations such as the New Hampshire District Council, which has recently developed a long-range health plan for New Hampshire, and Today's Parent, a new statewide parenting television show. This work is very gratifying." Susan lives in Hopkinton with her husband, John, and children, Jacqueline (12), Julia (9) and Hayden (6).

1987

Mary Czymbor, MD, is pleased to announce a recent addition to the family: Benjamin Lyons Mahon, born 5-31-98. He joins brother, Miles (3), Mary and husband, Michael Mahon. Mary is now medical director of Faulkner Hospital's ambulatory clinic.

Jay Sorgman, MD, and **Anthony Wilson, MD**, ('90) had a commitment ceremony in Hawaii in April 1998 to celebrate their 10th anniversary, followed by a reception for family and friends at the Hyatt in Cambridge. Jay, a gastroenterologist in private practice in Providence, is clinical assistant professor of medicine at Brown University school of medicine. Anthony has a new job as hospitalist at Southern New England Rehabilitation Center in Providence.

1988

Carol Bova, MS, RN, ANP, has been named instructor of medicine at UMMS.

Joseph Disa, MD, is an attending plastic surgeon at Memorial Sloan-Kettering Cancer Center in New York. Julie is assistant provost at the New School University in New York City. They have two children, Michael (5) and Nicholas (2).

Sheila Kennedy, MD, is working part-time at Emerson Hospital's satellite in Westford. She has three children: Cara (7), Derin (4) and Maya (14 months).

1989

Douglas Burd, MD, has joined the radiology group at UMass Memorial, Memorial campus.

Carol DiGiusto Burd, MD, is working as an internist at Harvard Vanguard Medical Associates in Wellesley. Doug and Carol have a daughter, Rachel, and live in Weston.

Paul Haley, MD, has been appointed to the medical staff of Western Massachusetts Hospital.

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.

1990

George Parker, MD, has become board certified in forensic psychiatry. He is on the faculty at Case Western Reserve and working as chief clinical officer of a state hospital. His wife, a pediatric radiologist, will be a Roentgen Ray Society Scholar next year, working on outcomes research. Their oldest child, David, is in kindergarten.

1991

Paul Apostolides, MD, has joined the practice of Orthopaedic & Neurological Surgery Specialists P.C. in Greenwich.

Matthew Cohen, MD, married Michele Sharon (University of Illinois '91) in October 1996. He wrote, "Just shy of two years later, and just in time to justify her indefinite extension of summer vacation from teaching high school biology, Michele gave birth to Adam Zaia. After my brief 'paternity' leave, I returned to my faculty position in the section of digestive diseases at Yale. I'll miss the student questions that Michele used to bring home from students (e.g., 'how much gas do you pass in a day?' [answer: 500-2,000 cc's, although you may know outliers]). I am now answering questions of my own (e.g., how do these crib parts fit together?). Professional and family life are fulfilling."

Laura Sheingold Duffy, MD, has completed her residency in psychiatry and a fellowship in primary care psychiatry at MGH. She married Edward Duffy, PhD, a biochemist who works in robotics sales, in 1988. They live in San Francisco where Laura is an attending psychiatrist in the consultant service at San Francisco General Hospital.

1992

Mark Brassard, MD, and Melissa Mikami Brassard, MD, are doing well in New York City. Mark is doing a one-year fellowship in sports and total joints at the Insall-Scott-Kelly Institute. Melissa is busy with their two children, Brianna (7) and Kylie (1), and working some shifts in the ER. Mark wrote, "We would love to catch up with people if they make it to New York City."

Bonnie Faulkner Ryan, MD, wrote, "Since graduation from emergency medicine residency program in 1995, my husband T.J. and I have had two children. Our daughter, Taryn, is 3 and son, Trevor, is 1 1/2. I am working at UMass Memorial, Memorial campus emergency department, and love it!"

Bruce French, MD, has been named assistant professor of orthopedics at UMMS.

Andrea Gropman, MD, received the "Outstanding Junior Member Award" from the Child Neurology Society at its annual meeting in Montreal in October 1998. Andrea is a clinical associate at the National Institutes of Health, Human Genome Research Institute, and serves as director of the neurogenetics clinic at Children's National Medical Center, Washington, D.C.

1993

Caroline Baltimore, MD, has been promoted to assistant professor at UMMS.

Ron Guibord, MD, has been named assistant professor of pathology at UMMS.

Sandra McNeil, PhD, has been appointed instructor in cell biology at UMMS.

Maureen O'Brien, MD, married Bradley Payne in May 1998. She currently practices internal medicine in Somerville.

1994

Alan Babigian, MD, recently announced his engagement to Deena Mariano.

Lynda Fann, MD, has joined the active staff at South Shore Hospital and the Weymouth practice of Dr. Brian Battista, and is a member of Harbor Medical Associates.

Mary Ellen Timmins, MD, practices pediatrics at Westwood Pediatrics in Westwood.

1995

Susan Campo, MD, has joined South Shore Medical Center in Norwell and Kingston as a primary care physician specializing in pediatrics.

Tricia Carty, MD, was recently board certified in internal medicine.

Nicholas Fay, MD, is an emergency physician at Holyoke Hospital.

Beth Koester, MD, a family practice physician, has joined Community Clinical Services, working at St. Mary's Family Health Center in Poland, Maine.

John Levine, MD, PhD, has been named research instructor of psychiatry at UMMS.

Michael Lyons, MD, has joined the staff of HealthAlliance in the office of Medical Associates Pediatrics in Leominster.

Richard Marseglia, MD, has joined the Johnson Health Network as a pediatrician.

Deborah Reich, MD, recently married David Sullivan in Boston.

1996

Christopher Ollari, MD, recently married Mary-Alice Abbott.

1998

Maura (Sullivan) Borah, MS, RN, is board certified as a nurse practitioner and on staff in the cardiac intensive care unit at UMass Memorial.

Deaths

Kevin Barry Keating, MD '83, died November 16, 1998, at Brigham & Women's Hospital due to complications arising in the course of a bone marrow transplant. Kevin is survived by his wife, Kathy, and their two children, Jillian Rose (5) and Jack Colin (2). He was the founder of and principal physician of First Stop Medical Care in Albany.

Mary Lee Olmsted, MD '88, a family practitioner whose struggle with breast cancer was detailed on the WCVB-TV show *Chronicle* and in an article in *Mirabella* magazine, died October 28, 1998, at her home in Cranston, R.I.. She leaves her husband, William Gordon, and a daughter, Melissa Scott Gordon.

Lucie Russell, MS, RN '98, a nurse practitioner and avid gardener, died November 15, 1998, after a long illness. She is survived by her husband of 18 years, Robert Russell, and their three children.

save the dates!
october 2-4, 1999
reunion weekend

saturday

2

Reunion Class Events

sunday

3

Alumni & Family Day Programs,
Cookout

monday

4

Alumni Golf Tournament
at Sterling Country Club

Gretchen Morrill Kelley

Tom Consolati

Katie Girard

Kelly McCahan O'Callahan



UMMS '93 graduates and their families gather for their fifth reunion at the lodge on Mt. Wachusett.



Howard Price

Rowen
(Howard & Val's daughter)

Val Robins Price

Paul Julian
*(Reference desk
librarian in the Lamar
Scoutter Library)*



Brett Leav

Sophia *(Brett's daughter)*



Eric Benson

Emma
(Eric's daughter)

Maureen O'Brien

Brad
(Maureen's husband)

Grants & Research:

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

MEDITATION PROVEN TO SPEED TREATMENT OF PSORIASIS

UMMS faculty members have found that psoriasis patients who practiced meditation-based relaxation while undergoing ultraviolet (UV) light treatments experienced quicker clearing of their skin lesions than did patients who received UV treatments alone.

Published in the September/October issue of *Psychosomatic Medicine, the Journal of the American Psychosomatic Society*, their study suggests that people have the potential to substantially influence healing through their own efforts, as a complement to medical treatment. This approach is one example of *integrative medicine*, in which an unconventional treatment, such as meditation, is used in conjunction with a more traditional medical therapy, such as UV light. It also demonstrates *participatory medicine*, in which the patient is an active collaborator with the physician.

The small randomized trial was conducted by Jon Kabat-Zinn, PhD, associate professor of medicine and executive director of the Center for Mindfulness in Medicine, Health Care, and Society at UMass Memorial; Mark Scharf, MD, associate professor of medicine and director of the Dermatology Laser Center and Phototherapy Center at UMass Memorial; and Elizabeth Wheeler, PhD, assistant professor of medicine. David Hosmer, PhD, professor of epidemiology and biostatistics at the University of Massachusetts School of Public Health, also participated in the research.

BLOOD/MUSCLE FUNCTION

NATIONAL INSTITUTES OF HEALTH

Mitsuo Ikebe, PhD, professor of physiology: Function of RHO pathway on smooth muscle contraction, 1 year, \$334,500; recommended for 2 more years, \$645,042.

MATERNAL AND CHILD HEALTH BUREAU

Doreen B. Brettler, MD, director of the New England Hemophilia Center, Memorial campus: New England Hemophilia Center Region 1 Hemo Program, 1 year, \$360,752.

CANCER

AMERICAN CANCER SOCIETY

Leslie J. Berg, PhD, associate professor of pathology: T cell development and activation in Jak3-deficient mice, 1 year, \$219,932.

Cathleen Cooper, PhD, research assistant professor of medicine: Role of Id proteins in B lymphocyte development, 2 years, \$275,000.

U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY

Stephen J. Doxsey, PhD, assistant professor of cell biology: Centrosome defects, genetic instability and prostate cancer progression, 2 years, \$484,375 (government share: \$436,100; recipient institution's share: \$48,275).

Jane Teas, PhD, research assistant professor of medicine: Dietary seaweed and breast cancer: a randomized trial, 2 years, \$215,491.

NATIONAL INSTITUTES OF HEALTH

Chung-Cheng Hsieh, ScD, professor of medicine: Validating a model for postpartum breast cancer risk, 1 year, \$117,262; recommended for 1 more year, \$105,294.

F. Marc Stewart, MD, professor of medicine: Cancer and leukemia group B, 1 year, \$31,000; recommended for 2 more years, \$65,184.

Mary-Ellen Taplin, MD, assistant professor of medicine: Androgen receptor analysis in refractory prostate cancer, 1 year, \$177,337; recommended for 1 more year, \$208,074.

CELL BIOLOGY

NATIONAL INSTITUTES OF HEALTH

Greenfield Sluder, PhD, professor of cell biology: Centrosomes and the control of the cell cycle, 16th year, \$388,990; recommended for 1 more year, \$404,415.

Gary S. Stein, PhD, professor and chair of cell biology: Intranuclear trafficking of bone transcription, 1 year, \$428,277; recommended for 3 more years, \$1.3 million.

Janet Stein, PhD, professor of cell biology: Osteoblast chromatin structure and nuclear domains, 1 year, \$334,767; recommended for 3 more years, \$1.1 million.

Richard B. Vallee, PhD, professor of cell biology: Mechanism of action of dynamin, 19th year, \$218,173; recommended for 1 more year, \$226,645.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Yu-Li Wang, PhD, professor of physiology: Effects of gravity on cell movement and development, \$161,081; recommended for 2 more years, \$341,570.

COMPENSATION AND CARE

ROBERT WOOD JOHNSON FOUNDATION

Terry S. Field, DSc, assistant professor of medicine: Impact of physician compensation mechanisms on the process of care, 2 years, \$335,197.

Jay S. Himmelstein, MD, MPH, professor of family medicine & community health: Workers' Compensation Health Initiative, 1 year, \$328,526.

NATIONAL INSTITUTES OF HEALTH

Jerry H. Gurwitz, MD, associate professor of medicine: Adverse drug events in the ambulatory geriatric setting, 1 year, \$429,915; recommended for 1 more year, \$394,132.

ENDOCRINE FUNCTION

NATIONAL INSTITUTES OF HEALTH

Silvia Corvera, MD, associate professor of cell biology: PI-3 kinase effectors in insulin-responsive systems, 1 year, \$226,081; recommended for 3 more years, \$719,759.

H. Maurice Goodman, PhD, professor and chair of physiology: Interdisciplinary studies of hormone function, 1 year, \$189,115; recommended for 4 more years, \$756,460.

U.S. ARMY MEDICAL RESEARCH ACQUISITION ACTIVITY

Neil Aronin, MD, professor of medicine: Protective mechanisms against apoptotic neurodegeneration in the substantia nigra, 4 years, \$1 million.

HUMAN DEVELOPMENT

NATIONAL INSTITUTES OF HEALTH

Joel D. Richter, PhD, professor of molecular genetics & microbiology and biochemistry & molecular biology: Translational control in early mammalian development, 1 year, \$255,974; recommended for 3 more years, \$814,401.

George B. Witman III, PhD, professor of cell biology: Sperm motility control, 9th year, \$194,500; recommended for 1 more year, \$246,508.

INFECTIOUS DISEASES

NATIONAL INSTITUTES OF HEALTH

Francis A. Ennis, MD, professor of medicine and molecular genetics & microbiology: Mechanisms of immunopathology in DHF/DSS, 1 year, \$500,000; recommended for 4 more years, \$3.8 million

Mohan Somasundaran, PhD, assistant professor of pediatrics: Molecular determinants of cell death by HIV-1, 1 year, \$237,378.

Maria L. Zapp, PhD, assistant professor of molecular genetics & microbiology: Molecular interactions between rev and cellular factors, 1 year, \$239,479; recommended for 3 more years, \$732,445.

NATIONAL CENTER FOR HIV PREVENTION

Ho-Wen Hsu, MD, New England Newborn Screening Program, Jamaica Plain campus: FY97 Epidemiologic research studies of AIDS and HIV, 3 years, \$412,239.

LASER SCANNING

NATIONAL CENTER FOR RESEARCH RESOURCES

Jeffrey A. Nickerson, PhD, assistant professor of cell biology: Laser scanning confocal microscopy shared equipment, 1 year, \$293,513.

MICROBIOLOGY

NATIONAL INSTITUTES OF HEALTH

David G. Lambright, PhD, assistant professor of biochemistry & molecular biology: Structural basis of G protein mediated signaling, 1 year, \$245,949; recommended for 4 more years, \$977,971.

Andrea J. Pereira, PhD, research assistant professor of cell biology, microbiology & molecular genetics: Functional analysis of the kinesin-like protein, KLP67A, 1 year, \$179,550; recommended for 4 more years, \$716,212.

Craig L. Peterson, PhD, associate professor of biochemistry & molecular biology: Yeast SWI1, SWI2, and SWI3 proteins, 1 year, \$264,332; recommended for 3 more years, \$827,980.

Janet M. Stavnezer, PhD, professor of molecular genetics & microbiology: Induction of IG C epsilon and C gamma 1 by IL-4 and CD40L, 1 year, \$216,230; recommended for 4 more years, \$1 million.

MOLECULAR GENETICS

MARCH OF DIMES BIRTH DEFECTS FOUNDATION

Y. Toney Ip, PhD, assistant professor of cell biology and biochemistry & molecular biology: Molecular genetic study of drosophila gastrulation, 1 year, \$62,370.

NEUROBIOLOGY

NATIONAL INSTITUTES OF HEALTH

Alonzo H. Ross, PhD, associate professor of pharmacology: Nerve growth factor and neuronal differentiation, 13th year, \$274,600; recommended for 3 more years, \$1.1 million.

Richard B. Vallee, PhD, professor of cell biology: Training grant in cellular and molecular neurobiology, 3rd year, \$169,919; recommended for 2 more years, \$339,838.

David E. Wolf, PhD, associate professor of physiology: Structure/ function dynamics of NGF receptors, 6th year, \$254,798; recommended for 3 more years, \$800,873.

Zuoshang Xu, PhD, assistant professor of pharmacology & molecular toxicology: Axonal transport in NF and SOD1 transgenic mice, 3rd year, \$111,800; recommended for 1 more year, \$223,078.

PHARMACOLOGY

NATIONAL INSTITUTES OF HEALTH

J. Don Chen, PhD, assistant professor of pharmacology & molecular toxicology: Molecular actions of nuclear receptor compressor SMRT, 1 year, \$197,530; recommended for 4 more years, \$844,637.

PREVENTIVE MEDICINE

AGENCY FOR HEALTH CARE POLICY AND RESEARCH

Robert J. Goldberg, PhD, professor of medicine: Pilot feasibility study for heart failure surveillance HSRD, 2 years, \$77,367.

NATIONAL INSTITUTES OF HEALTH

Judith K. Ockene, PhD, professor of medicine and director of the Division of Preventive and Behavioral Medicine: Provider-delivered alcohol intervention project, 1 year, \$357,811; recommended for 4 more years, \$1.4 million.

PSYCHIATRY

NATIONAL INSTITUTES OF HEALTH

Charles W. Lidz, PhD, instructor of psychiatry: An intensive study of violent incidents, 1 year, \$364,794; recommended for 3 more years, \$876,077. Also, Informed consent and the therapeutic misconception, 1 year, \$275,123; recommended for 2 more years, \$539,172.

SENSORY DISORDERS

NATIONAL INSTITUTES OF HEALTH

Thomas A. Schoenfeld, PhD, research associate professor of physiology: Spatial organization of the olfactory system, 1 year, \$232,355; recommended for 4 more years, \$771,328.



FOUNDATION AWARD

George B. Witman III, PhD, whose recent grant support for human development research is noted in this section, presents a Worcester Foundation for Biomedical Research award to **Shirley M. Tilghman, PhD**, a Princeton University molecular biologist. The award honors the memory of Min-Chueh Chang, co-developer of the birth control pill 40 years ago at the Foundation. Now part of UMMS, the Foundation continues to present the M.C. Chang Distinguished Lecture; Tilghman, as guest speaker, was honored for her pioneering contributions in genetics and developmental biology.

(not) The Last Word:

Lillian Goodman's association with nursing education at the University of Massachusetts goes back 30 years, to her initial appointment as associate dean and professor at the Amherst campus in 1969. But that is not even half the story. The shaping of graduate nursing education at UMass Worcester bears her stamp in a way to which many academics aspire but few can claim.

She had first come to the city in 1973 as founding chair and professor for a newly proposed bachelor's program at Worcester State College — a program she says was resented by those in the profession who resisted change. In circumstances familiar to those who recall the somewhat contentious birth of UMMS, Goodman and colleagues at WSC had to fight on several fronts, political and professional, to establish the first program in Massachusetts in which registered nurses would earn bachelor's degrees.

By doing so, Goodman contributed to epochal change in the profession, change that contributed to establishment of the Graduate School of Nursing at UMass, which she joined in 1991. "The reason that programs such as the bachelor's and master's and PhD were so important has to do with the values they represent," says Goodman. "Those who go on to advanced degrees also integrate within themselves the self-learning that accompanies their achievements — they have something to give. A greater recognition of the role that professional nurses can play in the world of health care is the result."

In her time at GSN — the past eight years as dean — Goodman has overseen the continuing development of a special and synergistic relationship with the School of Medicine — a relationship of which she is

As dean of GSN, Goodman has led development of a graduate nursing curriculum that is respected nationally for its rigor; she also has seen a joint PhD program established with UMass Amherst and graduates of GSN going on to occupy key positions within the profession. And throughout her career, Goodman has worked persistently to change the place of her profession within the constellation of health care. "Ask anyone," she says with a laugh, "and they'll tell you I'm persistent — if I believe in what has to be done, it will happen!"

Lillian Goodman will retire this year after a career experiencing change in the profession she loves — from a time when nurses were considered an adjunct to physicians, to a

time when nurses are recruited by physicians to the faculty of medical schools for their expertise in delivering health care from a base of knowledge and compassion. But she is not leaving the GSN, nor leaving the profession.

In a role that resonates with a key part of her background, Goodman will begin working with the Office of Development to raise funds for what will be the first endowed faculty chair in the GSN. Indeed, she's already begun. Reflecting on her career, and her impact, Goodman says, "Psychiatric professionals know that the most important part of the therapeutic encounter isn't at the beginning of a session — it's that last five minutes when something really important can happen." — M L S



Lillian Goodman at bat...



...and at ease

***** Lillian Goodman's early career images include a 1949 front-page photo in the Boston Record American (escorting Judy Garland from Peter Bent Brigham Hospital after a "complete physical checkup") and an at-bat experience with patients in the Gaebler Children's Unit of Metropolitan State Hospital in Waltham.

most proud. "The GSN had to demonstrate what we could contribute, and it's very clear that our graduates have made a place for themselves where health care is provided, taught and, above all, respected. The role taken on by nurse practitioners, for example, in the Department of Medicine, shows how health care has become more inclusive — to everyone's benefit."

Goodman's first teaching position was as educational director at Boston State Hospital. Her work in psychiatric nursing came at a time when nurses began to have a more and more substantive role in therapeutic intervention. "It was when nurses first became partners with physicians in treatment and patient care," she recalls. "And it was also excellent preparation for teaching."

Vitae: the magazine of the University of Massachusetts Medical School, one of five campuses in the UMass system. The magazine is distributed twice yearly to members and friends of the UMMS community. Published by the Office of Public Affairs & Publications, and paid for out of non-state funds, the magazine is successor to the *UMass Medical Center Magazine*, which had been published from 1978 to 1998.

<i>Chancellor and Dean</i>	Aaron Lazare, MD
<i>Vice Chancellor, University Relations</i>	Albert Sherman
<i>Associate Vice Chancellor</i>	Myrna L. Baylis
<i>Director of Public Affairs & Publications, and Managing Editor</i>	Mark L. Shelton
<i>Interim Editor</i>	Jodie H. Martinson
<i>Writers</i>	Lynn C. Borella Sandra L. Gray Roxanne Hurley Wendy Linden Jodie H. Martinson Richard J. Phelps Mark L. Shelton
<i>Design</i>	Stewart Monderer Design Inc.
<i>Printing</i>	Springfield Printing Corporation
<i>Photography</i>	Bruce Fiene Stanley Rowin UMMS Biomedical Media Dennis Vandal

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

Readers, because our mailing lists are supplied by several University departments, some of you may receive duplicate copies of this magazine. Thank you for passing them along to others who are interested in the Medical School.

Non-Profit Org.
U.S. Postage
PAID
Worcester, MA
Permit No. 176



UMass Medical School 55 Lake Avenue North Worcester, MA 01655

Current resident or:

