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Boston University School of Medicine

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BOSTON UNIVERSITY SCHOOL OF MEDICINE

Campus Alumni News

SUMMER 2011 • www.bumc.bu.edu

→ A New Voice at *The Journal of the American Medical Association*
Howard Bauchner '79

PLUS

- REFLECTIONS FROM PROVOST AND DEAN KAREN ANTMAN
- THE ROAD TO LEADERSHIP IN ACADEMIC MEDICINE

Boston University School of Medicine

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Howard Bauchner makes his next big move.

Photo by Melody Komyerov.

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Message From The Dean

DEAR FRIENDS, Boston University School of Medicine's many conscientious students, dedicated faculty, superb clinicians and researchers, and outstanding alumni engage in every facet of medical care, research, education, and health policy.

Our alumni are accomplishing great things in many different and interesting fields. Howard Bauchner '79 has been named the editor of *The Journal of the American Medical Association (JAMA)*, one of the world's most important medical journals. Dr. Bauchner is a professor and vice chair for academic affairs in our Department of Pediatrics.

Charlotte Cowan '84 brings her talents to pediatric education and literature as the author of five highly recognized books for children.

In this issue, we also highlight several graduates who are deans of medical schools across the country. As their stories show, while being a dean is challenging, it is also incredibly rewarding.

During the winter, we were engaged in a site visit by a team of Liaison Committee on Medical Education (LCME) evaluators as part of the School's important reaccreditation process. The three-year self-analysis that preceded the site visit provided a comprehensive examination of what we do and how well we do it. The outstanding effort by more than 300 faculty members and 150 student participants examined in depth our processes, administration, and curriculum. Strengths identified included student service learning; a deep sense of collegiality among faculty, students, and staff; responsive institutional structures; mission-based budgeting that reinforces our emphasis on quality teaching; and diverse clinical and cutting-edge research opportunities for our students that greatly enrich their educational experience.

The unlimited capacity of our faculty, staff, students, alumni, and friends to make a difference is clear in the following pages. We appreciate your involvement in and support of this work.

Best regards,

Karen Antman, MD
Provost, Medical Campus
Dean, School of Medicine

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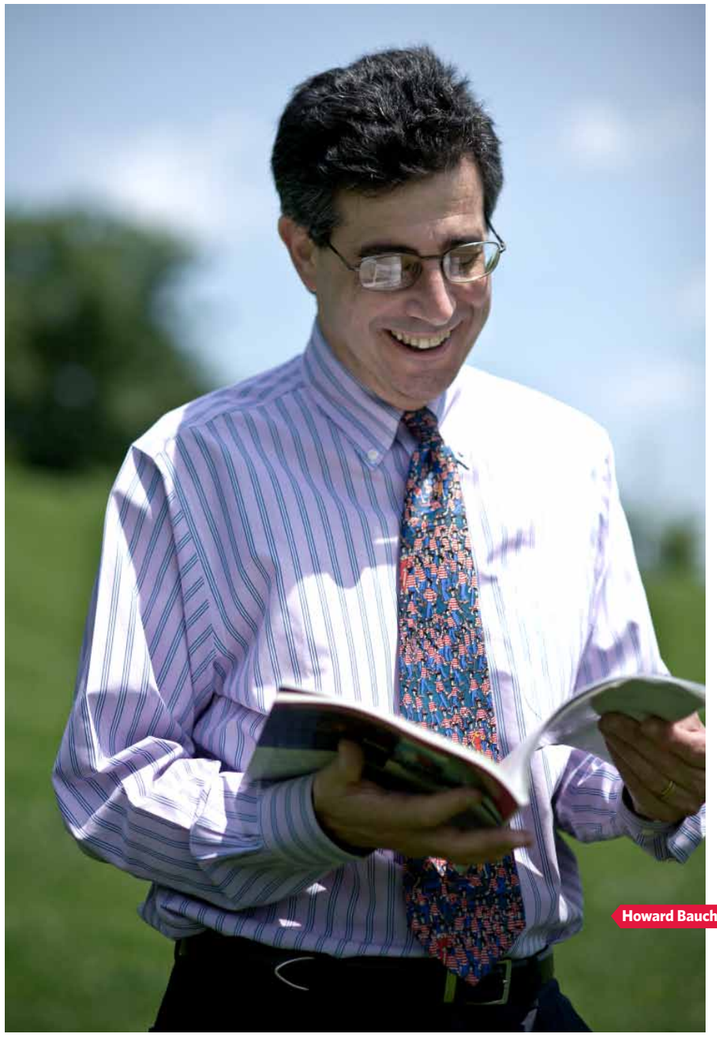
Howard Bauchner at the Helm of Prestigious Medical Journal

BUSM professor and alumnus lands in Chicago to lead *JAMA*



Howard Bauchner '79

PHOTO BY MELODY KOMYEROV

Howard Bauchner MED'79, a 25-year veteran of the School of Medicine and Boston Medical Center, has been named the new editor-in-chief of the 128-year-old *Journal of the American Medical Association* (*JAMA*).

Bauchner was in Chicago, *JAMA*'s base, for the announcement of his appointment, effective July 1. He succeeds friend and fellow pediatrician Catherine DeAngelis, the journal's first female editor-in-chief. A BUSM professor of pediatrics, assistant dean for alumni affairs and continuing medical education, and vice chair of Boston Medical Center's Department of Pediatrics, Bauchner will move to Chicago.

"It's truly an honor and a privilege to direct *JAMA*," Bauchner said. From the Gilded Age to the Internet Age, *JAMA* has been the scholarly flagship of one of the most influential professional groups in the country. Published continuously since 1883, the magazine bills itself as "the most widely circulated medical journal in the world." It is selective, publishing just nine percent of the 6,000 solicited and unsolicited manuscripts submitted each year.

"We are pleased that Dr. Bauchner will be the new editor-in-chief of *JAMA*," says Michael D. Maves, American Medical Association CEO and executive vice president. "We're confident the journal will continue to grow and prosper under his leadership. The future of *JAMA*—one of the AMA's most treasured assets—is in great hands."

As editor-in-chief, Bauchner will have editorial oversight of *JAMA* and the nine Archives journals, the specialty medical journals published by the AMA. He was chosen after an international search conducted by a committee comprised of members of the Journal Oversight Committee, the *JAMA* Editorial Board, the AMA's Board of Trustees, and senior management and with help from an executive search firm.

In selecting Bauchner as its new editor-in-chief, *JAMA* has chosen a physician whose résumé brims with editorial experience. He is currently the first U.S.-based editor-in-chief of the *British Archives of Disease in Childhood*, published by the Royal College of Paediatrics and Child Health. He is also a member of the editorial boards of several publications. Author of more than 125 papers, he researches health promotion, quality improvement, and clinical trials.

Past *JAMA* covers

Bauchner says he plans "intelligent innovation" at *JAMA* by updating its website and print presentations and bringing in new columnists to provide "provocative content."

"I want to make sure *JAMA* contributes to the discussions (such as health care reform and the burgeoning genetics fields) in American medicine," he says.

Bauchner says that leaving Boston University after a generation is bittersweet: "It has been my home for over two decades, and it has been wonderful caring for our patients. They have many struggles and adversities in their lives, and we are committed to improving their health."

Bauchner earned a bachelor's degree at the University of California at Berkeley, later doing his medical internship and working as a junior and then chief resident at Boston Medical Center (then Boston City Hospital).

"Not only is Dr. Bauchner an accomplished scholar, researcher, and pediatrician, he is also a thoughtful and generous colleague," said Karen Antman, BUSM dean and provost of the BU Medical Campus. "He will be an outstanding editor-in-chief of *JAMA*." ■

This article first appeared in BU Today

RADIATION ONCOLOGY NOW INDEPENDENT DEPARTMENT

As of October 2010, radiation oncology is an independent department on the Medical Campus. "The time was right to recognize the advances and importance of the discipline," says Lisa Kachnic, MD, chair of the new department and professor of radiology at BUSM and chief of radiation oncology at Boston Medical Center (BMC). "This new department will allow for the further growth of innovative research and individualized care in radiation oncology at BUSM. Together with our BMC multidisciplinary clinical colleagues and BUSM scientists, we will work to improve cancer prevention and treatment outcomes for our most vulnerable patients."

In the past five years, BUSM radiation oncology faculty helped develop a state-of-the-art radiotherapy facility on the Medical Campus. Many specialty radiation services have been introduced, including image-guided and stereotactic radiotherapy and the CyberKnife program. Radiation oncology is now integrated in all four years of the medical school curriculum, making BUSM a national leader in radiation oncology education.

Kachnic is the principal investigator of more than $11 million in research grants from the Department of Defense, as well as a $2.2 million award from the National Cancer Institute to launch a minority-based community clinical oncology program at BU/BMC. Other research funding comes from the American Cancer Society and the Radiology Society of North America. The department has four faculty members, each of whom will be conducting research in their respective fields.

MORE ONLINE
www.bmc.org/radiation-oncology.htm

Beginning in their first year, medical students have the opportunity to rotate in radiation oncology as part of the Introduction to Clinical Medicine (ICM) Program. Between the first and second year, students may engage in research projects with a faculty preceptor from radiation oncology as part of the Medical Student Summer Research Program.

During the second year, students are immersed in the vertically integrated, systems-based Disease and Therapy course, which includes an entire block devoted to the study of oncology, developed and directed by Ariel Hirsch, MD, assistant professor of clinical radiology and a member of the new Radiation Oncology Department. In the third and fourth years, students can pursue rotations in one of two radiation oncology-based electives that reinforce the classroom curriculum. "BUSM is the only medical school with formal didactics in radiation oncology provided to every medical student and taught alongside radiographic interpretation and immediately reinforced in a clinical setting," Kachnic explains.

School of Medicine Dean Karen Antman, MD, has high expectations for the new department: "We are pleased with the designation of departmental status for radiation oncology at BUSM, which will facilitate greater research collaborations and expand our understanding of the causes and progression of cancer in the diverse population we serve." ■

Renowned Cardiologist Presents First Howard D. Kirshenbaum, MD, Lecture

Joseph Loscalzo, MD, PhD, cardiovascular scientist, clinician, and teacher, presented the first annual Howard D. Kirshenbaum, MD, Lecture to the Medical Campus community, including members of Dr. Kirshenbaum's family, on Wednesday, April 6.

Loscalzo is the Hersey Professor of Theory and Practice of Medicine and chair of the Department of Medicine at Harvard Medical School, and physician-in-chief at Brigham and Women's Hospital. He served on the BUSM faculty for 11 years, first as chief of cardiology before being named the Wade Professor and Chair of Medicine, professor of biochemistry, and director of the Whitaker Cardiovascular Institute. He has authored or co-authored 600 scientific publications and authored or edited 27 books. He holds 31 patents for his work in the areas of vascular biology, thrombosis, and atherosclerosis over the past 25 years.

"Dr. Loscalzo is the quintessential physician-scientist whose work has advanced our knowledge and the practice of cardiology and cardiovascular medicine," said Karen Antman, MD, provost of the Medical Campus and dean of the School of Medicine. "We are fortunate to have him with us today."

His presentation, "Pulmonary Arterial Hypertension: Lessons and Challenges for the Cardiovascular Community," marked the inauguration of the lecture named in memory of Dr. Kirshenbaum, a highly regarded cardiologist, who died in May of 2010. The Kirshenbaum Lecture was established by his wife, Elaine Kirshenbaum. A graduate of BU College of Liberal Arts, School of Education, and School of Public Health, Mrs. Kirshenbaum is a member of the Boston University Board of Trustees and the School of Medicine Dean's Advisory Board. Her son, Daniel, graduated from BUSM this May and her daughter, Jennifer, is a BU School of Law graduate.

Rabbi Joseph Polak, director of the BU Hillel House, offered welcoming remarks and noted that Dr. Kirshenbaum loved ideas: "It is most appropriate that a lecture in his name should honor his memory and be presented by Dr. Loscalzo, a preeminent physician and researcher."

"It is a privilege to give this lecture," said Loscalzo. "Howard Kirshenbaum exemplified what it means to be a clinician, teacher, and outstanding caregiver. We miss him." ■

BUSM Researcher Awarded Peter Paul Career Development Professorship

Pietro Cottone, PhD, (second from left) assistant professor of pharmacology and psychiatry, was awarded the Peter Paul Career Development Professorship at BUSM at a celebratory dinner where he was joined by (from left) **BUSM Dean Karen Antman, BU President Robert Brown,** and **Peter Paul.** The award, established in 2006 by Peter Paul, a 1967 MBA graduate of the BU School of Management, is one of four awards given at BU this year and supports the research of new faculty within the first two years of appointment. Cottone, co-director of the Laboratory of Addictive Disorders at BUSM, researches the neural mechanisms underlying addictive disorders.

POSTDOCTORAL AFFAIRS OFFICE ESTABLISHED

Recently established on the Boston University Medical Campus and housed within the Division of Graduate Medical Sciences (GMS), the Postdoctoral Affairs Office is dedicated to supporting postdocs and enhancing their quality of life.

"Postdoctoral fellows are a vital part of Boston University," says Yolanta Kovalko, administrative manager for the office under the direction of Linda Hyman, PhD, associate provost for GMS. "Our mission is to help and support them by addressing their needs and providing information on such issues as housing, immigration laws, taxes, schools, and daycare. The office's website is designed to offer a gateway to a wide range of information."

According to Hyman, "This office is the go-to place to get answers to questions about postdoc life and identify resources that can help individuals navigate through BU as well as through the next phases of their professional life."

For more information, visit bumc.bu.edu/gms/gateway/postdoc or call Yolanta Kovalko at 617-638-5244.

APPOINTMENTS

Michael Collins has been appointed assistant vice president for the Sponsored Programs Office and is responsible for the operation of both offices at the Medical and Charles River Campuses. He has more than 15 years of experience in various roles supporting research and teaching, most recently at Massachusetts Eye and Ear Infirmary as vice president of research and academic affairs. Before that, he was director of research administration for Boston Medical Center, overseeing both proposal development and research finance.

Karl J. Karlson, MD, has been appointed chief of cardiac surgery at BUSM and Boston Medical Center.

His most recent appointments have been with St. Francis Hospital and Medical Center in Hartford, the busiest cardiac center in Connecticut; and Beth Israel Deaconess Medical Center (BIDMC) in Boston with Overholt Cardiothoracic Surgical Associates. He received his undergraduate and medical degrees from Brown University, and completed his general surgery internship and residencies at Johns Hopkins Hospital, Baltimore, and BIDMC, where he was chief resident. He completed a cardiovascular and thoracic surgical residency and fellowship at Rush-Presbyterian—St. Luke's Medical Center in Chicago. His research interests include aortic root reconstruction, mechanical support, and cardiac program development in the realm of managed care. Karlson's experience includes two years at the National Institutes of Health in the Clinic of Surgery in the National Heart, Lung and Blood Institute.

Terence M. Keane, PhD, has been appointed assistant dean for research at BUSM. Keane is professor and vice chair for research in the BUSM Department of Psychiatry and professor of psychology on the Charles River Campus. He also serves as the associate chief of staff for research at VA Boston Healthcare System, where he directs the National Center for Post-traumatic Stress Disorder's (PTSD) division of behavioral science. A clinical psychologist by training, Keane was chief of psychology at the VA for nearly 25 years before moving to his current role as the head of research at VA Boston. Under his aegis, the research portfolio at VA Boston more than doubled in five years. As assistant dean for research at BUSM, Keane will work with Associate Provost for Research Ron Corley and Associate Provost Tom Moore to further integrate the research programs at VA Boston and the BU Medical Campus.

Marianna B. Ruzinova, MD, PhD, has been appointed assistant professor of pathology and laboratory medicine at BUSM and director of clinical hematology in laboratory medicine at Boston Medical Center. Ruzinova received her medical degree at Weill Cornell Medical College and her doctorate at Weill Cornell Graduate School of Medical Sciences in New York City. She completed her medical training as an anatomic and clinical resident and hematopathology fellow at Brigham and Women's Hospital. Prior to her appointment, Ruzinova taught at Harvard Medical School; she also served as a senior resident in surgical pathology and chief resident in clinical pathology at Brigham and Women's. Her clinical interests include flow cytometry and hematopathology. She is a published researcher who has contributed to editorials, peer-reviewed articles, critical reviews, and case reports. Ruzinova is currently a member of the American Society for Clinical Pathology and the United States and Canadian Academy of Pathology.

New Leadership in the Diversity & Multicultural Affairs Office

Dean Antman announced the appointment of Rafael Ortega, MD, to the position of associate dean for diversity and multicultural affairs as of February 1, 2011. Ortega, an active member of the Boston University Medical Campus community for 25 years, succeeds Jonathan Woodson, MD, who held the position for five years until his confirmation as the U.S. Assistant Secretary of Defense for Health Affairs in December.

Ortega is a professor of anesthesiology and has been vice chair of the Department of Anesthesiology since 1998. He received his premedical education and was awarded his medical degree from the Universidad Nacional Pedro Henriquez Ureña, Santo Domingo, Dominican Republic. He completed an internship in surgery at San Isidro Air Force Hospital, Dominican Republic, and an internship in internal medicine at St. Francis Medical Center, Trenton, N.J. He served as chief resident in anesthesiology and as a fellow in cardiac anesthesia at Boston Medical Center. He is board certified in anesthesiology and perioperative transesophageal echocardiography.

Rafael Ortega, MD

Ortega has served on a variety of BUSM committees including admissions, curriculum, and faculty affairs, and on the advisory committee for faculty development. He has authored articles and book chapters on a variety of topics, including operating room safety and the history of anesthesiology. He developed a number of educational videos, some of which have been published by the *New England Journal of Medicine* and the World Health Organization. His work in computer-assisted instruction has earned him numerous awards, including the Anesthesia Patient Safety Award First Prize for an educational exhibit at the 2010 ASA Annual Meeting.

He is also a passionate leader and member of the BUMC band, playing guitar and harmonica. Not only was he instrumental in restoring the Ether Monument—a statue and fountain near the northwest corner of Boston's Public Garden that commemorates the first public demonstration of ether in anesthesia—he also created a fund to support the monument's upkeep.

"I am honored to assume this important role in the BUSM community and look forward to helping develop strategies and programs to enhance the experience of our diverse faculty and student body," said Ortega. "We live in a diverse society and as clinicians and scientists we must be attuned to the wonderful differences that exist among us as well as the intrinsic characteristics that we share."

The Diversity & Multicultural Affairs Office also has some other new faces to support the School of Medicine's mission to promote diversity and cultural competence among students, faculty, and staff. Since his appointment, Ortega has recruited a team of associate deans to broaden the office's reach and add greater depth of diversity in administration. The appointments include Douglas Hughes, MD; Samantha Kaplan, MD, MPH; and Alexander Norbash, MD.

Hughes is a BUSM associate professor of psychiatry and director of medical student education. He received his medical degree from the University of Missouri, Columbia, and completed his residency in psychiatry at Tufts-New England Medical Center. He is board certified in psychiatry with special interests in research in violence, suicide, and emergency psychiatry.

MORE ONLINE
www.bumc.bu.edu/oma

Kaplan is a BUSM assistant professor of obstetrics and gynecology and an attending obstetrician-gynecologist at Boston Medical Center and the Upham's Corner Health Center in Dorchester, Mass. She is currently involved in a longitudinal survey of academic medical faculty designed to identify factors associated with retention, attrition, productivity, and promotion at BUSM. She received her medical degree from the University of Virginia School of Medicine and completed her internship and residency in obstetrics and gynecology at the University of Rochester-Strong Memorial Hospital in New York. She also holds a master's degree in Health Policy and Management from the Harvard School of Public Health and completed the Commonwealth Fund Harvard University Fellowship in Minority Health Policy.

Norbash is a BUSM professor, chair of the Department of Radiology, and chief of radiology at Boston Medical Center. He received his medical degree from the Medical School of the University of Missouri in Kansas City, and completed his residency in radiology at the University of Pittsburgh and post residency at Stanford University. He has a Master of Health Care Management from Harvard University and is board certified in diagnostic radiology and diagnostic neuroradiology.

"Our new leaders in Diversity & Multicultural Affairs bring a wealth of experience and heterogeneity," said Dean Antman. "They represent our commitment to enrich our teaching and learning environment by including individuals of varied backgrounds and perspectives." ■

BUSM RECEIVES LCME REACCREDITATION

BU President Robert Brown and School of Medicine Dean Karen Antman have received notification from the Liaison Committee on Medical Education (LCME) that the School of Medicine has been reaccredited for the next eight years.

The LCME is the only nationally recognized accrediting body for all medical education programs in the United States leading to the medical education degree. Accreditation signifies that national standards for structure, function, and performance are met by a medical school's education program.

"The School of Medicine is a leader in education, research, and clinical training," said Dean Karen Antman. "The LCME accreditation confirms the quality and the standards that we have developed and continually refine and enhance. My colleagues at the School have my sincerest congratulations on this recognition."

The School received high marks from the accreditation survey committee for the strong support provided by central administration for the teaching mission; the robust series of faculty development activities that are well attended by MED faculty; the mission-based allocation model that allows all components of the School's mission to be strongly supported by department chairs and faculty; and the dedicated leaders at the School's affiliated hospitals who strongly support its educational mission.

"Receiving this accreditation is an endorsement of the quality of the education we provide, our pedagogical process, and the outcomes—our graduates, who are highly prepared both clinically and scientifically to contribute to health care at the bedside and in the laboratory," said Antman.

Students and graduates of LCME-accredited medical schools are eligible to take the United States Medical Licensing Examination (USMLE). These graduates are also eligible to enter residencies approved by the Accreditation Council for Graduate Medical Education (ACGME). Graduating from an LCME-accredited U.S. school and passing the national licensing examinations are accepted as prerequisites for medical licensure in most states. LCME accreditation establishes eligibility for select federal grants and programs, including Title VII funding administered by the Public Health Service. The accrediting body comprises medical educators and administrators, practicing physicians, public members, and medical students.

Hundreds of faculty, staff, and students participated in the three-year self-analysis that preceded the site visit by an LCME evaluation team in February, providing the platform for the LCME team to comprehensively examine our institutional setting, governance, academic and student support programs, as well as faculty development and evaluation and educational resources. About 120 people participated in the actual visit.

"I was very impressed by the dedication and hard work of the BUSM community," Antman said. "The outstanding effort of the hundreds of faculty, students, and staff involved in conducting the self-study illuminated our strengths as an academic institution. We have extensive and purposeful student involvement especially in service learning; a deep sense of collegiality among faculty, students, and staff; responsive institutional structures; mission-based budgeting that reinforces our emphasis on quality teaching; diverse clinical opportunities for our students; and a cutting-edge research program fully open to our students that enriches their educational experience." ■

FACULTY IN PRINT

Richard C. Pillard, MD

The People of the Eye: Deaf Ethnicity and Ancestry
Oxford University Press, 2011

Richard C. Pillard, MD, is a co-author of the first book to examine the 300-year ancestry of deaf people in America. He and his colleagues argue that deaf people who use sign language to communicate are members of an ethnic group. The book examines the lives and culture of the people who identify themselves as members of Deaf-World and compares them to other ethnic groups, delving into controversial questions surrounding whether being deaf is always a disability or, for some, an ethnicity.

Included are the first compiled ancestries of deaf families dating back to the 17th century. The authors have traced more than 200 lineages, most of which can be accessed from an online database. These lineages provide information for those curious about their personal ancestry or relations to the Deaf-World, and they identify the persons and conditions that led to the founding of the Deaf-World in America.

Pillard is a professor of psychiatry. The book's co-authors are Harlan Lane and Ulf Hedberg.

Frances R. Frankenburg

***Vitamin Discoveries and Disasters: History, Science, and Controversies* is a new history of the discovery of vitamins.**
The Praeger Series on Contemporary Health and Living
Praeger, 2009

This book describes the emergence of nutritional science and its contributions to our understanding of the body. It is a review of the men and women whose medical, laboratory, and epidemiologic detective work helped elucidate and defeat some devastating health conditions, including some forms of mental illness.

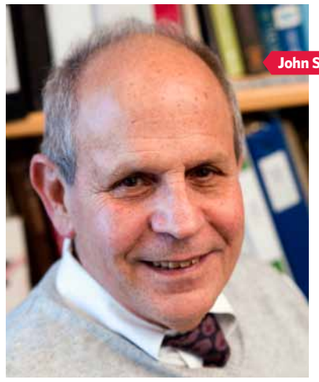
Each chapter of *Vitamin Discoveries and Disasters* focuses on a specific vitamin, describing the researchers, the research, and the historic and scientific contexts for its discovery. The researchers were brilliant and often defied common prejudices of the time. Conflicts between scientists who saw disease as caused by micro-organisms and those who understood disease as a result of social problems or dietary deficiency are described.

Frankenburg is an associate professor of psychiatry.

Mentoring Clinician Scientists

John Schwartz, MD, (CAS'63), the new director of the MD-PhD program, believes that the holder of the dual MD-PhD is a true hybrid of the physician at the bedside and the scientist at the bench, an amalgam of both disciplines who seamlessly integrates clinical practice and scientific research.

"The purpose of getting the dual degree, as I see it, is to be trained not as a physician and a scientist but as a physician-scientist whose curiosity is such that he or she uses the science synergistically with clinical knowledge to better treat the patient, simultaneously using observations of the patient as a catalyst that sparks discovery," says Schwartz. "My vision of the MD-PhD program is to train people who will use their knowledge to ultimately improve the care of others. It is a wonderful privilege to take young people and show them that there is a way in which they can use their intellectual and bedside skills to better their patients' lives. They can work in the laboratory and take care of patients as a single function because they are not only plying their trade but also making discoveries that can benefit everyone."



John Schwartz, MD

Schwartz's own path as a physician-scientist did not stem from a specific program, but his journey as an academic clinician informs his work mentoring students and guiding the School of Medicine's program.

The son of a physician, his interest in laboratory research goes back to his undergraduate days at Boston University. "The work gave me a sense of what discovering could do and how science could be used to improve people's well-being," he recalled. "The experience of being introduced to translational research at the age of 17 set me off on the track of being a physician-scientist. I learned I could be both a direct-care provider and study how biological systems work to understand the basis of disease."

He received his medical degree from New York University and completed his residency training in nephrology at Beth Israel Hospital in Boston (now Beth Israel Deaconess Medical Center). As a member of the U.S. Army during the Vietnam War, he served as chief of the renal unit at Walter Reed Army Institute of Research studying renal failure, a common side effect of wounds, blood loss, and fractures.

After leaving the military in 1977, he joined BUSM's Department of Medicine in the renal section and has been here ever since. He has made numerous research contributions to the understanding of the cellular regulation of H+ transport in renal epithelia, coupling in excitable cells, and pathogenesis of acute renal failure. His research activities include control mechanisms of acid secretion, gene expression associated with acute renal injury, and cellular mechanisms of injury in acute renal failure. His research is supported by grants from the National Institutes of Health (NIH).

BUSM is a special place to Schwartz. He appreciates having had the opportunity to practice medicine without the worry of the business of medicine, and he notes that BUSM offers a highly collegial atmosphere where there are few hierarchical constraints to accomplishing goals.

"In my 30 years here, I have experienced only support and cooperation," he says. "If this is the way we as faculty and administrators treat each other, this sets the best example for students, because our goal is that everyone succeeds and never at the expense of anyone else. In fact, you do better by helping others succeed."

Over the years, he has had people in his laboratory who have never done research before but are curious about the process; a number of those students have gone on to direct academic laboratories and lead departments of nephrology at academic medical centers across the country. He views this as his chance to present them with an alternative path for their professional lives.

"I discovered that of all the things I have done, training young physicians how to become physician-scientists was the most rewarding," notes Schwartz. "So last year when this opportunity to direct the training program for MD-PhD students appeared, I knew it was for me."

MORE ONLINE
www.bumc.bu.edu/gms

Started in 1976, the MD-PhD program at BUSM offers students opportunities for integrating basic and clinical training. Fulfilling the requirements of the dual degrees can take at least seven years. Students in the pre-clinical basic sciences attend specially tailored classes that challenge them to design research programs based on clinical cases. Students in the graduate years shadow working physician-scientists to learn how to integrate laboratory and clinical work with research interests. Students in their clinical years participate in seminars on translational research and clinical trial design.

The program emphasizes the translational nature of being both a scientist and a clinician. Some students engage in basic science research with a view to developing diagnostics and treatments; others examine the structure of how patients are cared for to develop better policies and strategies for optimal health care delivery. Schwartz emphasizes that the goal is to train physician-researchers who experience their work as a whole and not separate functions. "We mentor our students to be able to integrate their thinking so that they don't, for example, see their clinical rotation as interfering with their time in the lab or worrying that their research time reduces their ability to care for their patients."

Currently, one-sixth of the students enrolled in the graduate division are pursuing an MD-PhD (the program enrolls eight students each year as MD-PhD candidates for a total of approximately 70 students). These students receive their graduate degrees and training in any of more than 20 departments and training programs, including anatomy and neurobiology, biomedical neuroscience, immunology, and physiology. Medical school tuition for dual-degree candidates is covered by institutional scholarships, and students receive stipends during their graduate study years.

"We look for students who have a curiosity for discovery and are interested in the care of others," said Schwartz. "They are intellectually gifted and socially aware. Because BUSM now underwrites the full tuition cost of the medical degree, which can total a quarter of a million dollars, we want to make sure we select the right students and give them the support not just to get them through the program, but to develop them as successful academicians."

"I discovered that of all the things I have done, training young physicians how to become physician-scientists was the most rewarding."

—JOHN SCHWARTZ

The numbers underline the success of the program. Schwartz notes that BUSM has a less-than-10-percent attrition rate and only two students have dropped out in the past four years. According to the American Medical Association, 75 percent of MD-PhD students nationwide do not finish the graduate degree (but most finish the medical degree). Schwartz has been visiting other MD-PhD programs at schools such as New York University and the University of North Carolina at Chapel Hill—which also have low attrition rates—to better understand the characteristics that are consistent across programs.

"We try to create a family atmosphere in the program where the more experienced students teach and care for the newest students," Schwartz says. "We constantly have special events so that they can gather either with or without faculty and staff. Having both educational and social supports offers the best basis for student retention and ultimate success."

Because there has not been a director of the program for the last decade, Schwartz does not have exact data on recent graduates, but he does know that during that period, approximately 70 percent of them attained academic positions. "We have much work to do in the next year contacting our graduates to build up a compendium of the work they have done and are doing." ■

DIVISION OF GRADUATE MEDICAL SCIENCES LAUNCHES NEW UNDERGRADUATE SUMMER RESEARCH PROGRAM

Performing hands-on biomedical research is often a closed door to undergraduates, especially historically underrepresented groups in the biomedical sciences. The Division of Graduate Medical Sciences is taking steps to change that by establishing the Summer Research Program.

Piloted last summer as a collaboration between BUSM and Xavier University of Louisiana, a historically black institution, the division now has opened the program to other colleges and universities across the country.

"What better way to engage promising undergraduates in the wonders of biomedical research than to bring them into our laboratories and give them basic training and exposure to the possibilities of life as a scientist?" says Linda Hyman, PhD, associate provost of Graduate Medical Sciences and the creator of the program. "Along with our talented faculty, our current graduate students are excellent mentors whose knowledge and perspectives provide invaluable guidance."

Nationally, blacks and Hispanics make up just four percent of students enrolled in graduate programs in science and engineering, yet according to the U.S. Census bureau, blacks make up 12.9 percent of the population and Hispanics, 15.8 percent. Moving undergraduates from the possibility of a career in the biomedical sciences to a reality is the goal of the division's summer program.

During the summer of 2010, GMS hosted 10 undergraduate students from Xavier University of Louisiana and one student from the Emerging Caribbean Scientist program at the University of the Virgin Islands in St. Thomas.

Each student was assigned to one or more faculty members whose research topics matched his or her interests, such as investigating the biological basis of obesity and stress-related disorders, the effects of pollution on asthma, the pharmacological treatments for mental and memory disorders, the management of infection in critically ill patients, the uncovering of HIV infection, and the role of inflammation in development and progression of type 2 diabetes.

The 10-week program is structured so that the undergraduate researchers are given their own project, which they present at a symposium at the close of the program. The students are supervised by faculty and GMS doctoral candidates and have opportunities to interact with them in a supportive, learning environment. They attend weekly seminars on topics relevant to biomedical science, participate in professional development workshops, build a social and professional network, and explore and develop career interests and decision-making skills.

MORE ONLINE
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Qualified students are selected competitively from a national applicant pool of rising sophomores or juniors who primarily are majoring in a basic or biological science and have completed introductory coursework in biology and chemistry. Participants receive a stipend and full coverage for the cost of room, board, and travel to and from Boston. ■

BUSM's 164th Commencement Celebrates Achievement

There could be a no more satisfying and rewarding event for the Boston University School of Medicine (BUSM) Class of 2011 and their families than the May 21 medical school Commencement ceremony held at Boston University's Agganis Arena, the setting for so many proud moments in the lives of BU students, faculty, and staff.

"I speak for my colleagues in saying that it has been a great privilege to work with you," said BUSM Dean Karen Antman, MD. "We know you are resilient and adaptive; smart and serious. We hope you find fulfillment in the work that you have chosen and that the occasional bumps and diversions prove, with time, to be instructive. The faculty hopes you do well. Even more, we hope you do good."

Graduation speaker Steven Borkan, MD, associate professor of medicine at BUSM and the Robert Dawes Evans Educator and attending physician in the Department of Medicine at Boston Medical Center, urged the graduates to always probe and listen. "Think and say, 'that's odd' to remind yourself to question and 'take a seat' to remember to really listen to your colleagues and your patients."

Established to honor outstanding BUSM faculty, three Educator of the Year awards were presented during the ceremony. Based on student nominations, the 2011 awards for graduate sciences went to Judith Saide, PhD, associate professor of physiology and biophysics; for preclinical sciences to Deborah W. Vaughan, PhD, professor of anatomy and neurobiology; and for clinical sciences to Melissa Dipetrillo, MD, assistant professor of general internal medicine.

Steve R. Williams, MD, and Philippa G. Sprinz, MD, were the recipients of the Leonard Tow Humanism in Medicine awards in recognition of their outstanding compassion in the delivery of care; respect for patients, their families, and health care colleagues; and demonstrated clinical excellence.

The School of Medicine's highest teaching award, the Stanley L. Robbins Award for Excellence in Teaching, was presented to Carl J. O'Hara, MD, professor of pathology and laboratory medicine, for his extraordinary contributions to medical education at Boston University.

"We love a challenge," said Eustathia Giannaris, student speaker and PhD candidate in neurobiology, of her class. "We question everything around us and want answers. We want to have a deeper understanding of how things work. We want to improve the quality of life. Most of all, we do it for the greater good." **PHOTOGRAPHS BY FRANK CURRAN**

JOHN KAUFMAN '82 is all smiles with his daughter, Claire. John was proud to hood Claire during the Commencement ceremony.

With hands on hearts, graduates remember those who helped them reach this day of achievement.

FACULTY AND STUDENTS

LINING UP, marching, and smiling at the 2011 BUSM Commencement at Agganis Arena.

PAUL ROMESSER (left) and **SCOTT MAHANTY** demonstrate agility and joy at the White Coat Ceremony in 2007. Switching sides, they re-create the move at their 2011 graduation.

128 Master of Arts and Sciences degrees conferred at Graduate Medical Sciences Commencement

The Boston University Division of Graduate Medical Sciences celebrated Commencement for 128 members of the Division who earned the Master of Arts and Master of Sciences degrees on May 20 at the George Sherman Union.

Representing 15 different departments and programs in the Division, the graduates' careers include medical anthropology and cross-cultural practice, medical nutrition sciences, pathology and laboratory medicine, as well as mental health counseling and behavioral medicine and biomedical forensic science.

"Part of your job as graduate students has been to learn lots of things,'" Linda Hyman, associate dean for the Division of Graduate Medical Sciences, told graduates. "Your harder job has been to learn to think critically and independently.

"The notion of 'ownership of your ideas' is the basis of the thesis, which all of you have successfully completed. Yet as you move forward in your careers you will find that it is critically important to work as teams. So, even though you may take ownership and indeed be very proud of your independent work and thinking, remember you rarely work in isolation and you will be more effective in achieving your goals if you think beyond yourself."

The Robert F. Troxler Award in Biochemistry, instituted in 2005 and named in memory of a legendary member of the biochemistry faculty at BUSM, was presented by Gwynneth Offner, PhD, director of the Master of Medical Sciences program, to Flavien Leclere, and the Educator of the Year Award in Graduate Medical Sciences was presented to Judith Saide, PhD, associate professor of physiology and biophysics, for her excellence in teaching, mentoring, and devotion to students.

Alexandra Wink, one of three students selected to address the gathering, offered advice gleaned from her forensic anthropology coursework. "Learn to adjust your strategy," she said. "As anthropologists in the field, we make neat and organized plans for a systematic search and excavation effort, but the world is messy, and more often than not, human or environmental factors force us to reevaluate the scene and adapt to a situation that is far from our ideal. The same applies to our lives—what we have planned for ourselves isn't always what the future has in store."

(FROM TOP) Ms. Yanan Yu and Dean Antman. Associate dean handing a rose to a graduate. Graduates Luke Stevens, Matthew McAdams, and Daniel Martin.

New Dermatology Chair Expanding Department's Reach

PHOTO BY VERNON DOUCETTE

"Dermatology is very intellectual, challenging, and scientific."
—RHODA ALANI, MD

DR. RHODA ALANI came to the Boston University Medical Campus a little more than a year ago to assume the Herbert Mescon Professorship and Chair of the Department of Dermatology. Her interest in leading the department stemmed from her knowledge of the rich tradition of excellence in both dermatology research and clinical care on the Medical Campus. It was also apparent to her that the department was a vital and well-regarded part of the medical center.

"I felt this opportunity was really special because this is clearly a department that is highly valued," Alani says. "Dermatology departments are usually small and off the radar screen. Here, the leadership of the hospital and the dean of the medical school are both invested in the program and help ensure its success." She is pleased by the welcoming and collegial culture on campus, and by the number of women in leadership roles: "In my previous experience there were few senior-level positions and few chairs held by women. At BU, we have women leading the hospital as well as the Medical Campus and the medical school. This is important to me."

An internationally recognized melanoma expert, Alani recognized that the enthusiasm and support of the department would allow for meaningful expansion of its research arm as well as develop opportunities to advance treatment options. She is impressed by the department's traditional research strengths related to skin biology and aging, photomedicine and photobiology, and skin cancer biology. As someone who supports interdisciplinary activities, she is delighted by the collaborations that dermatology has with other departments in basic and translational research as well as those that improve patient care.

"Historically, we have been strong in the typical diseases dermatologists treat," she says. "My goals include enhancing and re-strengthening these areas." She has hired eight new faculty members, and initiated and developed a number of collaborative programs and projects across the Medical Campus as well as with departments on the Charles River Campus.

Before coming to BUSM, Alani was a 10-year faculty member at Johns Hopkins, where she served as director of the Laboratory of Cutaneous Oncology and director of the Melanoma and Pigmented Lesion Clinics in Dermatology. She received her medical degree with honors and distinction in research from the University of Michigan and completed her internship in internal medicine at Yale-New Haven Hospital and a residency in dermatology at Harvard Medical School. Her research focuses on understanding the molecular basis of melanoma development and progression, with the aim of translating her laboratory findings to better prevention, detection, diagnosis, and treatment of melanoma.

Her interest in melanoma research stems from work she did at Johns Hopkins. At the time, she was looking at how epithelial cells become cancerous and found that a gene she was studying also played a potential role in the development of human melanoma. When the results of the study were published, they garnered unexpected interest from the melanoma research community and the public. It was then that she recognized there was a significant opportunity to be involved in making basic discoveries that could have clinical applications for this disease. She developed a research laboratory to understand the basic biology of melanoma cells and skin cancer, using the science to find ways to improve cancer diagnosis and ways to prevent melanoma. "As a physician, you always want to be able to do something in the lab that has meaningful clinical application," she says. "It sounds like a simple thing to do, but it is extraordinarily difficult."

She and her colleagues have patented a number of their discoveries related to improving early detection of melanoma and accurate diagnosis of this disease, as well as the development of novel therapies for advanced melanoma. These innovative technologies have been licensed by companies interested in developing applications for several exciting new biomarkers, including the development of a blood test for melanoma similar to the PSA for prostate cancer. "A patient diagnosed with melanoma who had it removed could have this blood test every six months to diagnose a reoccurrence of the disease before it reappears on the skin or elsewhere in the body. This would lead to earlier diagnosis of recurrent disease and more rapid treatments," notes Alani. Other technologies patented by Alani and her team of investigators form the basis for a start-up biotechnology company, Acylin Therapeutics, which she co-founded with her collaborator (and husband) Dr. Philip Cole.

BUILDING TEAMS

Alani is developing collaborative research teams in the department to work around common themes, such as skin cancer biology and photomedicine, melanoma biology, and stem cell biology. She has hired new faculty members who have synergistic interests within these areas that also relate to her melanoma research. "I believe this kind of collaboration makes for a more powerful result than any one of us could achieve by ourselves," Alani says. "We can apply for team science grants together, develop research collaborations together, and publish results together."

She is enthusiastic about building bridges to programs in engineering and the physical sciences on the Charles River Campus.

continued

Dr. Rhoda Alani is an internationally recognized melanoma expert.

Collaborative research teams with University colleagues are being developed in biomedical engineering to work on a variety of projects, including the development of novel tools to model cancers and improve cancer diagnosis and treatment. "These cross-disciplinary research projects allow for truly unique collaborative programs, particularly ones involving physicians and physical scientists, where state-of-the-art tools can be used to solve challenging medical problems," she explains.

EXPANDING AREAS OF STRENGTH

Alani is committed to expanding the traditionally strong areas of the department. "Howard Koh, now the Assistant Secretary for Health in the U.S. Department of Health and Human Services, started the skin oncology program here many years ago that was successfully led by Dr. Marie-France Demierre until her tragic death last year," she says. "We are seeking to continue the tradition of excellence in skin oncology and skin cancer epidemiology and translational research and will be recruiting in these areas over the next few years." The department has already hired a new Mohs surgeon with an interest in skin cancer and epidemiology research who will be an important addition to this collaborative team dedicated to skin cancer research and state-of-the-art therapies for skin cancer patients.

Alani wants BUMC to be nationally recognized as a place where referring physicians can send their most difficult cases for treatment.

Alani has also worked closely with the Cancer Center on the Medical Campus to create a world-class multidisciplinary melanoma program that coordinates dermatology care with dermatopathology, medical oncology, surgical oncology, plastic surgery, head and neck surgery, and radiation oncology.

Other clinical programs are being expanded in medical dermatology. "We are going full circle with our acne program because that is how this department started, with the work of Peter Pochi who made seminal contributions to the field," Alani says. "We have brought a clinician on board who is a leader in acne research as well as cosmetic dermatology, laser therapies, and medical dermatology." She notes the strong cosmetic dermatology program at their practice on Commonwealth Avenue, which is one of the mainstays of the department, and is looking toward developing a strong pediatric dermatology program as well.

Alani emphasizes the need for greater recognition of the Department of Dermatology's excellence in clinical care. "We need to let people know who we are and about the outstanding care they will get at the Boston University Medical Campus," she says. "We need to expand our catchment area beyond our traditional base and develop referral sources in New England and beyond." Alani wants BUMC to be nationally recognized as a place where referring physicians can send their most difficult cases for treatment: "We have the expertise and clinicians with national and international reputations second to none."

ENHANCING STUDENT COMPETITIVENESS

Dermatology has become a popular specialty for medical students. "Dermatology is a great career for balancing work and family life," said Alani. "There are very few emergencies, and you have reasonable control over your schedule." She wants to ensure that BUSM students are the most competitive candidates for the highly sought-after residency slots.

The department—particularly Director of the Training Program Amit Garg, MD—is very involved with medical students, both organizing the curriculum and working with them at various levels to enhance their competitiveness. While dermatology at BUSM is part of the standard second- and third-year curricula, students cannot take the dermatology elective until their fourth year. By then, they are already applying to residency programs. Alani points out that this makes it very important for students interested in dermatology to take action early in their medical education.

"We are very engaged in the process and students are encouraged to come to the department so that we can be involved and help them," she says. "If they want clinical research or basic research they can find a mentor here." She credits Garg for his dedication to assisting students in developing a record of achievement to help them be the most competitive applicants. Last year, the department had seven students apply for residency slots; six of the seven were accepted to top training programs. Alani also stresses that she and her colleagues, aware of how high the bar is set for a career in dermatology, make a point of helping students to view the specialty realistically, including how difficult it may be to gain acceptance into a program.

Alani is dedicated to fulfilling the Department of Dermatology's mission to serve as a leader in skin health and skin disease teaching, research, and patient care. She is committed to the department's goal of generating new knowledge about normal and diseased skin to advance public health: "I am thrilled to be a part of the wonderfully collegial academic environment at Boston University School of Medicine and to provide leadership to Dermatology during these exciting times." ■

MORE ONLINE: www.bumc.bu.edu/derm

GRANTS

Carmela Abraham, PhD, BUSM professor of biochemistry, and Tiffany Mellott, PhD, BUSM research assistant professor of pathology and laboratory medicine, were awarded grants from the Alzheimer's Association. Abraham received $200,000 to support her current research on drug therapy for Alzheimer's disease. Mellott was granted $80,000 to support her current research on a naturally occurring brain chemical which may have Alzheimer-preventing properties. The study, called "The effects of perinatal choline supplementation on AD models," explores the uses of the chemical choline on the brain.

Suresh Agarwal, MD, BUSM associate professor of medicine and the chief of surgical critical care at Boston Medical Center, is the recipient of a $295,172 grant from the National Trauma Institute (NTI) to identify optimal treatment methods for acute lung injury (ALI). BMC will lead the multi-institutional trial, which involves seven level-one trauma centers and includes one military hospital. Agarwal will study two therapies that may influence ALI. His team will compare a novel therapy, airway pressure release ventilation (APRV), with ARDSNet (Acute Respiratory Distress Syndrome), the traditional modality for managing ALI.

Caroline Genco, PhD, BUSM professor of medicine and microbiology and director of research in the section of infectious diseases, and a team of researchers have been awarded a five-year, $7.7 million grant from the National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID) to explore how chronic inflammation can lead to systemic diseases. Genco is the principal investigator on the grant and leads a multidisciplinary research team as they study the cellular mechanisms responsible for immune system activation, which induces chronic inflammation following bacterial infection. This study focuses on two pathogens, *Chlamydophila pneumoniae* and *Porphyromonas gingivalis*, which induce chronic inflammatory responses in the lungs and the mouth, respectively. The chronic inflammation can lead to atherosclerosis, or hardening of the arteries, as a result of plaque buildup.

Hengye Man, MD, PhD, BU assistant professor of biology and a faculty member of the BUSM Department of Pharmacology & Experimental Therapeutics and the Biomolecular Pharmacology Program, is the recipient of a National Alliance for Research on Schizophrenia and Depression (NARSAD): The Brain and Behavior Research Fund Young Investigator Award. NARSAD's Young Investigator Award Program provides support for the most promising young scientists conducting neurobiological research. One- and two-year awards of up to $30,000 per year are provided to enable promising investigators to either extend research fellowship training or begin careers as independent research faculty. Hengye is examining abnormalities in the glutamate neurotransmitter system related to schizophrenia.

Avrum Spira, MD, MSc, BUSM associate professor of medicine, pathology, and laboratory medicine, and director of the Translational Bioinformatics Program at BU's Clinical and Translational Science Institute, is the recipient of the Caine Halter Hope Now Award for Lung Cancer Research. The annual Hope Now Award is intended for the research lab and its leader showing the most progress in lung cancer research in a particular year. The purpose of this award is to provide funding for and recognize the demonstrated excellence of research labs seeking to develop medical treatments for lung cancer. Spira will receive a one-year award of $25,000 to apply towards lung cancer research.

Katrina Steiling, MD, MSc, BUSM assistant professor of medicine, is the recipient of the American Association for Cancer Research's (AACR) 2011 Dharma Master Jiantai Innovative Grant for Lung Cancer Research. The AACR funds innovative research grants, research fellowships, and career development awards.

Maria Trojanowska, PhD, BUSM professor of medicine, is the recipient of The Walter A. Coyle Memorial Research Grant from the Scleroderma Foundation. Chosen by the foundation's Peer Review Committee, Trojanowska was one of six researchers nationally to receive foundation grants for her work on "the Role of ER Stress in SSc-PAH." The grants are awarded to help motivate new researchers to become interested in investigating scleroderma.

HONORS

Marlene Oscar Berman, PhD, BUSM professor of anatomy and neurobiology, is the recipient of the Research Society on Alcoholism's (RSA) 2011 Henri Begleiter Award for Excellence in Research. The award is given to an individual demonstrating innovation or creativity and excellence in research and/or someone whose work has a major impact on the field. Berman has made contributions to the field of alcoholism for more than 40 years, advancing knowledge of the consequences of chronic alcoholism on various aspects of brain function and their sequelae.

Lewis E. Braverman, MD, BUSM professor of medicine in the Section of Endocrinology, Diabetes & Nutrition, is the recipient of the H. Jack Baskin, MD, Endocrine Teaching Award from the American Association of Clinical Endocrinologists (AACE). The Baskin Award is given annually to an AACE member in good standing who has made a profound impact in teaching fellows-in-training and who is actively involved in teaching either in a university setting or through AACE.

Larry Culpepper, MD, MPH, BUSM professor and chair and chief of family medicine at Boston Medical Center, is the recipient of the 2010 Maurice Wood Award for Lifetime Contribution to Primary Care Research.

continued

HONORS

Deborah Frank, MD, BUSM professor of pediatrics and director of the Grow Clinic at Boston Medical Center and founder of Children's HealthWatch, was recognized for "Outstanding Leadership" by the Massachusetts Health Council (MHC). Frank was honored for her work in providing clinical care and research-based advocacy for families and children struggling with food insecurity. She is founder of both the Grow Clinic, which provides comprehensive specialty medical, nutritional, developmental, and social services and dietary assistance to children from the Greater Boston area, and Children's HealthWatch, a network of pediatricians and public health researchers who work to improve child health by bringing evidence and analysis from the front lines of pediatric care to policy-makers and the public.

Michael F. Holick, PhD, MD, BUSM professor of medicine, physiology, and biophysics, director of the General Clinical Research Unit, and director of the Bone Health Care Clinic at Boston Medical Center, is the recipient of the 2010 Van Slyke Award from the American Academy for Clinical Chemistry New York Metro Section. The award acknowledges outstanding contributions to the science of clinical chemistry and laboratory medicine.

Angela Jackson, MD, BUSM associate professor of medicine, vice chair for education in the Department of Medicine, and director of the Primary Care Training Program, was appointed by Kathleen Sebelius, Secretary of the U.S. Department of Health and Human Services, to the Advisory Committee on Training in Primary Care Medicine and Dentistry. The committee makes recommendations to the Secretary concerning policy, program development, and other matters of significance concerning the family medicine, general internal medicine, general pediatrics, general dentistry, pediatric dentistry, and physician assistant programs at the Health Resources and Services Administration's Bureau of Health Professions.

Conan Kornetsky, PhD, BUSM professor of psychiatry and pharmacology and director of the Laboratory of Behavioral Pharmacology, is the recipient of the 2011 Bernard Lown University of Maine Alumni Humanitarian Award. Named in honor of Nobel Peace Prize laureate Dr. Bernard Lown, the award recognizes University of Maine graduates who distinguish themselves in service to humanity. The award has been given only 11 times since 1988.

Ewa Kuligowska-Noble, MD, BUSM professor of radiology, is the recipient of the 2010 Marie Sklodowska-Curie Award from the American Association for Women Radiologists. The award is presented annually to an individual who has made an outstanding contribution to the field of radiology. Over the course of her career, Kuligowska-Noble's contributions have included developing and promoting ultrasound-guided abdominal and pelvic biopsies and drainages using novel transrectal, transvaginal, and abdominal approaches. She also has focused on ultrasound applications for the diagnosis and management of gynecologic disorders.

Sharon A. Levine, MD, BUSM professor of medicine and associate dean of academic affairs, is the recipient of the American Geriatrics Society (AGS) 2011 Dennis W. Jahnigen Memorial Award, given annually to an AGS member who has provided outstanding leadership in advancing geriatrics education in health profession schools.

Aubrey Milunsky, MD, and **Jeff Milunsky, MD,** received the British Medical Association's high commendation for their book, *Genetic Disorders and the Fetus, 6th Edition*. Aubrey Milunsky is BUSM professor of human genetics, pediatrics, pathology, and obstetrics and gynecology, and director of the Center for Human Genetics; and Jeff Milunsky is BUSM professor of pediatrics and genetics and genomics, director of clinical genetics, and associate director of molecular genetics at the Center for Human Genetics.

George J. Murphy, PhD, BUSM assistant professor of medicine in the Section of Hematology & Oncology, is a recipient of the American Society of Hematology's (ASH) 2011 Scholar Award. The award program is designed to support hematologists who have chosen a career in research by providing partial salary or other support during the critical period required for completion of training and achievement of status as an independent investigator.

Christopher Nowinski, co-director of the BUSM Center for the Study of Traumatic Encephalopathy, was chosen as one of 11 Eisenhower USA Fellows for 2011. USA Fellows travel on an intensive, four- to five-week individualized professional program to countries throughout the world, where they meet with experts in business, political, and nonprofit institutions in their respective fields. The fellowship's goal is to engage emerging global leaders and enhance their professional capabilities, broaden their contacts, deepen their perspectives, and unite them in the diverse Eisenhower Fellowships community—a network where dialogue, understanding, and collaboration lead to a more prosperous, just, and peaceful world.

Rafael Ortega, MD, BUSM professor of anesthesiology and vice chair of academic affairs, and associate dean for diversity and multicultural affairs, received a Letter of Commendation from the World Health Organization (WHO) for producing a training video on pulse oximetry. The video, which has been distributed worldwide and is available in six languages, is a major component of the WHO's efforts to improve anesthesiology safety for patients worldwide. The video includes a combination of real and simulated operating room footage with computer-generated animation to illustrate proper usage of oximetry equipment. It also provides information about what health care practitioners need to do if a patient experiences hypoxemia.

Adam Rose, MD, MSc, BUSM assistant professor of medicine, is the recipient of the Society of General Internal Medicine's (SGIM) New England Region 2011 Clinician Investigator Award for his contributions to quality of care research. The Clinician Investigator Award honors outstanding career achievements by a clinician-investigator in his or her first five years as a faculty member.

Kitt Shaffer, MD, PhD, BUSM professor of radiology and vice chair for education in radiology, is the recipient of the Radiological Society of North America's (RSNA) Outstanding Educator Award for 2010. The award recognizes distinguished academics who have devoted 15 years or more to radiologic education while demonstrating original and significant contributions to the field. Shaffer's current work focuses on integrating imaging education—including anatomy, DRx and IP-2 lessons—into first- and second-year medical school courses. She has also developed a resident as teacher curriculum for the radiology department in order to train the next generation of educators in the field.

Philip A. Wolf, MD, BUSM professor of neurology, medicine, and public health, was named the Robert Wartenberg Lecturer of the American Academy of Neurology and delivered the Wartenberg Lecture in Toronto. Wolf was the 51st Wartenberg Lecturer and the first epidemiologist to be so named. The Robert Wartenberg Lecture is the premier award sponsored by the American Academy of Neurology, and is awarded to a neurologist for excellence in clinically relevant research.

IN MEMORIAM

David M. French, MD, (center) on March 30, 2011, at the age of 86. French received his medical degree from the College of Medicine at Howard University in Washington, D.C. and a master's in public health from Johns Hopkins. He was chief resident in surgery at Freedmen's Hospital in Washington and practiced in Detroit before returning to teach at Howard. He established a division of pediatric surgery at Freedmen's while becoming involved in the civil rights movement, where he directed medical care for historic marches, including one across Alabama from Selma to Montgomery. He served as the first chair of the Department of Community Medicine at BUSM and the first director of the Roxbury Comprehensive Community Health Center. He led a 20-country health program launched by institutions and organizations that included Boston University and the World Health Organization.

French's wife of 64 years, the former Carolyn Howard, died in 2009. He is survived by four sons, four daughters, 14 grandchildren, and two great-grandchildren.

Peter J. Mozden, MD '53, of Newton, Massachusetts, on January 4, 2011, at the age of 86. A surgical oncologist, he dedicated 40 years to BUSM and the Medical Campus. He was a BUSM professor of surgery and chief of surgery and the section of surgical oncology at Boston Medical Center. In 1964, he established one of the first surgical oncology fellowship programs in the country. He also helped create the first regional oncology program, a network that included 24 hospitals across New England. A visionary physician, he realized that cancer patients would require multidisciplinary care, and cancer education became a focus of his career. He was one of the leaders of the American Association for Cancer Education and served as a physician adviser to President Richard Nixon, who in December 1971 signed the National Cancer Act to launch the "war on cancer." When he retired in 1989, BUSM established the Peter J. Mozden Visiting Professorship. During the 1970s, he took part in *Joan Robinson: One Woman's Story*, a documentary about one of his patients broadcast on PBS in 1980.

He served as a staff sergeant in the U.S. Army during World War II, fought in the Battle of the Bulge, and received a Purple Heart and the Bronze Star. He is survived by his two daughters, four grandchildren, and three sisters.

Karen L. Reed, PhD, research associate professor of surgery and pharmacology, on October 27, 2010. Reed received her undergraduate degree from the University of New Hampshire, her master's degree from the University of Delaware, and her doctoral degree from the University of Florida; she did postdoctoral work at the University of New Hampshire. Her research focused on the molecular and cellular characterization of pro-inflammatory regulators of intra-abdominal adhesion formation and the etiology of inflammatory bowel disease. Her work has been included in the *Proceedings of the National Academy of Sciences* and received a Best Poster Presentation award at the international meeting of the Peritoneal Access Society. Reed is survived by her husband, Andrew West, her three children, and her parents. ■

PHOTO BY KALMAN ZABARSKY

Vascular Biologist Receives Highly Competitive NIH MERIT Award

RICHARD COHEN, MD, the Jay and Louise Coffman Professor of Medicine at BUSM, is the recipient of a National Institutes of Health (NIH) MERIT Award. Prestigious and highly competitive, the Method to Extend Research In Time (MERIT) Award program provides long-term support for established investigators of outstanding scientific achievement, offering them the opportunity to continue making fundamental contributions of lasting scientific value.

Awardees are chosen by the NIH based on their record of successful scientific investigation and productivity and may receive up to ten years of support. The grant is used to foster continued achievement and reduce the burden associated with preparing and submitting grant applications.

Obesity and diabetes increase the complications of cardiovascular disease, including impaired blood vessel growth—or angiogenesis—that normally maintains tissue blood flow. Cohen's study will determine how oxidants arising from tissue metabolism affect angiogenesis, the formation of new blood vessels, by regulating a protein called p21ras. "The reason for accelerated cardiovascular disease in diabetics probably has to do with the abnormal metabolism resulting in the proteins in the heart and blood vessels getting oxidized. This has serious consequences for their function," says Cohen. "Understanding how the function of proteins like p21ras in cells is altered by high fat and high glucose levels may help to explain why diabetics are more likely to develop ischemic legs and will help to develop new treatments for metabolic disease like diabetes."

Director of the Vascular Biology Unit, a member of the Vascular Medicine Section, and the co-principal investigator of the Boston University Cardiovascular Proteomics Center, Cohen has received continuous funding from the National Institutes of Health since 1983. He has been studying vascular disease in diabetes for more than 20 years. Five years ago he began examining the effects of type 2 diabetes, which is obesity-related diabetes, studying the effects of a typical American diet—35 percent fat and 35 percent carbohydrate. "If you put an animal who has lived on a vegetarian diet on the typical American diet you begin to see pathological behavior of the heart and blood vessels within a period of weeks," he says. "This grant is researching very basic concepts on what controls the growth of blood vessels and how metabolic disease affects the proteins that drive cells to make new new blood vessels."

For the past ten years Cohen and his group have been studying a protein called "ras" that regulates endothelial cell function. Using animal models and cell models to study how protein changes caused by oxidants regulate normal cell function, they hope to better understand what happens when dysregulation like diabetes increases the level of oxidants and reduces antioxidants. "What falls apart is normal function of the vessels and heart when levels of oxidants rise above normal for long periods of time. Oxidants change everything including protein structure. Some proteins are irreversibly altered, seriously affecting function," he explains.

> *"If you put an animal who has lived on a vegetarian diet on the typical American diet you begin to see pathological behavior of the heart and blood vessels within a period of weeks."*

A professor of medicine, physiology, and pharmacology, Cohen is a former American Heart Association (AHA) Clinician Investigator and AHA Established Investigator. He is also a past president of the American Federation for Medical Research and a member of the board of trustees of the American Federation for Medical Research Foundation, which he founded during his tenure as an officer of the Foundation. Cohen is distinguished by his election to the American Society for Clinical Investigation and the Association of American Physicians, and as a Fellow of the Cardiovascular Section of the American Physiological Society and the AHA. He is a member of the editorial board of the *American Journal of Physiology: Heart and Circulatory Physiology, Arteriosclerosis, Thrombosis, and Vascular Biology*, and *Free Radical Biology and Medicine*. ■

MORE ONLINE: www.bumc.bu.edu/medicine/faculty/rcohen

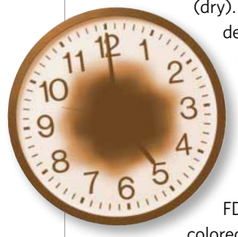
Richard Cohen, MD, has been studying vascular disease in diabetes for more than 20 years.

AMD is the leading cause of blindness over the age of 50 in developed Western countries.

■ No difference in effectiveness between standard treatment and less costly cancer drug for macular degeneration

BUSM researchers and the Veterans Affairs Boston Healthcare System conducted a study that failed to show a difference in efficacy between bevacizumab (Avastin) and ranibizumab (Lucentis) for the treatment of age-related macular degeneration (AMD). The study, published online in *Eye*, is believed to be the first study to describe one-year outcomes of a prospective, double-masked, randomized clinical trial directly comparing bevacizumab to ranibizumab. Last October, these same researchers published early, six-month outcomes of the same study, which also failed to show a difference in efficacy between these two drugs for treating AMD.

AMD is the leading cause of blindness in people over the age of 50 in developed Western countries. It presents in two forms, exudative (wet) or nonexudative (dry). Wet AMD is often more visually devastating with a higher risk of blindness. The gold standard of treatment for wet AMD is ranibizumab (Lucentis, Genentech, Inc.), which was FDA-approved as an eye injection in 2006. Bevacizumab (Avastin, Genentech, Inc.) was FDA-approved for the treatment of colorectal cancer in 2004, but has also been used worldwide in an off-label fashion as an eye injection for the treatment of wet AMD. Lucentis costs approximately $2,000 per injection, while Avastin costs approximately $50 per injection. While both drugs have independently shown to be effective in treating wet AMD, it was uncertain if both drugs were equally efficacious or if either one was better.



"With the exception that total injections given to subjects over one year were significantly different between the two treatment arms, visual and anatomic outcomes at one year failed to show a significant difference between both groups," says lead author and principal investigator Manju Subramanian, MD, BUSM assistant professor of ophthalmology. According to the authors, further studies with larger sample sizes are warranted.

This study is the result of work supported with resources and the use of facilities at the VA Boston Healthcare System, Jamaica Plain, Mass. The VA Boston funded the cost of medications for this study.

■ Patient navigations improve mammography rates in minority women

A new research study shows that patient navigation services significantly improve biennial mammography screening rates among inner-city women. The results, published online in the *Journal of General Internal Medicine*, indicate the importance of patient navigation in reducing health disparities in vulnerable patient populations.

The study was conducted over a nine-month period and involved 3,895 Boston Medical Center (BMC) general internal medicine primary care practice female patients between the ages of 51 and 70. Patient navigation services consisted of phone calls and reminder letters to identify the barriers to care and aid in directly scheduling mammograms. At the end of the nine months, mammography adherence rates increased to 87 percent in those who received patient navigation with no change from the baseline adherence rates of the non-navigated group (76 percent). Patient navigation also increased adherence rates across all languages, races, insurance coverages, and education groups.

"Primary care-based patient navigation is a valuable intervention to help reduce health care disparities, especially in vulnerable patient populations served by safety-net hospitals like Boston Medical Center," says Christine Phillips, MD, BUSM assistant professor of medicine and a physician in the Department of General Internal Medicine at Boston Medical Center, who led the study. "We need to explore ways to help sustain such programs in resource-poor communities and integrate them into our current medical home in order to provide the highest quality of care for patients."

■ Child/teen sexual and physical abuse linked to fibroids in premenopausal women

BUSM researchers found that both physical and sexual abuse history were positively associated with a higher incidence of uterine fibroids later in life. These findings were published in the journal *Epidemiology*.

Uterine leiomyomas, also known as fibroids or myomas, are benign, hormone-dependent tumors

that are clinically symptomatic in 20 to 25 percent of reproductive-age women. Fibroids contribute to a third of hysterectomies in the U.S.; increase risk of infertility, spontaneous abortion, and pelvic pain; and have a significant impact on the quality of life for women.

Participants in this study included 68,505 premenopausal U.S. nurses, enrolled in the Nurses' Health Study II. Sixty-five percent of these women reported physical or sexual abuse as a child or teen. "Our analyses showed that exposure to physical, sexual, or emotional abuse in childhood and adolescence was associated with an increased risk for clinically symptomatic fibroid tumors in adulthood. The impact of early life adversity on fibroid risk persisted even among those with no future violence exposure in adulthood," says lead author Renee Boynton Jarrett, MD, ScD, BUSM assistant professor of pediatrics.

The researchers also found that having a consistent (very often or always) emotionally supportive relationship in childhood was protective when included as a covariate in the multivariate model of cumulative violence predicting leiomyoma.

Funding for this study was provided by the William T. Grant Foundation and Building Interdisciplinary Research Careers in Women's Health.

■ Post-traumatic stress disorder measures identified for use in traumatic brain injury research

Five U.S. federal agencies recently cosponsored a set of expert work groups to formulate common data elements for research related to psychological adjustment and traumatic brain injury (TBI). Danny G. Kaloupek, PhD, BUSM associate professor of psychiatry and behavioral neuroscience, chaired the work group on post-traumatic stress disorder (PTSD). Kaloupek's work at the National Center for PTSD at VA Boston Healthcare helped to guide identification of key PTSD-related characteristics

The impact of early life adversity on fibroid risk persisted even among those with no future violence exposure in adulthood.

VSV is sensitive to the innate immune response, which causes lymphocytes to release interferon and protect the body from developing an infection.

and evidence-based measures that might be used in future research. The results were published in *Archives of Physical Medicine and Rehabilitation*.

PTSD has an estimated prevalence of approximately eight percent among U.S. adults, with much higher rates in subpopulations that include combat-exposed military personnel. Potential for co-occurrence of psychological trauma and TBI exists because the same types of violent and life-threatening experiences can cause both conditions. In addition, some of the ways that PTSD can affect functioning are similar to the effects of an increasingly recognized condition labeled mild TBI. For these reasons, PTSD-related measures are likely to be relevant for many studies focusing on TBI.

Eight categories were identified and reviewed, including exposure to traumatic stressors, factors that moderate life stress, PTSD symptoms, mental health history, and domains of functioning.

■ Oncolytic virus switches off cancer cell survival signal

BUSM researchers have identified a mechanism by which specific viruses acting as oncolytic agents can enter and kill cancer cells. The finding, published in the *Journal of Virology*, could help lead to the development of more targeted treatments against many types of cancer.

The study was conducted by Ewan F. Dunn, PhD, a postdoctoral fellow, under the direction of John H. Connor, PhD, an assistant professor of microbiology at BUSM. The virus, known as vesicular stomatitis virus (VSV), is being developed in the Connor Lab and in other international research laboratories to kill cancer cells. VSV is not a significant human pathogen.

VSV is sensitive to the innate immune response, which causes lymphocytes to release interferon and protect the body from developing an infection. Cancer cells lose the ability to respond in that way, explains Dunn: "When cancer cells transform, they become nonresponsive, leaving them vulnerable to viruses attacking the cell and its function." Previous research has shown that a major signaling pathway in cancer cells, called the AKT signaling pathway, is frequently turned on. AKT signaling is a cell survival signal, helping to keep the cancer cells alive. The team demonstrated that VSV can switch off that signaling pathway, which suggests that a single viral

continued

protein could play a major role in cancer cell death. The study was funded by the National Institutes of Health.

Cellular mechanism responsible for chronic inflammation, type 2 diabetes uncovered

BUSM researchers have demonstrated that certain T cells require input from monocytes in order to maintain their pro-inflammatory response in people with type 2 diabetes (T2D). The study also showed, for the first time, how a loss in homeostasis in this group of T cells most likely promotes chronic inflammation associated with T2D.

Previous research using mice showed that T cells play a critical role in the development of insulin resistance in response to a high-fat diet, often leading to T2D. Additional findings indicate that T cells exhibit a pro-inflammatory response more often than an anti-inflammatory response.

Working with human T cells, the team observed that in order for T cells to exhibit the pro-inflammatory response, they required constant interaction with monocytes, indicating that monocytes play an indirect role in chronic inflammation and T2D.

"The true importance of our observations is the indication that altering balance among immune system cells could be a fundamentally novel treatment for T2D-associated inflammation and perhaps insulin resistance," says Barbara Nikolajczyk, PhD, BUSM associate professor of microbiology and medicine, and the senior author of the study, which was published in the online version of the *Journal of Immunology*. This research was funded by the National Institutes of Health and the American Diabetes Association.

Previous research using mice showed that T cells play a critical role in the development of insulin resistance in response to a high-fat diet, often leading to T2D.

Genes link puberty timing and body fat in women

Scientists have discovered 30 new genes that control the age of sexual maturation in women. Notably, many of these genes also act on body weight regulation or biological pathways related to fat metabolism. The study, which appears in *Nature Genetics*, was a collaborative effort by the international ReproGen consortium, which included 175 scientists from 104 worldwide institutions, including Boston University School of Medicine and Boston University School of Public Health.

"Our study found genes involved in hormone regulation, cell development, and other biological pathways associated with mechanisms age at menarche, which shows that the timing of puberty is controlled by a complex range of biological processes," says senior author Joanne Murabito, MD, ScM, BUSM associate professor of medicine and clinic director and investigator of the Framingham Heart Study.

"Several of the genes for menarche have been associated with body weight and obesity in other studies, suggesting some women may have a genetic susceptibility to weight gain and early puberty. It is important to understand that these 'genetic factors' can be modified by changes in lifestyle. Efforts to reduce or prevent childhood obesity should in turn help reduce the early onset of puberty in girls," Murabito adds.

Support for the study was provided by the National Institute on Aging and the National Heart, Lung and Blood Institute.

BUSM researchers have identified a potential new biomarker and therapeutic target for melanoma.

New biomarker for melanoma identified

In collaboration with Johns Hopkins University, BUSM researchers have identified a potential new biomarker and therapeutic target for melanoma. The novel cell-screening method used in the study also clarifies the process behind tumor metastasis and may allow the identification of biomarkers for other aggressive cancers. The findings appear online in *Cancer Research*.

The researchers investigated the process through which melanoma cells communicate with blood vessel cells and promote the formation of tube-like conduits that may allow for tumor metastasis. They found that the molecule neuropilin-2 played a large role in the process and that silencing it inhibited cancer cell growth. "We found that neuropilin is an important mediator of melanoma cell and blood vessel cell interactions," says Rhoda Alani, MD, BUSM professor and chair of dermatology. "We can now investigate this molecule as a potential biomarker and melanoma treatment target. We can also use the unique methodology developed in these studies to evaluate cellular crosstalk between other tumor cell types and vessel cells. Such studies are likely to provide important insights into the metastatic process for other cancers."

BUSM researchers have found that among inner-city children, the drug omalizumab improved asthma control, nearly eliminated seasonal exacerbations, and reduced the need for controller medication.

Drug omalizumab reduces asthma symptoms, future attacks among inner-city children

In collaboration with researchers from the Inner City Asthma Consortium, BUSM researchers have found that among inner-city children, the drug omalizumab improved asthma control, nearly eliminated seasonal exacerbations, and reduced the need for controller medication. These findings were published in the *New England Journal of Medicine*.

Guidelines-based treatment of persistent asthma follows a step-wise approach designed to achieve control. In allergic patients with asthma who fail to achieve control on higher steps of treatment, omalizumab, a humanized monoclonal anti-IgE antibody, is recommended based on available clinical trial data for children with severe asthma. Anti-IgE treatment reduces the allergic airway response to inhaled antigen, symptoms, exacerbations, and, in some patients, the dose of inhaled corticosteroids (ICS) needed to maintain disease control.

"There is a high prevalence of allergic sensitization and ongoing allergen exposure in inner-city environments," explains study coauthor Suzanne Steinbach, MD, BUSM associate professor of pediatrics. "We found omalizumab to be equally effective at all levels of asthma severity and all ages evaluated. Secondly, the addition of omalizumab significantly reduced asthma symptoms within one month rather than three, as previously reported. Third, and most striking, was the profound reduction in all exacerbations associated with omalizumab treatment."

This project was supported by the National Institute of Allergy and Infectious Diseases. Additional funds were provided by the National Institutes of Health National Center for Research Resources. Supplemental support was provided by Novartis Pharmaceuticals Corporation under a clinical trial agreement with the University of Wisconsin–Madison. The study received donated product from Novartis Pharmaceuticals Corporation, Dey Pharma, L.P., and S. C. Johnson & Son, Inc.

Researchers find anatomic differences after robotic-assisted radical prostatectomy and open prostatectomy

BUSM researchers have concluded that the anatomy of the pelvis following robotic-assisted radical prostatectomy (RARP) is considerably different when compared to the anatomy of the pelvis following an open prostatectomy (OP). These findings, which are the first to ever compare pelvic anatomy following RARP and OP surgeries, may have implications for patients requiring postoperative radiation. The study appears online in *Practical Radiation Oncology*.

The surgical approaches to prostatectomy include open, laparoscopic, and robot-assisted prostatectomy. In particular, robot-assisted prostatectomy has rapidly gained acceptance in the urologic community and is now in widespread and rapidly expanding use. Currently it is estimated that nearly 60 percent of all prostatectomies in the U.S. are performed using the robotic technique.

"The most clinically relevant differences observed in the current study were the superior mediolateral separation of the levator ani and the trend toward statistical significance in the separation of the bladder from the rectum, representing the anterior, posterior, and lateral borders of treatment volumes," explains lead author Ariel Hirsch, MD, BUSM assistant professor of radiation oncology. "Thus, careful attention must be paid in planning the posterior and lateral margins to ensure that coverage is sufficient in men who have undergone RARP. To that end, our data support that the CTV borders as suggested by the Radiation Therapy Oncology Group guidelines be expanded five mm beyond the anterior rectal wall posteriorly and five mm beyond the levator ani muscles laterally in men who have undergone RARP."

The researchers believe that as RARP continues to become a more widespread surgical option for the management of localized prostate cancer, the radiation field design may need to be further adjusted.

continued

Researchers from a consortium led by the Boston University School of Medicine, University of Pennsylvania School of Medicine, and the University of Miami identified four new genes linked to Alzheimer's disease.

Increased risk of blood clots when taking oral contraception with drospirenone

Two new drug safety studies conducted by BUSM researchers offer strong evidence that women taking oral contraception with drospirenone have an increased risk of nonfatal venous thromboembolism, or blood clots, compared to women taking oral contraception with levonorgestrel.

Susan S. Jick, DSc, director of the Boston Collaborative Drug Surveillance Program at BUSM and professor of epidemiology at BUSPH, and her colleagues conducted the two studies simultaneously using two different data resources—one from the United Kingdom and the other from the United States. The UK study found that women taking drospirenone contraception had a threefold-higher risk of nonfatal blood clots compared with women taking levonorgestrel contraception. In the study examining women in the U.S., women taking drospirenone contraception had double the risk of nonfatal blood clots compared with women taking levonorgestrel contraception.

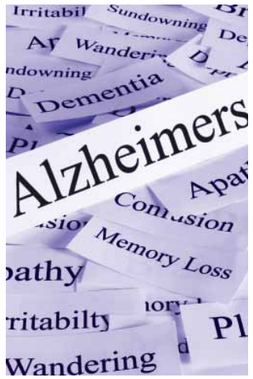
"Our data clearly shows an increased risk in women taking drospirenone contraceptives compared to levonorgestrel contraceptives," says Jick. "It is important for women to be informed about the risks and benefits of the different oral contraceptives so they can make informed decisions."

The results are published in the *British Medical Journal*.

Alzheimer's disease consortium identifies four new genes for Alzheimer's disease risk

In the largest study of its kind, researchers from a consortium led by the Boston University School of Medicine, University of Pennsylvania School of Medicine, and the University of Miami identified four new genes linked to Alzheimer's disease. Each gene individually adds to the risk of having this common form of dementia later in life. These new genes offer a portal into what causes Alzheimer's disease, and identifying them is a major advance in the field.

The study, conducted by the Alzheimer's Disease Genetics Consortium, reports genetic analysis of more than 11,000 people with Alzheimer's disease and a nearly equal number of elderly people who have no



symptoms of dementia. Three other consortia contributed confirming data from additional people, bringing the total number of people analyzed to more than 54,000. The consortium also contributed to the identification of a fifth gene reported by other groups of investigators from the United States, the United Kingdom, France, and other European countries. The findings appear in *Nature Genetics*.

The researchers' ultimate aims are twofold. First, identification of new Alzheimer's disease genes will provide major clues as to its underlying cause. Genetic studies can provide new insights into the molecules at the center of the disease. Gaining this type of understanding is critical for drug discovery since the currently available treatments are only marginally effective.

"The skyrocketing prevalence and financial and societal costs of Alzheimer's disease will soon undermine the delivery of health care worldwide," says Lindsey Farrer, PhD, BUSM professor of neurology, genetics, and genomics, chief of biomedical genetics, and BUSPH professor of epidemiology and biostatistics, who leads the Boston analysis unit. "That gives our national research enterprise added incentive to act quickly and boldly to make new discoveries."

Second, this discovery will contribute to predicting who will develop Alzheimer's disease, which will be important when preventive measures become available. Knowing these risk genes will also help identify the first disease-initiating steps that begin in the brain long before any symptoms of memory loss or intellectual decline are apparent.

The research published in *Nature Genetics* was supported by the National Institute on Aging, part of the National Institutes of Health, which includes 29 Alzheimer's Disease Centers, the National Alzheimer's Coordinating Center, the National Institute on Aging (NIA) Genetics of Alzheimer's Disease Data Storage Site, the NIA Late Onset Alzheimer's Disease Family Study, and the National Cell Repository for Alzheimer's Disease.

MAJOR RESEARCH GRANTS

$1.3M

BUSM has been awarded a five-year, $2 million grant from the National Cancer Institute (NCI) Early Detection Research Network (EDRN), as well as a four-year, $1.3 million grant from the U.S. Department of Defense (DoD). These grants will allow researchers to develop novel and complementary procedures for early detection of lung cancer in high-risk patients.

The NCI grant will support collaboration between the University of California, Los Angeles and Boston University to form a Lung Cancer Biomarker Development Laboratory (UCLA–BU BDL) as part of the NCI EDRN program. The focus of the BUSM portion of the program is designed to develop new tests for diagnosing lung cancer based on subtle cancer-related differences in cells from the nose or mouth. "The idea is that even though these cells aren't cancerous, they act differently in patients with cancer, and we can use these differences to diagnose disease," says Marc Lenburg, PhD, one of the principal investigators on the grant and an associate professor of medicine and pathology at BUSM.

The DoD grant will fund collaborative research involving researchers at BUSM, UCLA, the University of Texas MD Anderson Cancer Center, and Vanderbilt University. The project also focuses on novel tests for the early detection of lung cancer and will study veterans, who are 75 percent more likely to develop lung cancer than civilian adults and are also more likely to die from the disease. "The challenge is to develop lung cancer detection methods that are effective during this early window of opportunity to increase the rate of early detection and thereby spur early treatment and improve lung cancer patient outcomes," says Avrum Spira, MD, principal investigator on both grants and an associate professor of medicine and pathology at BUSM.

$3.7M

Deborah A. Frank, MD, BUSM professor of pediatrics and director of the Grow Clinic for Children at Boston Medical Center, received a five-year, $3.7 million grant from the National Institutes of Health (NIH) to study the long-term impact of intrauterine cocaine exposure (IUCE) and intrauterine substance exposure (IUSE). The project will examine resilience among young adults who had IUSE. Resilience evolves from person-environment interactions, which may buffer the impact of biologic and social risks. The multidisciplinary, longitudinal study will look at 140–150 urban participants between the ages of 18 and 24 who, along with their caregivers, have been monitored since birth for their exposure to violence and material hardship. Focusing on both environmental and biological factors, Frank and her colleagues will analyze the resilience of the participants and their ability to beat the odds despite negative circumstances. "Many Americans have experienced intrauterine exposures to psychoactive substances, which may put them at an increased risk for difficult life circumstances," says Frank. "We are working to identify the factors that can foster resilience, which could yield important public health interventions."

$1.625M

Pietro Cottone, PhD, BUSM assistant professor of pharmacology and psychiatry, and Michael Silverstein, MD, BUSM associate professor of pediatrics, were each awarded the prestigious National Institute of Mental Health (NIMH) Biobehavioral Research Awards for Innovative New Scientists (BRAINS) grant with 10 other investigators from around the country. The BRAINS award calls for innovative and groundbreaking research projects from early-stage investigators to explore the complex mechanisms underlying mental disorders, or novel treatments and prevention strategies. The award supports scientists in launching an innovative clinical, translational, or basic research program that has the potential to profoundly transform the understanding, diagnosis, treatment, or prevention of mental disorders. Cottone's research explores the neural mechanisms underlying addictive disorders; Silverstein is studying maternal depression and exploring detection and treatment options in the community setting, using programs like Head Start and Early Intervention. The BRAINS program awards up to $1.625 million over five years.

$2M

The National Cancer Institute's (NCI) Alliance for Nanotechnology in Cancer has tapped a multidisciplinary research team, comprising members of the Medical and Charles River Campuses, to launch a training center to help grow the next generation of nanomedicine researchers in cancer. The announcement comes with a five-year, $2 million grant.

An offshoot of nanotechnology, nanomedicine is medical intervention at the molecular scale for treating disease or repairing damaged tissues. Harnessing nanoparticles to deliver drugs, heat, light, or other substances to specific cells could dramatically alter the future of diagnoses, prognoses, and treatments for a range of diseases. Traditional chemotherapy, for example, is delivered through the vein and exposes the entire body to its potent effects.

"If you can deliver chemotherapy specifically to sites, you not only concentrate the chemotherapy at the site of the tumor, but decrease the side effects and off-target effects," says Douglas Faller, MD, PhD, BUSM professor of medicine, pediatrics, biochemistry, microbiology, pathology, and laboratory medicine; director of the Cancer Center; vice chair of the Division of Medicine; and one of the grant's primary investigators.

The grant will allow graduate students and postdoctoral fellows at BU to train in research labs focused on developing diagnostic and therapeutic tools for various types of cancer.

This article was written by Caleb Daniloff and originally appeared in BU Today.

PHOTOS BY FRANK CURRAN

A Conversation *with* Provost and Dean Karen Antman, MD

KAREN ANTMAN, MD, an internationally recognized expert on breast cancer and other malignancies, became dean of Boston University School of Medicine and provost of the Medical Campus on May 1, 2005. She came to BU from the National Cancer Institute (NCI) of the National Institutes of Health (NIH), where she served as Deputy Director for Translational and Clinical Sciences in 2004 and 2005. Previously, she spent more than 10 years as the Wu Professor of Medicine and Pharmacology at Columbia University College of Physicians and Surgeons, and Director of Columbia's Cancer Center. In 1993, Antman was voted Senior Faculty Teacher of the Year by medical residents at Columbia. She also served on the faculty of Harvard Medical School from 1979 to 1993 and had hospital appointments at Brigham and Women's Hospital and Dana-Farber Cancer Institute in Boston and Presbyterian Hospital in New York.

In high school, Karen Antman wanted to be a doctor, but was told the profession was unsuitable for a woman and was discouraged, even by some teachers. On a college exchange program in Czechoslovakia, she discovered that more than half of their physicians were women (and that Czech students knew more about American art, music, and theater than she did). She returned hooked on international travel, continued her pre-med requirements, and added classes in music, modern art, American theater, and Russian history and language. "The realization that traditional constraints on women in medicine in the U.S. were cultural and had nothing to do with aptitude must have occurred to many American women and medical school admissions officers at about the same time. Women comprised about 10 percent of our class but, by graduation, 30 percent of the incoming class were women. Clearly, I was on the inflection curve of a cultural change," Antman reflects.

Her professional trajectory illuminates a person who seizes upon data, analyzes it for facts and trends, and uses it to develop goals and strategies. When she was an undergrad, one of her college friends was diagnosed with Hodgkin's disease and a neighbor with leukemia; Antman was told that both had fatal diseases. The neighbor with leukemia died shortly thereafter. Her friend with Hodgkin's lymphoma returned to school the next fall, graduated, and did fine. He had been enrolled in a clinical trial of the National Cancer Institute and was one of the first to receive a combination chemotherapy regimen for then-fatal stage 4 Hodgkin's disease, a cohort with 45 percent long-term survivors. "I was impressed: standard medicine for a fatal disease—you die; clinical trial—you live," says Antman. "So I entered medical school knowing I wanted to do clinical research in cancer."

After graduating from Columbia University College of Physicians and Surgeons, she completed a medicine residency at Columbia University Medical Center, married medical school classmate Elliott Antman, and began a clinical fellowship in oncology as well as a research postdoc in neoplastic disease mechanisms at Harvard's Dana-Farber Cancer Institute. Their family comprises six physicians: both their son and daughter are physicians and also married classmates.

How did you get involved in administration? "Clinical cancer care requires at least four specialists: the surgeon, pathologist, and radiation and medical oncologists for each patient. Thus oncologists learn to work in teams. I started out as a cancer investigator supervising a sarcoma clinical research team and a bone marrow transplant research team and learned to manage budgets.

"I didn't wake up wanting to do administration. Given that resources are always limited, how does the team achieve maximum return? Faculty had different skills. Some could draft a grant but not polish it. Others could analyze data but weren't good writers. We put together teams with the requisite skills. If each team member contributed effectively so that they each advanced their individual career and the team's as a whole, more research was done, papers published, and grants secured.

"I was then recruited to Columbia to be a division chief of medical oncology with a faculty of about 30 and subsequently became the director of the cancer center, with about $150 million in cancer research funding, and finally I headed to the NIH

RECENT DEVELOPMENTS, ACHIEVEMENTS, AND ADVANCES AT BUSM

NEW AND RENOVATED FACILITIES

A new Student Residence to house 208 first-year medical students is under construction and scheduled to open in the fall of 2012. In addition to subsidies from the University, School of Medicine development efforts have raised $11 million to support the $40-million construction.

Phase one of a three-phase renovation of the library was completed in spring 2010 and provides 10,000 square feet of newly renovated quiet and study space. Phases two and three are renovations of an additional 25,000 square feet of space and will include new study space, breakout rooms, and computing facilities.

Complete renovation of 13,000 square feet of classroom space on the second floor of the Instructional Building, completed in August of 2010, provides eight new modular classrooms that may be combined or separated based on class size needs. These classrooms feature state-of-the-art audio/visual- and IT-based teaching systems.

Crosstown Center opened in 2007 with 250,000 square feet of office space on the corner of Massachusetts Avenue and Albany Street.

Three classrooms were added to the first floor of the Instructional Building in 2008. These spaces are now used as the model for future instructional renovations, saving money on architectural and construction fees by replicating the same model multiple times.

A 160,000-square-foot, eight-story research building that opened October of 2005, Biosquare III at 670 Albany Street includes a 300-seat auditorium equipped with audiovisual and teleconferencing systems.

The School of Medicine Instructional Building lobby was renovated, including lounge and eating areas and café and conference space.

Renovations of four of seven floors of the Conte Laboratory Building took place in 2009/2010.

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NEW SCHOLARSHIPS

$10.5 m

The largest single gift to BUSM

$108 m

BUSM received $108 million in foundation philanthropy.

Eight

NEW PROFESSORSHIPS, ASSISTANT PROFESSORSHIPS & ENDOWED RESEARCH FUNDS

BU CARES

BU CARES Institutional Learning Objectives instituted—"BU CARES" stands for the BUSM education program's seven fundamental objectives, which detail the knowledge, skills, and attitudes that every graduate should possess. The principles behind BU CARES guide the management of the curriculum, inform student assessments, and form the basis of all course and clerkship learning objectives.

FACULTY/ALUMNI/STUDENTS

BUSM Faculty Central—This faculty-oriented website centralizes information on curricular, research, administrative, and faculty development resources at BUSM.

New faculty orientation—For the first time, the Medical Campus sponsored an orientation program for new faculty.

New faculty reporting system—An online system is now in place for faculty to report on their teaching, research, clinical, and administrative responsibilities, initiatives, and achievements, including publications, funding, and honors.

Full funding for MD-PhD students—While research and training grants support the PhD training, BUSM is now providing full financial support for the medical education of MD-PhD students.

There has been a first-time decline in average BUSM student debt.

Mission-based budgeting allows the School of Medicine to align expenses with specific activities, including clinical care, research, teaching, and administration.

To accommodate curriculum changes, the Clinical Skills and Simulation Center was created to offer an active learning center with resources, equipment, and technology that simulates clinical situations for students.

An e-newsletter updates alumni on campus events.

Enhancement of student-centered and student–alumni activities deepens student commitment to BUSM and strengthens links to alumni.

as a deputy director. Each time the number of people, the size of the budget, and number of grants increased.

"Probably the best training to be a dean was serving as a cancer center director with laboratory, clinical, and public health research. The cultures of the three are very different. Simplistically, basic scientists value mechanisms; clinicians, outcomes; and those in public health, prevention.

"It is essential to do something challenging that you enjoy. To stay on a learning curve, academics need to reinvent themselves every decade or so. Students, residents, and faculty initially learn rapidly and then master the material; learning levels off. Taking on new responsibilities and different challenges requires learning new skills."

Why did you become dean of Boston University School of Medicine? "Trajectory and mission. When considering the dean position at BUSM, I was struck by the changes in the campus compared to prior visits earlier in my career. The trajectory of the campus in research, renovations, and resources under Dr. Chobanian's leadership was impressive. BUSM's faculty and students are committed to its educational and research mission; my other reason for coming to BUSM. This community is also dedicated to mitigating health disparities locally and globally. People come here because they are committed to the patient population. Columbia was also committed to eliminating health disparities in New York City and the NIH was also passionately committed to cancer research. So BUMC felt comfortable."

"THE WONDERFUL THING ABOUT MEDICINE IS ITS MANY NICHES FOR DIFFERENT TYPES OF PEOPLE."

What is your philosophy of leadership? "How do we best invest limited resources to get the most effective results, to produce outstanding research and educational programs that facilitate mastery of the requisite knowledge base? Leaders get credit for what their faculty accomplish, not for what they do personally.

"Faculty in academic medical centers are selected to be self-starters. Leading is recruiting the right people and giving them freedom to develop productive collaborations and teams. To the extent possible, good academic leaders eliminate barriers to faculty productivity.

"We are an idea place. Management research suggests that in creative industries, for example Bell Labs, universities, and pharma research, collaborations in small teams get the best results, although these institutions will also have some pretty creative solo fliers.

"The Association of American Medical Colleges runs a program for new medical school deans affectionately called 'charm school' by the deans. It covers budgets and spreadsheets, conflict resolution and negotiating skills, academic law, and working with the press. We recently covered some of these same concepts for our BUMC Emerging Leaders Forum in April."

What do you think makes a good physician? "The wonderful thing about medicine is its many niches for different types of people. Medical expertise is a necessity, but good pathologists, radiologists, surgeons, psychiatrists, pediatricians, and physician investigators require different personalities and skills. Certainly physicians on the clinical front lines need empathy and outstanding communication skills, however, for a physician investigator in a lab, critical thinking might be more important. Pathology and radiology require pattern recognition. Surgeons also need hand-eye coordination. We need to be open to considerable diversity of talent within our students and faculty."

What do you consider the most pressing challenges to medical education? "Cost and access. Cost to students and cost to the institution to provide the necessary resources for a high-quality education. Eighty percent of U.S. medical students come from families with incomes in the top 40 percent. The magnitude of the debt discourages many from less well-to-do families who would be excellent physicians. We have to protect access to an affordable medical education. We also must develop more effective ways of conveying information. Small groups may be more effective for learning, but are also more expensive in terms of faculty time. Perhaps we should use interactive modules that students view online before coming to class for small group discussions.

"Most of the world spends about five years in medical school after high school, followed by residency. In the U.S., we spend eight. Developing more effective pedagogical methods to facilitate mastery of the required coursework would decrease cost. Making medical education affordable makes it more accessible.

"The idea that the duration of medical education should be determined by mastery of competencies rather than by a fixed interval in medical school is generating considerable discussion among medical educators. Theoretically, students who master the competencies more quickly would graduate sooner. How to provide effective medical education to a class of students on their own different personal schedules, however, is a major stumbling block."

What do you see as the future of medical education and BUSM in particular? "We want to be known for creativity in medical education as well as for our research and exceptional care. Many of our faculty study educational interventions to determine if students' learning improved—or not. Dr. Deborah Vaughan evaluated online testing in one course to get experience with the technology before we make a decision to adopt it. She also found no difference in grades between students who attend class and those who don't, although before lectures were taped, the outcome may have been different. Educational neuroscience may identify more effective means of mastering the required medical curriculum.

"We're also encouraging transdisciplinary research collaborations and have recently started conferences that focus on a theme with faculty from the three Medical Campus schools presenting their research.

"Health disparities cut across disciplines—pediatric care, cardiovascular disease, or cancer—here in Boston as well as internationally. Such research should be a strength on our campus.

"Finally, our students will need to master global health issues. They will need to recognize tropical diseases in U.S. emergency rooms, even if they never leave the U.S."

What are your thoughts on health care reform? "My personal view is that health care is a right, not a privilege. No other industrialized country lacks a cohesive health care plan for its citizens. Other countries, such as Switzerland, have closely regulated private insurance or, as in Australia, government-funded baseline catastrophic care with the option to buy additional private health care for those who want it. We haven't had health care reform yet. We have had health insurance reform." ■

TRAIN, RETOOL, MASTER, LEAD, ORGANIZE, LEVERAGE, CREATE, COMMUNICATE, MANAGE

keys to leading academic medicine today.

"We need to train our future leaders, as well as retool those of us currently in leadership roles, to master a complex skill set, such as leading by values, organizing high-performance teams, leveraging technology, creating financial transparency, communicating effectively in the face of ambiguity, and managing change."

—DARRELL KIRCH, MD, AAMC PRESIDENT AND CEO

OUR PANEL

Steven Berk '75 is dean of the School of Medicine and executive vice president and provost of the Texas Tech University Health Sciences Center.

Robert Golden '79 is dean and vice chancellor for medical affairs at the University of Wisconsin-Madison School of Medicine and Public Health.

Joshua Wynne '71 is vice president for health affairs and dean of the School of Medicine and Health Sciences at the University of North Dakota.

Being dean of a medical school in the United States is a complex challenge, and BUSM has produced three current leaders who meet the demands of guiding their respective institutions and provide leadership to the profession.

THE ROAD TO LEADERSHIP

While none of these graduates set out to be a medical school dean, each one had a catalyzing experience developing a department, a new program, and even a new medical school.

"I fully intended to pursue a typical academic career focusing on research, education, and clinical care in my area of greatest interest, mood disorders," recalls Robert Golden. "Unexpectedly, at a relatively junior phase in my career, I was invited by the new director of UNC's general clinical research center to join him as the new associate director. To my surprise, I found that I really enjoyed many aspects of administration, especially new program development and the creation of synergistic partnerships among different academic groups."

Dr. Golden then was appointed chair of psychiatry, and after a decade in that role, the new dean and CEO of the University of North Carolina health care system invited him to fill the new position of vice dean. "It turned out that the position was a great fit for me, and I learned that I enjoy serving as a 'coach' even more than as a 'player,'" he adds. "Thus I was quite receptive when I received an invitation to look at the position of dean and vice chancellor for medical affairs at the University of Wisconsin School of Medicine and Public Health."

Steven Berk's trajectory to deanship was launched by his medical education and training at BUSM, combined with an early opportunity to join the faculty of the newly created medical school at East Tennessee State University (ETSU). "The background that I received in academic medicine at BUSM and Boston City Hospital ensured my success at the new medical school in East Tennessee. BUSM and BCH attracted attending physicians who were passionately challenging young trainees to develop excellence in patient care, teaching, and scholarship," says Berk. "The clerkships and post-graduate education combined the best of bedside teaching, patient care based on exhaustive knowledge of the

literature of medicine and scholarship, and discovery as an integral part of the day's clinical work. This atmosphere encouraged careers in academic medicine at that time, just as it does today."

Joshua Wynne was an early admirer of academic medicine. While a student at BUSM, he had the opportunity to work with Richard Egdahl, then chair of surgery. "I had the chance to see what academic surgery was like, and I fell in love with the idea of academic medicine," recalls Wynne. Although happy in Boston as a faculty member at Harvard and cardiologist at what was then Peter Bent Brigham Hospital (now Brigham and Women's), Wynne was recruited by Wayne State University to be chief of cardiology.

"I had no intention of moving to Detroit, but the idea of trying to build an academic cardiology unit was appealing to me," says Wynne. "I decided I really liked the administrative side of medicine and thought that I had had some successes, but I wasn't quite sure if I wanted to run a hospital, or a foundation, or what." He enrolled in the University of Chicago executive MBA program as he felt he needed more formal training. "It was a fantastically invigorating experience because we learned the details of management in a stimulating intellectual environment, the kind that I had found at BU and at the Brigham," he says. To round out his preparation for administration, Wynne acquired a master's in health management and policy at the University of Michigan.

LEADING BY LISTENING

Wynne notes that he experienced an evolution in his understanding of leadership: "While I knew I had a handle on problem solving—and I knew it was my job to convince others of what I thought was the right thing to do—I realized that only succeeds sometimes. I realized that by working collaboratively as a team the end result is invariably a more reasoned solution to the problem and better than any one person could conceive. That does not mean molding people to my way of thinking, but genuinely developing input from my leadership team and having a dynamic and respectful interaction."

Like Wynne, Golden relies on the collaborative efforts of the highly talented and insightful colleagues on his team and encourages them to share and respectfully debate their different ideas, opinions, and perspectives. "I try to synthesize the best ideas into an action plan, and provide the requisite support for those responsible for its implementation," he explains.

According to Berk, he stays grounded by listening to and learning from students: "To be a leader in medical education, it is helpful to have a good memory of what it was like to be a medical student and resident. A leader must understand the process necessary to teach and develop good clinical skills, to care about medical students and understand that each student has a unique background, skill set, and different way of learning, coping, and interacting with peers." He continues to lecture, and attends many of the early clinical experience small groups and demonstrated physical exam techniques. He also meets with third-year students individually to hear about their clerkship experiences.

Joshua Wynne, MD, MBA, MPH '71

completed his internal medicine residency and cardiology fellowship at Peter Bent Brigham Hospital and Harvard Medical School, where he served as director of the Brigham's Noninvasive Cardiac Laboratory. He is board certified in internal medicine and cardiovascular disease. In 1984, he became chief of the Division of Cardiology at Wayne State University. Starting in 2004, he served as the University of North Dakota medical school's executive associate dean for academic affairs, and subsequently as vice dean. He was appointed vice president for health affairs and dean of the School of Medicine and Health Sciences in July of 2010.

He holds an MBA with honors from the University of Chicago and an MPH degree from the School of Public Health, Department of Health Management and Policy, University of Michigan. He is the author of more than 200 publications and has been cited 13 times as one of the Best Doctors in America by Best Doctors, Inc. (www.bestdoctors.com). He received the BUSM Distinguished Alumnus Award in 1998.

Wynne is married to Susan Farkas, a practicing cardiologist who has a clinical appointment at the University of North Dakota. They have two children, both graduates of Boston University.

Robert Golden, MD '79

completed his internship, residency, and chief residency in psychiatry at the University of North Carolina (UNC). He was a medical staff fellow in the Clinical Pharmacology Section of the National Institute of Mental Health Intramural Research Program. Returning to UNC in 1985, he served as the founding director of the Clinical Psychobiology/Pharmacology Research Training Program and the ECT Service, associate director of the General Clinical Research Center and the Mental Health Clinical Research Center, and chair of the Department of Psychiatry for 11 years. In 2004, he assumed the additional role of vice dean. In 2006, he became the ninth dean of the University of Wisconsin–Madison School of Medicine and Public Health and the vice chancellor for medical affairs. He holds the Robert Turell Professorship in Medical Leadership.

His research and clinical interests focus on psychobiological and psychopharmacologic aspects of mood and anxiety disorders. He has published more than 390 papers, chapters, books, and research abstracts. He has served on editorial boards, review panels, and advisory committees and is currently associate editor for *Psychosomatic Medicine*.

Golden was chosen as a Ginsburg Fellow of the Group for the Advancement of Psychiatry, a Laughlin Fellow of the American College of Psychiatrists, and a Jefferson Pilot Fellow in Academic Medicine. He is the recipient of the Eugene Hargrove Mental Health Research Award and the Mood Disorders Research Award from the American College of Psychiatrists.

Golden lives in Madison, Wisconsin, with his wife, Shannon Kenney, MD, who is the Wattawa Bascom Professor of Cancer Research in the departments of Oncology and Medicine at the University of Wisconsin–Madison. They have four children.

Steven Berk, MD '75

completed his internal medicine residency and infectious disease fellowship at Boston City Hospital. He is board certified in internal medicine and infectious disease with a certificate of added qualification in geriatrics. In 1979, he joined the faculty of East Tennessee State University (ETSU) and was appointed chief of infectious disease in 1982, professor of medicine in 1986, and chair of the Department of Medicine in 1988, a position he held for 11 years. He joined Texas Tech University Health Sciences Center (TTUHSC) School of Medicine in Amarillo in 1999, where he served as regional dean and professor of medicine, and holds the Mirick-Myers Endowed Chair in Geriatric Medicine. In 2006, he was appointed dean of the school of medicine and vice president for medical affairs at TTUHSC, and, in 2010, was appointed executive vice president and provost for TTUHSC.

He is the author or co-author of more than 120 publications and four textbooks. He has served on the National Institutes of Health Special Advisory Panel on the evaluation of vaccines against infections in the elderly, and on the editorial board of the *Journal of the American Geriatric Society*. He is a ten-time recipient of the ETSU medical school's Teacher of the Year Award and also received the university's Distinguished Faculty Award. The American College of Physicians named him Laureate in Medicine in 1998, and he was elected to the national board of Alpha Omega Alpha in 1999. He received the Texas Tech University Health Sciences Center Distinguished Service Award in 2003.

Berk has been married to his wife, Shirley, a microbiologist, for 29 years and has two sons. He recently completed a book five years in the making entitled *The Anatomy of a Kidnapping, a Doctor's Story*. He was kidnapped from his home in Amarillo at gunpoint in 2005.

THE MISSION AND THE STUDENTS

"Medical education has a moral obligation to elevate the health of all people in our society," says Golden. "This can be best accomplished through compassionate, state-of-the-art clinical service, innovative research and discovery, and the thoughtful education of the next generation of clinicians. At the same time, we should be nonpartisan advocates for public policies that promote health and well-being."

Wynne emphasizes the important role medical education has in mitigating health disparities and advancing best practices. "We need to do even more from an advocacy standpoint to improve our health care delivery system," he says. "Medical schools have very important social missions and, certainly, BUSM has been at the forefront of this. In a state like North Dakota, where we have only one medical school, I take this role very seriously. At North Dakota we also recognize that a community-based approach to the research enterprise contributes significantly to public health."

"While medical education is constantly changing as students, technology, and societal needs change, medical schools remain safety-net providers for patients, a community resource that can be depended on to do what is right for the health of a region as a whole, a place where there is great debate and concern about how to produce the best possible physician, and—of course—the hope for new treatments and cures," says Berk.

The three deans agree that while intellectual skills are necessary, caring and the ability to communicate are among the most important qualities in medical students who will make good physicians. "Recently, I had a herniated disc," Wynne says. "Certainly I wanted the best hands that were available to fix my back, but I also wanted someone who could deal with my fears of what my life was going to be like after the surgery.

"The bottom line is, what does each of us want in our doctor? We want a caring, compassionate, concerned, compulsive, good communicator who has the ability to work with others. If we can select people who have those qualities and then train them in medical school, we will be doing a good job as educators preparing the next generation of physicians."

Berk harkens back to his own training to illustrate the qualities that make for a good health care provider: "As was the case at BUSM and Boston City Hospital, role-model physicians are experts in patient communication, physical exam, and self-learning. In the end, the most competent physician will be the one who cares about his patient."

Like Berk, Golden was influenced by his BUSM mentors. "I was inspired by several wonderful role models at BUSM who were triple threats—outstanding clinicians, teachers, and researchers," he says. "At that pivotal stage in my education, I became impressed with the synergies that are afforded when the three missions are integrated. The very best physicians are those who are equally attuned to the science and art of medicine. Both the brain and the heart must be fully engaged in service to the patient."

"This is a wonderful time to be in medicine because we as physicians can and should be involved in helping to improve and refine our health care delivery system."

— JOSHUA WYNNE

THE CHALLENGES AND THE ROAD AHEAD

Academic medicine has experienced a sea change in the last decade. Designed to better respond to changes in American society and the health care needs of the public, medical schools have developed curricula and programs that emphasize team-based learning, cultural competency, health care disparities, service-learning that encourages social responsibility, and integrated clinical experience starting in the first year.

The Association of American Medical Colleges (AAMC) Center for Workforce Studies outlined some predictions for the next decade, including 45,000 too few primary care doctors and a shortage of 46,000 surgeons and medical specialists. An additional 70,000 new graduates from expanding and new medical schools will find great difficulty in securing a residency slot due to the continuing freeze on government support for post-graduate programs and shrinking hospital budgets affected by cost containment measures of health reform. The retirement of close to one-third of all physicians in the next decade, while the large baby boomer population is aging, will require more health care resources.

"We need to stress teaching good analytical and critical thinking skills so that our medical students become physicians who are well prepared for what is certainly going to be a changing environment," says Wynne. "The whole health care delivery system is obviously a hotly debated topic, and I don't think anyone knows exactly how this is going to play out. We need to make sure that our students are prepared for changes even if we don't know what those changes are going to be.

"At the same time, I don't want to see students become anxious or discouraged about pursuing a career in medicine because of the uncertainty—we need to make sure they feel confident that they can handle the challenges that will be coming. This is a wonderful time to be in medicine because we as physicians can and should be involved in helping to improve and refine our health care delivery system. We should be excited that we are participants in making the necessary changes."

In Texas, Berk notes that the shortage of primary care doctors is critical. "We must decide how we can best help develop a mix of primary care doctors to specialists back to about a one-to-one ratio," he says. "To meet the incredible need in our state for family medicine physicians, our medical school established a six-year program—three years of school and the traditional three years of residency—which is designed to be very attractive to students interested in primary care." He adds that it is equally important to address the shortage of physician-scientists "to ensure that we reap the benefits of our enormous breakthroughs in molecular biology."

Golden believes that what medical students pay for their education and how health care providers are reimbursed are issues that need to be addressed: "The rising debt load of medical students, coupled with the growing disparities in compensation across the disciplines, is creating a perverse maldistribution of physicians in terms of both specialty choice and geographic practice location. We must develop strategies that remove the current disincentives to serve disadvantaged populations and create better correlations between what our society needs and what and where our graduates choose to practice."

"Medical schools no longer produce physicians, we produce residents. Yet we still design our programs as if all of our graduates will share common career paths," says Golden. "I'm not sure that all medical schools should attempt to 'do it all.'" He also offers a cautionary note: "Today's students know how to find information and data in a matter of seconds while walking down the hallway, which would have required hours in the library when I was in school. But if we aren't careful, the ease of learning via one's laptop—at a distance and in the comfort of one's home—can interfere with the important, albeit 'inefficient' human interactions that allow teachers to become role models and advisors."

With the passage of the Affordable Care Act in 2010, 32 million more Americans are eligible for health coverage. Health care delivery is on the forefront of a national conversation about how to—and who should—pay for the care.

Wynne views the challenges as access, affordability, and appropriateness of care. "We spend more than any other country in the world on health care, and these expenditures totaled would make it the sixth-largest economy in the world," he says. "This is unsustainable. We need a health care system that is more efficient in its use of resources. Access to insurance isn't the only requirement for access to health care, but it sure helps, and the Affordable Care Act is a good start.

"We also need to tackle the appropriateness of care which may have some incremental value, but in many cases is marginally beneficial but sufficiently expensive and does little to improve the overall public health." Wynne also notes that medical students and residents today, unlike those during his years of training, are very aware of systemic issues that affect how they care for their patients.

Berk advocates greater use of data. "Health care decisions need to be based on outcomes research," he says.

Golden notes the strong interrelationship between quality, access, and cost. "From a realistic perspective, we can't expect to have the very highest quality of care available for everyone at a cost that society can afford to bear," he says. "From a societal and an ethical perspective, every citizen should have access to care. From a personal perspective, I want my family's care to be high quality. This inevitably means that we must be prepared for relatively high costs. At the same time, we should make every effort to derive the greatest possible benefit from every health care dollar that we spend. This must involve a greater emphasis on prevention, health promotion, and the integration of public health with medical approaches." ■

Marking a Milestone with Generosity

Burton White '61 is honoring the occasion of his 50th BUSM reunion by establishing a charitable gift annuity to benefit the School of Medicine.

He recalls being interested in psychology in high school and belonging to a group of students who read current literature and listened to lectures on the radio. Upon hearing that White was wavering between dentistry and psychiatry, his guidance counselor at Boston Latin suggested he attend Harvard College and then "go the medical route at BUSM," calling it a "good package."

"BUSM accepted me, for which I am very grateful," said White. "Some of the other schools were not supportive of students inclined to pursue psychiatry." He recalls that, during his BUSM admissions interview, Dr. Stanley Robbins, BUSM professor of pathology, was very encouraging and helpful, which gave White a very good feeling about the School.

"BUSM gave me an excellent education and a strong foundation," he says. "The first two years were very hard with an onslaught of memorizing day after day, but in the end you really knew your stuff. The third and fourth years were terrific doing rotations at the former Boston City Hospital, Massachusetts Memorial Hospital, the VA, and the Lemuel Shattuck and Faulkner hospitals." He notes that the School did not have the campus resources that exist today. "I have enjoyed seeing the progress the School has made over the years, including the amazing research laboratories and the revamping of the hospital. It is well-deserved growth."

A longtime generous donor to the School of Medicine, White is modest about his planned gift to BUSM: "I have always wanted to pay back, give a little, and I felt I wanted to contribute more for this major reunion." He chose a charitable gift annuity as a way of giving while ensuring a stream of income in the future. He also has included BUSM in his estate plans.

White completed his internship at Los Angeles County General Hospital and his psychiatry residency at Massachusetts Mental Health Center. He is a practicing psychiatrist, a Distinguished Life Fellow of the American Psychiatric Association, and a member of the American Medical Association.

Although he and his wife, June, were both raised and educated in Boston, they met in California, and he says she made him promise they would return to California after his residency—a "very agreeable condition." Following a two-year stint with the U.S. Air Force in the Philippines, they settled in the San Francisco Bay area. Even though White lives across the country, he notes the good communication he has enjoyed with the School over the years, including visits from Dean Antman and former dean Aram Chobanian.

"I am very proud of the School and want to do a little something," he concludes. ■

MORE ONLINE: www.bumc.bu.edu/supportingbusm

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Making Medical Education More Accessible

Philanthropic actions are often characterized by a desire to mitigate inequalities—to make life better for the poor and underserved and to open up opportunities to those with limited resources. Albert Ghassemian, MD, a generous friend of BU and BUSM, has spent a lifetime making contributions to help address disparities in his local community and around the world.

Albert M. Ghassemian, MD

His most recent action—establishing an endowed scholarship that benefits both undergraduates and medical students—is indicative of his desire to close the gap. While median household income in the U.S. is $52,000, median household income for medical school matriculants is $110,000 (according to the Association of American Medical Colleges 2010 data) and only 17 percent of medical students come from families with incomes below the U.S. median figure.

Dr. Ghassemian's scholarship will help open the door to BU and BUSM regardless of a student's ability to pay. Established in his name and in memory of his beloved wife, Virginia, the scholarship will play an important role in reducing the debt of medical students at BU as well as offering them greater opportunities for entering a medical career path based not on financial necessity but on their field of interest.

"There is nothing better than philanthropy."

—ALBERT M. GHASSEMIAN

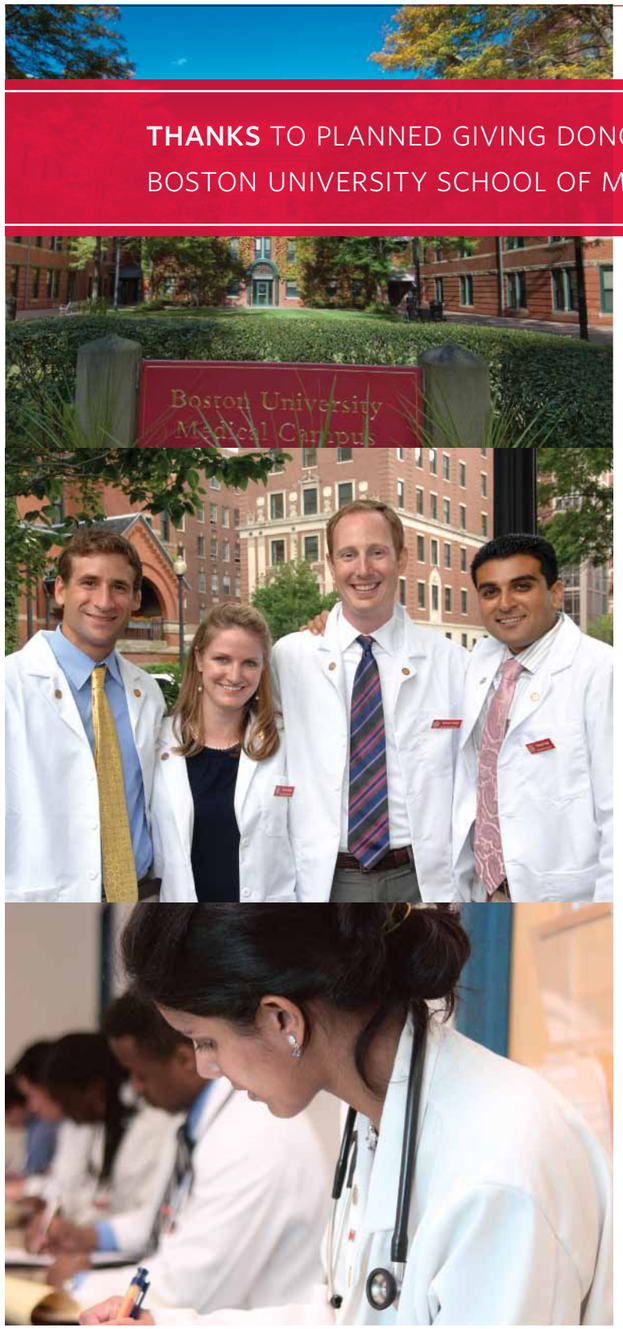
Dr. Ghassemian is board certified in internal medicine with a specialty in cardiovascular disease. Born in Azerbaijan of Armenian descent, he was raised in Tehran, Iran, where he attended a French Jesuit school before entering the National University of Tehran, where he earned his medical degree.

In 1971, he immigrated to the United States, where he completed a medicine internship and residency in pathology at St. Vincent's Hospital in Bridgeport, Connecticut—a Yale University affiliate. He also completed an internal medicine internship and a fellowship in cardiovascular disease at then-BU-affiliated Carney Hospital in Boston, as well as a fellowship in cardiovascular disease and electrophysiology at Hartford Hospital in Hartford, Connecticut. He practiced in Lawrence and Methuen, Massachusetts for more than 30 years.

He will tell you that the generosity of his parents—as well as being brought up in Tehran in the aftermath of World War II and seeing the misery of so many immigrants who fled the fighting—led to his passion, compassion, and faith in being decent and fair. In addition to supporting the education of many young people, he has founded and supported an orphanage in Aruba and rural schools for the poor in Armenia, and sent medical equipment and supplies to hospitals in Africa and Latin America. Ghassemian has also supported the Armenian Medical Fund and the Aram V. Chobanian, MD Scholarship Fund at the School of Medicine.

"There is nothing better than philanthropy," he says. "Your giving has to be based not on money but on what you want to see happen for the better. The lack of equality is such a problem, you have to do something."

"Increased scholarship assistance offers prospective students greater choice and added relief from the burden of long-term educational debt," says Dean Karen Antman, MD. "The Virginia and Albert Melik Ghassemian, MD Endowed Scholarship fund at BUSM will help equalize opportunity for a medical education and for that we are deeply appreciative of Dr. Ghassemian's generosity." ■



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Alumni NEWS

DEAR ALUMNI FRIENDS,
As a BUSM graduate, you are a partner in, contributor to, and beneficiary of the work of the Boston University School of Medicine community.

We take great pride in the significant and diverse accomplishments of our alumni. Having our own assistant dean for alumni affairs, Howard Bauchner, named editor-in-chief of *JAMA*, one of the most important medical journals in the world, is truly gratifying. Charlotte Cowan, the author of award-winning children's books, demonstrates the varied paths our graduates have taken and the important contributions alumni make to the health and wellness of our society.

The mission of the BUSM Alumni Association is fostering and enhancing the connection between graduates of the School of Medicine and the School, as well as helping individual alumni and classes stay connected to each other.

Along with our traditional class reunions, annual banquet, and receptions, we have instituted a number of programs and activities to facilitate our mission. Our online newsletter, **www.bumc.bu.edu/medalumni/alumni-enewsletter**, is a major feature of this outreach; we hope that you find it interesting and that it makes you feel more a part of the BUSM community. If we do not have your email address, please send it to us so that you won't miss out on all the great and useful information we've been sending out.

We regularly engage and interact with current students as we groom them to be involved alumni. This effort is ongoing and ever-expanding. They are a very impressive group of learners and doers!

When you get the chance, please visit campus, attend one of our events, or volunteer to help the School and our students. We'd be happy to see you.

Best regards,

Jean E. Ramsey

Jean E. Ramsey '90
Assistant Dean for Alumni Affairs
Associate Professor of Clinical Ophthalmology

Thank-A-Thon MONDAY, APRIL 25, 2011

Student and alumni volunteers call alumni to personally thank them for their contributions to the School of Medicine.

MORE ONLINE: www.bumc.bu.edu/medalumni/giving/thankathon

Candace King '13 shares a message of gratitude with an alumnus during the first-annual Thank-A-Thon held at the School of Medicine.

Thank-A-Thon volunteers Adil Yunis '14, Ricky Ortiz '14, and Madonna Ho '14, pose with their Alumni Association jackets and blankets.

Fulfilling the Mission of Dr. Hippocrates

Award-winning children's author Charlotte Cowan '84 shows how to manage care through children's literature.

As a pediatric resident at Massachusetts General Hospital (MGH) covering the emergency room one evening, Charlotte Cowan '84 saw a series of young children with asthma. "They were frightened of the nebulizer treatment," she recalls. "This got me thinking about what could be done to engage these children and dissipate their anxiety in the short and long term." She also felt frustrated by the lack of time and tools available to adequately allay parents' fears and inform them of good care practices.

Cowan found her answer in storytelling. She is now the author of five award-winning children's books, for which the Obama administration selected her as one of the nation's leading "social innovators" for health-care education in 2009. The founder of the Hippocratic Press, she has created age-appropriate stories for sick children that entertain, educate, and reassure both parent and child. "Picture books engage children and it is the nature of the genre that the books get read and reread," says Cowan. "You know that a parent who is reading the book will hear again and again the educational message in the story."

Her books have been used by departments of public health in 11 states, in pediatric offices, libraries, day care centers, health clinics, and children's museums. An Indiana program using her book *The Little Elephant with the Big Earache* as part of story time in 81 libraries throughout the state won the 2006 Centers for Disease Control Award for Innovation in Antibiotic Education. A clinical pilot is being launched at MGH to distribute copies of her books to randomly chosen families who will be followed for six months to determine the books' impact on patient satisfaction, and phone, office, and emergency room use as well as a reduction in health care costs.

PORTRAIT BY VERNON DOUCETTE; INSET BY KALMAN ZABARSKY

WHY PICTURE BOOKS?

Cowan chose picture books as her medium for a number of reasons. "The vehicle is accessible to parents with little education or for whom English is a second language," she notes. "Educational materials offered by pediatric associations are geared to people with at least a high school education.

"I also think that it is inherently comforting for a sick child to be read to, as the act requires a closeness with a parent," she adds. "I would argue that a child who is comforted by a book will already be invested in learning how to read when the time comes for this to happen. I believe there is a strong relationship between being read to and literacy."

The books feature Dr. Hippo, a kindly hippopotamus in round red spectacles, bow tie, sweater vest, and black-and-white saddle shoes. His patients—frogs, giraffes, moose, elephants, and bears—suffer sore throats, fevers, earaches, colds, and diarrhea, the common illnesses that constitute more than 90 percent of pediatric sick visits. The books include parent guides that answer common questions about when to call the doctor and how to comfort a sick child.

> *"Picture books engage children and it is the nature of the genre that the books get read and reread."*
> **—CHARLOTTE COWAN, MD**

The stories also offer examples of good health habits, including the judicious use of antibiotics, and they model relationships with primary care providers. The stories' messages foster appropriate at-home care which can reduce emergency calls and costly office or emergency room visits.

In 2004, the American Academy of Pediatrics (AAP) changed the recommendation for the treatment of ear infections. Before using antibiotics, the AAP suggests that children be observed for a period of time. Cowan incorporated what is known as the "observation option" in *The Little Elephant with the Big Earache*, her first book. She points out that earaches are responsible for approximately 30 million office visits annually in the U.S., five million cases of acute otitis media (AOM), and 10 million prescriptions for antibiotics—even though AOM is viral and can self-resolve.

"Because of my training as a medical student at Boston City Hospital with Dr. Jerry Klein, who was the chief of infectious diseases, I learned you do not give antibiotics to anybody unless you have a darn good reason," she says. She knows, though, that there is tremendous pressure on pediatricians from parents to medicate: "As the traditional model of the two-parent family has evolved and there are more and more single-parent families or both parents are working, they need their children to be well enough for day care or school."

MIXING MEDICINE AND CREATIVITY

Cowan grew up in a home that combined medicine and a love of literature. Her father was a psychiatrist and her mother an English teacher whose long-standing love of children's books and reading had spurred her to found a children's library. Since childhood, Cowan has loved to write stories. Graduating from Princeton University with a bachelor's degree in English, she taught English and worked as a social worker in New York City, caring for emotionally disturbed children. This experience inspired her to pursue a medical degree with the goal of caring for children from underserved areas.

During her interview for BUSM admission she was given a great piece of advice that has stayed with her throughout her career. When she was asked if she planned to have children (something that would not be asked today), she answered in the affirmative. Her interviewer, Dr. Daniel Bernstein, said he believed women could "do it all"—have a career and family—but he cautioned that it can't and doesn't have to be done all at once. He also welcomed her into the class of 1984. "I felt admitted on the spot and that engendered tremendous excitement and loyalty, so I chose BUSM," Cowan recalls.

Her creative abilities were put to use throughout her medical career. During her surgical rotation as a medical student, she was assigned to write a paper simply explaining biliary tract disease from a surgical perspective. "I took that assignment and pretended that I was writing a letter to my aunt who had been diagnosed with the disease," remembers Cowan. "My preceptor loved the approach, and kept my paper to illustrate the assignment for others." While in practice at MGH, she found herself squeezed between the increased demands of caregiving and better documentation. "What was dropping out of my care was time for the relational piece," she said. "My response was to develop a series of templates for pediatric well visits that were specific and already included all of the germane features of the history and physical exam so that all the physician had to do was check boxes." The hospital implemented use of her templates and they have since become the backbone of the computerized record system there.

Cowan believes that pediatricians need to think on their feet and be playful as caregivers, which requires a creativity that engages their patients in ways that are age- and developmentally appropriate. As her own children grew into adolescence, she decided she needed to be home more and saw this as the perfect opportunity to turn her ideas into stories. The chief of pediatrics then offered her a sabbatical to try her hand at writing. "At the end of the year I told him I really needed to leave practice to devote myself to these books," she says.

Cowan's goals include addressing not only the acute illnesses of childhood, but also the challenges of chronic illnesses, developmental issues, and terminal illnesses. Ideally, she would like to see age-appropriate picture books, jacket books, videos, and other digital media developed for a variety of diagnoses to educate and comfort children and adolescents. As always, her creative instincts will lead the way. ■


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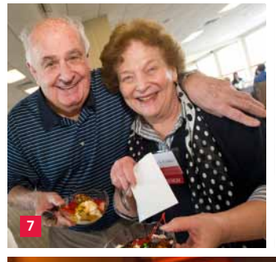
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Featured in the front row, left to right are: Barbara Biery Carney, Dan Moalli, Phil Andrews, Phil Arena, A.J. Gallitano, Jeanne Arnold, Edward Weiner, and Patricia Scola. Back row, left to right: Martin Lefkowitz, George Garcia, Ed Gilmour, Peter Van Orman, J. Elliot Taylor, Burton White, Richard Dolins, Simon Parisier, Jack Evjy, Lester Dewis, Stafford Cohen, and Francis Scola.

1. Classmates Jordan Leff '81 and Richard Gaines '81 share a happy moment during Friday's Grand Rounds luncheon and poster session.

2. Members of the Class of 2011 enjoy themselves during Saturday evening's Annual Banquet at the Renaissance Boston Waterfront.

3. A member of the Class of 2011 poses with her guest as they display their Photobooth images on Saturday evening at the Annual Banquet.

4. Members of the Class of 1961 celebrating their 50th reunion gather for a group photo.

5. Departing Alumni Association president Stephen Ober '86 is given the honorary chair for his service by incoming president Michael Choo '87.

6. Alumni enjoy a demonstration of the Sim Man in the Clinical Simulation and Skills Center by its director, Lorraine Stanfield, MD as part of the student-led Medical Campus tours.

7. There's nothing like participating in a make-your-own-sundae bar with friends, as Richard Dolins '61 and Deborah Cohen found out during the Saturday barbecue lunch at the School of Medicine's Hiebert Lounge.

8. Rafael Ortega, MD, assistant dean for diversity and multicultural affairs, speaks on this topic to alumni guests as part of the panel discussion "Under the Microscope: Examining What Life Is Like for a Medical Student in 2011" held on Saturday afternoon at the School of Medicine.

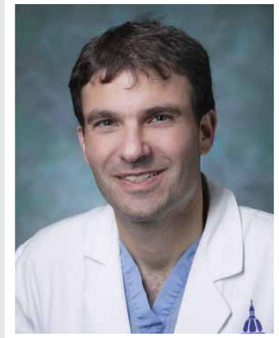
9. Sharon Fletcher Daley '81 is flanked by medical students Alan Hoang '14 and Madonna Ho '14 serving as volunteers during the Reunion Reception held at the Renaissance Boston Waterfront Hotel.

MORE ONLINE: www.bumc.bu.edu/medalumni/events/aw/spring2011

BUSM's Alumni Honored at Annual BUSM Alumni Banquet

The BUSM Alumni Association honored two alumni with a 2011 Distinguished Alumnus Award at the Annual Meeting and Banquet.

MORE ONLINE: www.bumc.bu.edu/medalumni/alumni-awards



Jean-Francois (Jeff) H. Geschwind '91
Professor of Radiology, Surgery, and Oncology; Director, Vascular and Interventional Radiology, Johns Hopkins University School of Medicine; Director, Interventional Radiology Center, Johns Hopkins Hospital.

Robert A. Witzburg '77
Associate Dean and Director of Admissions; Professor of Medicine, Boston University School of Medicine; Professor of Health Policy and Management, Boston University School of Public Health.

Boston University School of Medicine Alumni Association

Alumni Weekend

May 4–5, 2012

Campus & City-Wide Events Include:

Friday, May 4
- Scientific program and luncheon at the School of Medicine
- Reunion social hour and individual Class Reunion Dinner Parties

Saturday, May 5
- Planned giving open house at the School of Medicine
- Catered luncheon and student-led tours of campus
- Dining and dancing at the 137th Annual Meeting and Banquet

Reunion Dinners and the Annual Meeting and Banquet Will Be Held At:

Taj Boston
15 Arlington Street, Boston, Massachusetts 02116
617-536-5700

Classes Celebrating Reunions:

2002 – 10th
1992 – 20th
1987 – 25th
1982 – 30th
1977 – 35th
1972 – 40th
1967 – 45th
1962 – 50th
1957 – 55th
1952 – 60th
and
Golden Reunion (Graduates prior to and including 1961)

MORE ONLINE: www.bumc.bu.edu/medalumni/events/AW

Hotel Information:

Room blocks have been secured at the following hotels:

Taj Boston
15 Arlington Street, Boston, Massachusetts 02116
617-536-5700
www.tajhotels.com/Luxury/City-Hotels/Taj-Boston-Boston/Overview.html

Hampton Inn & Suites Boston Crosstown Center
811 Massachusetts Avenue, Boston, Massachusetts 02118
617-445-6400
www.hamptoninn.com

BUSM ALUMNI AWARDS CALL FOR NOMINATIONS

The Nominating Committee of the Distinguished Alumni Awards is calling for candidates! Do you know a BUSM graduate worthy of a Distinguished Alumni Award? Please submit the name of a deserving classmate or colleague and we will contact them to request a CV. Self-nominations are accepted! Send info to: Awards Committee, BUSM Alumni Association, 72 E. Concord Street, L120, Boston, MA 02118 or email us at **alumbusm@bu.edu.**

Rear Admiral Christine Hunter (CAS'80, MED'80) Receives BUA Award

As the deputy director of TRICARE Management Activity, U.S. Rear Admiral Christine Hunter leads the nation's health care system for members of the military and their families. She serves as the principal advisor to the assistant secretary of defense for health affairs in the Department of Defense.

1953

Frank I. Marcus of Tucson, Arizona, has been chosen to receive the Heart Rhythm Society's Pioneer in Pacing and Electrophysiology Award. Marcus will be honored at Heart Rhythm 2011—the Society's 32nd Annual Scientific Sessions, May 4–7, 2011, in San Francisco, California.

1964

Joseph A. Moylan of Durham, North Carolina, was recently honored with the Humanitarian Award at a special luncheon hosted by the Duke Medical Alumni Association. Moylan is the founder of the Durham Nativity School and has spent the last nine years committed to the Durham community. The Durham Nativity School is one of 64 nationwide based on the Nativity model, an independent educational program geared toward academic excellence and community leadership. Moylan works closely with his board to raise the school's entire $800,000 annual operating budget. Nationally, he is credited with establishing models of trauma care and developing innovative therapies to treat severely burned soldiers during the Vietnam War.

Murray Waksman of Pleasantville, New York, writes, "Still kicking 46 years after graduation! I gave up the office/hospital rat race 12 years ago and am now the full-time medical director of a large health care facility in 'the big city.' I visit Boston/Newton periodically where some of my grandchildren live. The growth of BUSM is quite impressive! Best wishes to the Class of '64!"

1967

Stuart E. Siegel of Pacific Palisades, California, was elected chair of the Board of the National Childhood Cancer Foundation, which supports the research of the Children's Oncology Group (COG). Siegel is the founding director of the Children's Center for Cancer and Blood Diseases at Children's Hospital Los Angeles.

1972

Jeanne M. Garvin of Lincoln, Nebraska, writes, "I just want to give an update on what is going on in our lives. My husband, **William Garvin** '72, was diagnosed in 2006 with Primary Progressive Aphasia. He had to retire and is currently in an adult day care while I continue to work. While language was the primary presenting concern, he has since had progressive difficulties with executive functions; dementia of the frontal lobe functions is becoming more of an issue. Travel is difficult. We would love to attend functions but, as you can imagine, my energies are in a different direction. We now have a grandson named after Bill, William Francis Garvin, age two, and twin babies on the way. These are my son Brian Garvin's '04 children. They are in Seattle, soon to relocate to Roanoke, Virginia. Hope all the research being done will lead to new treatments, as there are none."

CONTACT US

If you have news, announcements, or creative works you'd like to share with your fellow alumni, please write to the BUSM Alumni Association at 72 E. Concord Street, L120, Boston, MA 02118 or email alumbusm@bu.edu.

BUSM Alumni Association Facebook **www.facebook.com/alumBUSM**

1981

Sharon L. Fletcher-Daley of Harwich Port, Massachusetts, writes, "Joe (SDM'81) and I are enjoying living on Cape Cod. Joe practices dentistry in Westwood, and I am a pediatrician at Cape Cod Hospital. Our eldest son, James, is at BUSM, Class of 2014. Our middle son, Will, is a Fulbright Scholar teaching in Madrid, and our youngest son, Brian, is in eighth grade. Come visit us at the beach!"

Melody T. McCloud of Roswell, Georgia, has recently published her book, *Living Well…Despite Catchin' Hell: The Black Woman's Guide to Health, Sex, and Happiness.* The following is an excerpt from a December 20, 2010 press release: "The author is Atlanta obstetrician-gynecologist, media consultant and national speaker Dr. Melody T. McCloud. *Living Well* is a comprehensive guide to help us ensure total health and a thorough look at the issues black women face. *Living Well* addresses the psycho-social factors that affect black women's physical lives. These factors include disparaging images in the media, colorism, low marriage statistics, the risk of HIV/AIDS and the high incidence of men on the 'down-low.' These factors—the 'hell'—coupled with the ever-present medical challenges of killer diseases such as diabetes, cancer, hypertension, heart disease, and more, put black women in a unique class to themselves." The book was released on December 22, 2010. To read McCloud's blog, go to www.psychologytoday.com/blog/black-womens-health-and-happiness.

1991

Treyce S. Knee of Bethesda, Maryland, writes, "Greetings from Japan! I am still on active duty and currently serving as director of Medical Services at the U.S. Naval Hospital in Yokosuka, Japan."

➜ In Memoriam

1938 • Grant M. Dixey of Kearsarge, New Hampshire, on January 29, 2011, at the age of 97. He was a urologist who practiced in Boston and at South Shore Hospital in Weymouth, Massachusetts, for 35 years. He served in the U.S. Navy during World War II, having enlisted the day after the bombing of Pearl Harbor. He interned at Salem Massachusetts Hospital, where he met his wife, Eleanor, to whom he was married for more than 65 years. Dixey was a past president and a longtime member of the New England Section of the American Urology Association and many other medical associations.

1940 • Howard H. Milliken of Manchester, Maine, on February 27, 2010, at the age of 97. He served his community as a physician and consultant. Preceded in death by his first wife, Ruth Hogan, and his second wife, Madelyn Perkins, he is survived by his son and daughter, four grandchildren, and 10 great-grandchildren.

1943 • William E. R. Greer of Westwood, Massachusetts, on January 11, 2011, at the age of 92. An internist with a specialty in cardiology, he joined the Gillette Company in 1952, where he implemented the revolutionary concept of occupational medicine, both directly treating employees and creating total-health programs for the company's staff worldwide. He retired as corporate medical director in 1998. He was an associate professor of medicine at BUSM, a member of the Board of Trustees of University Hospital, now Boston Medical Center, and an associate visiting physician of Boston Medical Center. The Gillette Company medical/surgical unit at Boston Medical Center was dedicated in his name in 1994. He served as director of the American Heart Association for Massachusetts. In 1979, he was listed in the first edition of "The Best Doctors in America" and in 1985, was named by *Boston Magazine* as one of Boston's "Super Doctors" and one of five "Doctors' Doctors." Greer Peak in Antarctica was also named in his honor in the 1950s by his friend and patient Admiral Richard E. Byrd. On the occasion of his 90th birthday, Greer received a Congressional Proclamation in recognition of his many years of outstanding service, dedication, and deep devotion to both family and country with thanks from a grateful nation. He served in the U.S. Army Medical Corps in the Asiatic-Pacific Campaign and was a decorated veteran for his service in World War II.

1945 • Donald B. Barkan of Salem, Massachusetts, on September 5, 2010, at the age of 88. An internist, he practiced in Salem and Lynn, Massachusetts, and was the founding member of the American Society of Law and Medicine. He was a member of the American Medical Association and Massachusetts Medical Society, a past president of the Essex South Massachusetts Medical Society, and director of the Employee Health Department of Union Hospital. He served in the U.S. Navy during World War II and the Korean War as a full lieutenant. He is survived by his loving wife Anita (Baum) Barkan, two daughters, and two grandchildren.

John A. James of Auburn, Maine, on August 31, 2009, at the age of 88. An obstetrician-gynecologist, he practiced in his hometown of Auburn in 1950 until he was recalled to serve in the army during the Korean War. After the war he returned to Auburn and practiced for the next 41 years, retiring in 1996. He served as president of the medical staff at Central Maine General Hospital, as well as chief of obstetrics and gynecology. He served on the board of Central Maine Medical Center School of Nursing, Tri-County Family Planning, and Androscoggin Home Care and Hospice. He was a member of the Peer Review Board of New England and Health Care Review of Rhode Island. He is survived by his three daughters, two sons, 14 grandchildren, six great-grandchildren, and three brothers.

1946 • William Franklin of Newton and Wareham, Massachusetts, on September 27, 2010, at the age of 91. As a specialist in asthma and allergy, he served on the staff of Massachusetts General Hospital where he was a clinical professor at Harvard Medical School. He was a pioneer in the use of steroids for treating asthma and often sent his patients to Canada and the United Kingdom for steroid treatment before the FDA approved its use in the U.S. He is survived by his wife of 69 years, Beverly; his brother, Robert Franklin '47; his three sons, including Peter Franklin '81; and 13 grandchildren.

1947 • Thomas B. Efford of South Hadley, Massachusetts, on November 26, 2010, at the age of 88. He was a radiologist at Holyoke Hospital from 1957 to 1991, where he served as chief of radiology from 1981 to 1990. He served in the U.S. Air Force and U.S. Navy as a

flight surgeon and aviation medical examiner in Japan and received Korean and United Nations medals. He is survived by his three daughters and one son, eight grandchildren, and two great-grandchildren.

Norman S. Stearns of Boston, Massachusetts, on September 30, 2010, at the age of 86. An internist whose career spanned more than 60 years, he led the way for other physicians by helping to create programs at the Tufts University School of Medicine. He is survived by his wife, Irma (Fisher) Mann, two sons, four stepchildren, and five grandchildren.

1948 • Robert William Bell of Palos Verdes Estates, California, on June 14, 2010, at the age of 92. A general practitioner, he had a private practice in Osterville, Massachusetts, with his wife when, in 1958, he moved to the Palos Verdes Peninsula, where he was one of the original partners of the Redondo Beach Medical Clinic. After retirement, he volunteered as a team doctor for the Peninsula High School football team. He served in the U.S. Army during World War II and later distinguished himself as an army captain and physician with NATO in Germany and France. He is survived by his wife of 63 years, Nancy, two sons, a daughter, and five grandchildren.

Thomas F. Boyd of Reston, Virginia, on October 26, 2010, at the age of 85. A thoracic surgeon, he inaugurated the open-heart surgical programs at both Boston City Hospital and Massachusetts Memorial Hospital, now Boston Medical Center. He was a founding member of the Society of Thoracic Surgeons. He enlisted in the U.S. Naval Reserve at age 17 and was sent back to Brown University on active duty in order to continue his pre-medical studies. He was relieved from active duty in 1946 and continued his medical studies at BUSM. He was married to Martha Boyd '64.

Arthur E. Sullivan of Hingham, Massachusetts, on August 16, 2010, at the age of 87. An internist, he served as president of the medical staff at Carney Hospital in Dorchester, Massachusetts. He served in the U.S. Army and was a Korean War veteran. He is survived by his wife, four sons, two daughters, and many grandchildren.

1950 • Jeffrey H. Harris of Harvard, Massachusetts, on June 23, 2010, at the age of 88. He specialized in family medicine and had a private practice in Harvard, Massachusetts, as a country doctor holding office hours and making house calls. He was one of three doctors from area towns instrumental in the creation of Nashoba Community Hospital, now known as Nashoba Valley Medical Center, unifying what was then known as the Ayer and Groton Hospitals. Upon retirement from private practice, he joined the medical staff at Fort Devens. He is survived by his wife of 62 years, two sons, a daughter, seven grandchildren, and two great-granddaughters.

Herbert L. Martin of Burlington, Vermont, on May 24, 2010, at the age of 89. A neurologist, he taught at the University of Vermont College of Medicine from 1954 to his retirement in 1991. He was board certified in neurology and psychiatry, and co-developed the neurological service at the Bishop DeGoesbriand Hospital, where he was involved with new treatments for Parkinson's disease and stroke patients. He served as a consultant in neurology to a dozen hospitals in Vermont and New York and retained a clinical practice for several years following his retirement. He is survived by his wife, Joan, their six children, and 11 grandchildren.

1953 • George E. Crickard of Quincy, Illinois, on Friday, September 3, 2010, at the age of 83. He was a radiologist. He completed his rotating internship at Worcester City Hospital and was a resident in radiology at Dartmouth Medical Center and an instructor at Yale Medical School. He is survived by his wife, Lois Jane Stevenson, a daughter, a son, and six grandchildren. He was predeceased by an infant daughter.

Peter J. Mozden (see page 19)

1954 • Martin C. Manin of New Rochelle, New York, on February 15, 2011, at the age of 82. He was an orthopedic surgeon who practiced his whole life. His intelligence, wit, warmth, and perpetual thirst for knowledge will be dearly missed by all who were privileged to know him.

1956 • Jerome R. Pomeranz of Berea, Ohio, on August 22, 2010, at the age of 79. A dermatopathologist, Jerome Pomeranz was an associate professor of dermatology and pathology at Case Western Reserve University School of Medicine. In 1965, he joined the future MetroHealth, where he led dermatology for the next 27 years. Board certified in both dermatology and pathology, he opened Cleveland Skin Pathology Laboratory in 1976. He also researched skin cancer, receiving federal grants, and served on committees of the U.S. Food and Drug Administration and the National Academy of Sciences. During the 1970s, he was president of the Cleveland Dermatological Society and chairman of the Society of Investigative Dermatology.

He also served in the U.S. Army as a captain and was chief of pathology at Fort Baker, California.

1957 • Ralph Zalusky of Roslyn, New York, on May 28, 2010, at the age of 78. A hematologist, he taught at Mount Sinai School of Medicine and was associate chair of medicine at Albert Einstein College of Medicine. At Beth Israel Hospital in New York, he specialized in the treatment of aplastic anemia, leukemia, and lymphoma. He coauthored more than 50 publications in numerous medical journals. An annual lecture series in his honor is presented at Beth Israel Hospital, where he retired as chief of hematology/oncology after nearly 40 years as a physician and professor of medicine. He also served in the U.S. Air Force. He is survived by his wife of 51 years, Marian (Shayon), two daughters, a son, and nine grandchildren.

1963 • Judith Borit of Arlington, Massachusetts, on January 3, 2011, at the age of 74. A psychiatrist, she had a private practice for 50 years in Cambridge, Massachusetts, and was on the staff of several hospitals. Her focus became geriatric psychiatry and she was an advocate for mental health services for those who could not afford them. Born in Hungary, she survived the Holocaust while most of her mother's family perished at Auschwitz. She and other family members emigrated from Hungary after the failure of the Hungarian Revolution, eventually coming to the United States. She would later recall that Soviet Army soldiers grabbed people from the trains and handed them over to the Hungarian Army.

Calendar

2011–12

AUG 8
White Coat Ceremony and Reception for Incoming Medical Students
Monday, August 8
1:30 p.m.
Talbot Green, BUSM

SEP 6
Graduate Medical Sciences Welcome Barbecue
Tuesday, September 6
4:30–6 p.m.
Talbot Green, BUSM

SEP 21
Young Alumni Boston Reception
Wednesday, September 21
6:30–8:30 p.m.
Taj Boston Hotel

OCT 4 & 18
Alumni Association Fall Phonathons
Tuesday, October 4
Tuesday, October 18
5:30 p.m.
Hiebert Lounge, BUSM

OCT 28
Master's in Medical Sciences Alumni Reception
Friday, October 28
6 p.m.
Hiebert Lounge, BUSM

OCT 28–30
University Alumni Weekend
October 28–30
Dean's Club Dinner
Saturday, October 29
6 p.m.
BU Trustees Ballroom

MAR 15
Match Day BUSM
Thursday, March 15
Noon
Hiebert Lounge

MAY 4–5
BUSM Alumni Weekend
Friday & Saturday,
May 4–5
Taj Boston Hotel

MAY 18 & 19
Graduate Medical Sciences Commencement
Friday, May 18
BUSM Commencement,
Boston
Saturday, May 19

CONTINUING EDUCATION CONFERENCES

October 27–29, 2011
The 7th Annual Chicago Supportive Oncology Conference
InterContinental Hotel, Chicago, IL

November 12–13, 2011
Pediatric Infectious Diseases
Royal Sonesta Hotel, Cambridge, MA

January 2–6, 2012
The 28th Annual Conference on Obstetrics, Gynecology, Perinatal Medicine, Neonatology, and the Law
JW Marriott Guanacaste Resort & Spa, Papagayo Peninsula, Costa Rica

January 5–8, 2012
The 12th Annual Multispecialty Conference on Medical Negligence and Risk Management in Medicine, Surgery, Emergency Medicine, Radiology, and Family Medicine
JW Marriott Guanacaste Resort & Spa, Papagayo Peninsula, Costa Rica

April 16–20, 2012
Current Clinical Pediatrics
Hilton Oceanfront Resort, Hilton Head Island, SC

May 7–11, 2012
Controversies in Internal Medicine
Hilton Oceanfront Resort, Hilton Head Island, SC

May 6–10, 2013
Controversies in Internal Medicine
Hilton Oceanfront Resort, Hilton Head Island, SC