

Boston University School of Medicine

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WHEN SCIENCE BECOMES ART

BUSM's First Science Art Competition

PLUS:

Dean Antman Elected to the Institute of Medicine _____

Evans Memorial Department of Medicine Celebrates 100 Years

New Zoltán Kohn and **Alexander Graham Bell Professors Named**

2012

		MAY 11	Henry I. Russek Student Achievement Day Friday, May 11 Hiebert Lounge	MAY 18
Joint MED/SDM Napa Valley Event Saturday, June 9 4:30–6:30 p.m.	JUN 9	Alumni Association Executive Committee Meeting Wednesday, June 6, 6 p.m. Wilkins Board Room, BUSM	JUN 6	GMS/MAMS Commencement Friday, May 18
AUG 6	White Coat Ceremony Monday, August 6 2 p.m. Talbot Green	SEPT 20	Dean's Advisory Board Dinner Thursday, September 20 Hotel Commonwealth	SEPT 21
Evans Centennial Celebration & Symposium Friday & Saturday October 5 & 6	OCT 5&6	BUSM Dean's Advisory Board Meeting Friday, September 21 Hiebert Lounge	SEPT 21	Celebration of Student Residence Opening Friday, September 21 815 Albany Street

BOSTON UNIVERSITY SCHOOL OF MEDICINE AlumniNews





DEAR FRIENDS.

The challenges of health care, from caring for patients to educating providers and researchers, are evolving rapidly. How we deliver and pay for health care affects each of us personally. Medicare and Medicaid cuts and reduced NIH funding for research require academic medical centers to be even more creative in developing and using resources judiciously. Given that Massachusetts is ahead of the rest of the country in health care reform, BUSM is uniquely positioned to provide much-needed answers to questions facing the United States and other countries. We should take a leadership role as an efficiently run academic medical center studying

best practices and outcomes for our safety-net population.

Our missions are to attract and educate future leaders in health science and medicine, and to advance biomedical discovery With our partner, Boston Medical Center, we must lead in providing outstanding evidence-based medical care at the lowest possible cost. Given the increasing pressure for clinical productivity, we must retain a collective mission that protects academic quality and productivity for our clinical faculty.

Recent initiatives, including the new student residence and increased scholarship funding, will decrease the level of medical education debt. We must further address debt if our students are to have a true choice in selecting their careers.

Multidisciplinary collaborations among basic and clinical investigators have expanded the scope of translational medicine for our faculty and students. We have provided a faculty profile system that will better identify areas of expertise to facilitate research and educational collaborations.

Important leadership transitions include our new associate dean for academic affairs, Douglas Karen Antman, MD Hughes, MD, professor of psychiatry, who brings to the position

extensive experience and a marked enthusiasm for creating a dynamic learning environment. Gerard Doherty, MD, recruited from the University of Michigan, assumed the chair of our Department of Surgery, and James Holsapple, MD, associate professor of pediatrics and neurosurgery at BUSM since 2009, is now chair of our Department of Neurosurgery.

Two of our most outstanding faculty members, Professors Barbara Corkey and Avrum Spira, were recently installed as endowed professors at the School, expanding support for their highly successful research programs.

The 100th anniversary of the founding of the Evans Memorial Department of Medicine is an important milestone for our Medical School. A series of events in 2012 will celebrate the department's accomplishments and contributions to training, research, and clinical care.

Finally, after 56 years of service to the Medical Campus, Aram Chobanian, MD, closed his office on campus. Our former BUSM dean. provost of the Medical Campus, and BU president emeritus plans to devote his energies to playing and composing music. We thank him for his outstanding service to the School and University and for his dedication to medical science. We wish him the best in his new endeavors.

Best regards,

Kan St

Provost, Medical Campus Dean, School of Medicine

SPRING 2012

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BECOMES ART

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100 YEARS AND COUNTING

The Evans Memorial Department of Medicine celebrates 100 years

Boston University School of Medicine: Campus & Alumni News

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Boston University's policies provide for equal opportunity and affirmative action in employment and admission to all programs of the University.

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Platelets' Birth Place: A Multi-Star Globe by Katya Ravid

This Page: Green Fluorescent Protein; photo by Os professor emeritus of physiology and 2008 Nobel Prize

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CAMPUS



BUSM has joined the social network! "Like" our Facebook page, follow our Twitter account, and view our YouTube channel for up-to-date research news, event photos, and more

APPOINTMENTS

Dean Antman Elected to the Institute of Medicine



Karen Antman, provost of the Medical Campus and dean of the School of Medicine, has been elected to the Institute of Medicine (IOM) of the National Academies. The institute, which advises policy makers and professionals on medical and health issues, announced that Antman is one of 65 people chosen for outstanding professional achievement and commitment to service. Election to the IOM is considered one of the highest honors in the fields of health and medicine.

BU President Robert A. Brown said, "Karen's election to the Institute of Medicine is wonderful recognition of her accomplishments as a clinician, researcher, educator, and academic leader. We are very proud to have her at Boston University."

Members of the institute, who donate their time and expertise to work for the nation's health, are drawn primarily from the health care professions, but they also come from the natural, social, and behavioral sciences, as well as from law, administration, engineering, and the humanities.

Many of the studies the IOM undertakes begin as mandates from Congress; others are requested by federal agencies and independent organizations. The IOM also convenes a series of forums, roundtables, and standing committees, as well as other activities, to facilitate discussion, discovery, and critical cross-disciplinary thinking.

George Annas, a William Fairfield Warren Distinguished Professor and chair of the School of Public Health's health law, bioethics, and human rights department, says the IOM is the country's most prestigious and influential group of medical policy advisors. "The voice of medical school leaders is critical in charting the future of our rapidly changing and increasingly fragmented health care system," he said. "Dean Antman's election to membership in the IOM is a ringing endorsement of the respect her medical peers have for her leadership and influence in medical education." Annas is also a member of the IOM.

In addition to Annas, Antman joins BU-affiliated IOM members Joel Alpert, MD, BUSM professor emeritus of pediatrics, sociomedical sciences, and community medicine and health law; Larry Culpepper, MD, professor of family medicine and former chair of the BUSM Department of Family Medicine; Richard Egdahl, MD, a retired University Professor and founding director of the Health Policy Institute at the School of Management; Barbara Gilchrest, MD, BUSM professor of dermatology and chair emerita of the Department of Dermatology; and Gerald Keusch, MD, an SPH professor and an assistant to the president.

This article first appeared in BU Today.



- Douglas Hughes, MD, has been named the new associate dean of academic affairs. Hughes replaces Sharon M. Levine, MD, who has stepped down due to her expanded national leadership roles in academic medicine and geriatrics as well as the continued pursuit for national dissemination of the Chief Resident Immersion Training Program in Geriatrics, which she created. A member of the BUSM

community since 1997, Hughes is a professor of psychiatry and

served as assistant dean of diversity and multicultural affairs and chair of A teacher throughout his career, Dr. Doherty served as program the School's Appropriate Treatment in Medicine Committee prior to this director of the Surgery Residency at the University of Michigan for the appointment. past eight years and received multiple awards for teaching excellence. He also served as chair of the Clinical Curriculum Subcommittee He has also edited several major textbooks for students and surgical and teaches in all four years of the medical school curriculum. He is the trainees. An accomplished surgical researcher, he has nearly 20 years recipient of the Preclinical Sciences Educator of the Year Award as well of experience managing a basic science research laboratory and has as BUSM's highest teaching award, the Stanley L. Robbins Award for written more than 150 peer-reviewed journal articles. Excellence in Teaching. His wealth of administrative experience in academic medi-

"Dr. Hughes is one of our most dedicated teachers and administracal center settings includes serving as chief of general surgery at tors," said Dean Karen Antman. "Students and faculty alike look to him the University of Michigan Health System and president of the for his expertise and great sensitivity to the complex issues involved in Michigan Chapter of the American College of Surgeons. He has medical education." also held multiple leadership positions in national and international Hughes is a magna cum laude graduate of the University of Arizona professional groups.

and a graduate of the University of Missouri School of Medicine. He trained in psychiatry at Tufts Medical Center and has consulted with the Centers for Disease Control and Prevention on establishing national guidelines for managing suicidal and violent behavior. More recently, he consulted with the U.S. Department of Defense on suicide prevention. He has lectured extensively in North and South America, Asia, Australia, and Europe.

Board certified in psychiatry with special research interests in violence, suicide, and emergency psychiatry, he is a past president of the American Association of General Hospital Psychiatry and past president of the American Association of Emergency Psychiatry. Hughes has also been named a "Top Doctor in America" in U.S. News & World Report (2011) and has been recognized by "Best Doctors in America" numerous times. "I am enthusiastic about assuming this new position and look for-

ward to working with the students, faculty, and deans of the School," said Hughes. "I will dedicate myself to enhancing the wonderful curriculum and collegiality that characterizes Boston University School of Medicine."

Gerard M. Doherty, MD, has

been appointed James Utley a general surgery internship and neurological surgery residency Professor and Chair of Surgery at Upstate Medical University of the State University of New and professor of medicine at York (SUNY), where he was a National Research Service Award BUSM and chief of surgery at Research Fellow in the Neurological Surgery and Physiology Boston Medical Center (BMC). departments. He joined the faculty and was promoted to associate Doherty comes to BUSM/ professor of neurological surgery and pediatrics.

Aram Chobanian's Last Day on Campus

After 56 years on the Medical Campus, BU President and BUSM Dean Emeritus Aram Chobanian has packed up his office to pursue his love of composing music. Toasting Chobanian's last day on campus are BUSM Dean Karen Antman and BUMC Associate Provost Thomas Moore.









BMC from the University of Michigan, where he was a N.W. Thompson Professor of Surgery, vice chair of the Department of Surgery, and section head of General Surgery.

A graduate of Holy Cross and Yale School of Medicine, Doherty completed his residency training at the University of California, San Francisco, including a medical staff fellowship at the National Cancer Institute. He joined the faculty at Washington University School of Medicine in 1993 and became professor of surgery there in 2001.

His focus is on surgical diseases of the thyroid, parathyroid, endocrine, pancreas, and adrenal glands, as well as the surgical management of multiple endocrine neoplasia (MEN) syndromes. He is an international opinion leader in the management of endocrine tumors, including thyroid cancer, and is currently on the board of directors of the American Thyroid Association.

"As one of the key departments of our Medical Campus, surgery necessitates strong leadership," said Dean Karen Antman. "We are

confident that the Department of Surgery will thrive under Dr. Doherty."

James Holsapple, MD.

has been appointed chair of Neurosurgery at BUSM and chief of neurosurgery at Boston Medical Center (BMC).

An associate professor of neurosurgery and pediatrics at BUSM/BMC since 2009, he has quickly established himself as a leader, developing a new

and vibrant pediatric neurosurgery program.

Holsapple received his undergraduate degree from Drake University magna cum laude and his MD from the University of Kansas School of Medicine. He completed an internal medicine internship at St. Luke's Hospital, Kansas City, Missouri, and

Inaugural Scholarship Dinner

In October, the School of Medicine celebrated its first-ever Scholarship Dinner with Dean's Advisory Board members, generous scholarship donors, and student scholarship recipients. Sherry Leventhal, JD, chair of the Dean's Advisory Board and BUSM parent, introduced Jerry Serchuck, a Board member and BUSM parent, who spoke movingly about why supporting student scholarship is so meaningful to him and his family. Throughout the evening, scholarship donors and students enjoyed sharing their experiences and meeting one another.

The following day, at the Dean's Advisory Board meeting, Leventhal welcomed three new Board members. Dean's Advisory Board members serve as advocates and supporters of the School's educational and research mission, and provide counsel to Dean Karen Antman. For more information visit www.bu.edu/supportingBUSM.

NEW BOARD MEMBERS ARE:

HAROLD CHEFITZ, who resides in Livingston, New Jersey, has more than 45 years of experience in investment banking and venture capital related to the health care industry. He is a consultant to the board of Kensey Nash, a public company involved in the cardiovascular and biomaterials fields. Mr. Chefitz is a 1955 graduate of Boston University.

SUZANNE CUTLER, PhD, SMG '61, a resident of New York City, served until her retirement as an executive vice president of the Federal Bank of New York in charge of the bank's corporate group, which included financial management, operational risk management, business continuity, investment review, building support functions, and human resources. Dr. Cutler is a trustee emerita of Boston University and is a member of Boston University's Board of Overseers.

JOSEPH FASTOW, MD, a graduate of the BUSM Class of 1970, is a resident of Bethesda, Maryland. He serves as senior associate in the Department of Health Policy and Management at Johns Hopkins University Bloomberg School of Public Health, where he previously held a faculty position in the School of Medicine.







Ted Moore.



ROW 1, LEFT TO RIGHT: Lisa Force '12; Jenna Wheelhouse '12; Louis W. Sullivan, MD '58; Carmela Abraham, PhD; Haig Panossian '12. ROW 2, LEFT TO RIGHT: Rita Mehos; Laura Moreno '13; Peter Pochi, MD '55; Aram V. Chobanian, MD; Elaine Kirshenbaum; Alan Hoang '14; Menachem Abraham; Paul Rothbaum; Katrina Weed '14; Jerry Serchuck. ROW 3, LEFT TO RIGHT: Elizabeth Dooling, MD '65; Paul Dooling; Molly Zielenbach '15; Bryce Ratliff '15; John Polk, MD '74; Janis Manger; Philip Montenigro '14; Jules Manger, MD.



Dean Karen Antman and Dean's Advisory Board Chair Sherry Leventhal at the Dean's Advisory Board meeting.

Louis Heafitz (left), Dean's Advisory Board member, and new Board member Harold Chefitz.

Elizabeth Dooling, MD '65; Molly Zielenbach '15, recipient of the Elizabeth C. Dooling Scholarship Fund; Paul Dooling, scholarship donor; and James Dooling.



Joseph Fastow, MD '70 (left), new member of the Dean's Advisory Board, and Board member

Alan Leventhal, member of the Boston University Board of Trustees, and Dean Karen Antman.



FOR MORE INFORMATION ON SCHOLARSHIP AID, VISIT: www.bu.edu/supportingbusm



Scholarship Dinner (continued)



Bryce Ratliff '15, recipient of the Gladys C. Polk Scholarship Fund, and scholarship donor John I. Polk, MD '74

Philip Montenigro '14 (center), recipient of the Jules and Janis Manger Family Scholarship Fund, and scholarship donors Janis Manger and Jules Manger, MD.





New Dean's Advisory Board member Suzanne Cutler, PhD, SMG '61 (left), and Board members Louis W. Sullivan, MD '58, and Mary Jane England, MD '64.



BUSM scholarship donors (left) President and Dean Emeritus Aram V. Chobanian, MD, and Board member Jerry Serchuck.



Lisa Force '12, recipient of the Class of 1955 Scholarship Fund, and Peter Pochi, MD '55.



Alan Hoang '14, recipient of the Elaine B. and Howard D. Kirshenbaum Scholarship Fund, and scholarship donor Elaine Kirshenbaum, member of the Dean's Advisory Board.

FOR MORE INFORMATION ON SCHOLARSHIP AID, VISIT: www.bu.edu/supportingbusm

BUSM Faculty Honors



Richard A. Cohen, MD, the

medicine, and director of the

Vascular Biology Section, is

the recipient of the 2012 Paul

M. Vanhoutte Lectureship in

Vascular Pharmacology. The

lectureship was established

contributions that help our

understanding and appre-

ciation of the importance of

smooth muscle function in

health and disease. Cohen

recognition of his substantial

lifelong scientific achieve-

ments and commitment in

discoveries have significantly advanced our understand-

ing of vascular biology and

vascular pathology in both

animal model systems and in

patients, and have led to the

development of novel phar-

macological agents to treat vascular dysfunction in

the clinic.

this research area. His

receives this honor in

endothelial cells and vascular

to recognize scientific

Jay and Louise Coffman

Professor of Vascular

Medicine, professor of

Richard Babayan, MD,

professor and chair of the Department of Urology and chief of urology at Boston Medical Center, was honored by the Armenian American Health Professional Organization (AAHPO) for his exceptional contributions to medicine in both the United States and Armenia. The award was presented by Aram Chobanian, MD, BUSM dean emeritus and president emeritus of Boston University. Babayan first traveled to Armenia in 1989 as part of a medical relief effort and has been deeply involved in the Boston University-Armenia medical partnership program. For the past five years, he has served on the advisory board of the Yerevan State Medical University, helping to revamp the medical curriculum and academic standards for medical education in Armenia





Kamal M. F. Itani, MD,

professor of surgery and chief of surgery at the V.A. Boston Health Care System, was honored by the World Lebanese Cultural Union and was recognized as an outstanding citizen by the State of New York.

Francis A. Farraye, MD,

MSc, professor of medicine and clinical director in the Gastroenterology Section at Boston Medical Center, has been named one of the 125 Leading Gastroenterologists in America by Becker's ASC Review. The gastroenterologists named to this list lead their field in clinical and research efforts, furthering the practice of gastroenterology with their work, knowledge, and dedication to the specialty. The chosen gastroenterologists were selected for the list based on the awards they receive from major organizations in the field, their leadership in these organizations, work on professional publications, and positions of service.







Thea James, MD, associate professor of emergency medicine and director of the Massachusetts Violence Intervention Advocacy Program at the Boston Medical Center site, was appointed to the U.S. Attorney General's National Task Force on Children Exposed to Violence. The task force is part of the Attorney General's Defending Childhood initiative, a project arising from the need to respond to the epidemic levels of exposure to violence faced by our nation's children.



Faculty News

Faculty Honors (continued)

Robert D. Oates, MD,

vice chair of urology and director of both the BUSM urology fellowship and residency training programs, has been elected president of the New England Fertility Society (NEFS). Oates, a urologist at Boston Medical Center, is the first urologist to hold this position. NEFS is a voluntary, nonprofit organization dedicated to promoting awareness, standards of information, and assistance to providers, (and ultimately, patients) in the field of infertility in the New England area.





Winnie Suen, MD, MSc, assistant professor of medicine and a geriatrician and palliative care consultant at Boston Medical Center, has been selected as a member of the Centers for Medicare and Medicaid Services (CMS) Innovation Advisors Program. The initiative, launched by the CMS Innovation Center, will help health professionals sharpen skills that drive improvements to patient care and reduce costs. As one of the 73 Advisors, Suen will support the Innovation Center by testing new models of care delivery, forming partnerships with local organizations to drive delivery system reform, and improving health systems to give the community better health and better care at a lower cost.



Jeffrey H. Samet, MD, MPH, professor of medicine and community health sciences and chief of the Section of General Internal Medicine at Boston Medical Center, has been named to the board of directors of the American Board of Addiction Medicine (ABAM). Established in 2007, ABAM is an independent medical specialty board to certify addiction medicine physicians from several specialties, including emergency medicine, family medicine, internal medicine, obstetrics and gynecology, pediatrics, preventive medicine, psychiatry, and others. Prior to ABAM's formation, only one medical specialty (psychiatry) offered sub-specialized training and certification in addiction.

In Memoriam

Amal K. Kurban, MD, on October 11, 2011, at the age of 83. A professor of dermatology, he was a leading force in the Department of Dermatology for more than 25 years. His myriad contributions to the specialty and the department are legend-

ary, as was his passion for

teaching. He earned both his BA and MD in pathology and internal medicine from American University of Beirut and was a fellow at Johns Hopkins Hospital in the dermatology and connective tissue diseases divisions. He was the former chair of dermatology at the American University of Beirut. Certified under the American Board of Dermatology, he held appointments at Philipps-Universität Marburg, American University of Beirut Medical Center, University of London's St. John's Hospital, and Johns Hopkins University, as well as at BUSM.

He was recognized with the Lifetime Career Educator Award from the **Dermatology Foundation** in 2005 and Merit Awards from the International Committee of Dermatologic Societies. He was a member of the International Society of Tropical Dermatology, the Society of Investigative Dermatology, the American Federation for Clinical Research, the Lebanese Dermatologic Society, the Middle East Medical Assembly, the Order of the Cedars, and the Swedish Dermatological Society.

He is survived by his wife Helena, four children, and 12 grandchildren.

Literary Advice from the Faculty for the Class of 2012

Members of the BUSM faculty offer their book choices for the Class of 2012 as the class transitions to residency and the practice of medicine.

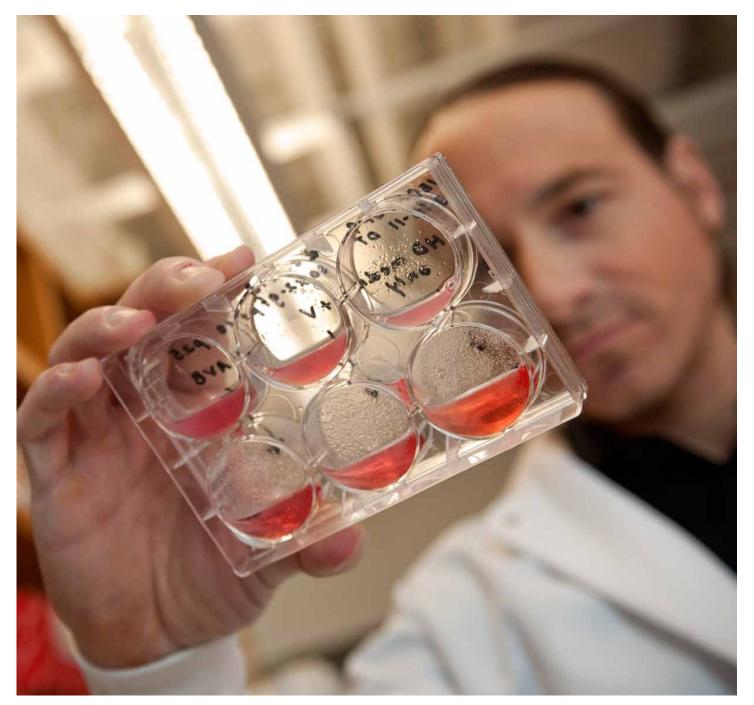
Recon	The Books:
Omar Eton, h	Cope's Early Diagnosis of the Acute Abdomen BY WILLIAM SILEN
Teresa (Breaking the Bamboo Ceiling BY JANE HYUN
Sharon Levin Levy, physiol	Cutting for Stone BY ABRAHAM VERGHESE, MD
Sharon	Destiny of the Republic: A Tale of Madness, Medicine and the Murder of a President BY CANDACE MILLARD
Aubrey N	Genetic Disorders and the Fetus: Diagnosis, Prevention and Treatment & Your Genes, Your Health: A Critical Family Guide that Could Save Your Life BY AUBREY MILUNSKY
Daniel R	Good to Great BY JAMES COLLINS
Osamu Sa	Head and Neck Imaging Cases BY OSAMU SAKAI
Jack Ma	House of God: The Classic Novel of Life and Death in an American Hospital BY SAMUEL SHEM, MD
Simon Levy, ph	How Doctors Think BY JEROME E. GROOPMAN, MD
Lauren Bab	Pushed: The Painful Truth About Childbirth and Modern Maternity Care BY JENNIFER BLOCK
Lance Lair	Righteous Dopefiend BY P. I. BOURGOIS AND J. SCHONBERG
Teresa (Switch: How to Change Things When Change Is Hard BY CHIP AND DAN HEATH
Sharon I	The Citadel BY A.J. CRONIN, MD & The Death of Ivan Ilyich BY LEO TOLSTOY
Alvin Essig, ph	Overdiagnosed: Making People Sick in the Pursuit of Health BY H. GILBERT WELCH, LISA M. SCHWARTZ, AND STEVEN WOLOSHIN
Michael S	The Doctor Stories BY WILLIAM CARLOS WILLIAMS
Jodi Abbot Nikolajczyk, Lee-Parritz, o hemato	The Immortal Life of Henrietta Lacks BY REBECCA SKLOOT
James Hu	The Social Transformation of American Medicine BY PAUL STARR
Teresa Chen Cotton, medici psychiatry; Phil Catherin	The Spirit Catches You and You Fall Down: A Hmong Child, Her American Doctors, and the Collision of Two Cultures BY ANNE FADIMAN
Sharon I	The Warmth of Other Suns: The Epic Story of America's Great Migration BY ISABEL WILKERSON
	Waking Up Blind BY TOM HARBIN
Edward Fein	
Edward Fein Philippa	The Knife Man BY WENDY MOORE The Professor and the Madman: Murder, Insanity and the Making of the Oxford English Dictionary BY SIMON WINCHESTER
	& The Professor and the Madman: Murder, Insanity and the Making of the Oxford

	7/78			
ommended By:	Why:			
, hematology-oncology	"A real classic for understanding belly pain to the max."			
a Cheng , medicine	"Powerful, dramatic, almost biblical story			
ine, geriatrics; Simon ology and biophysics	of love, family betrayals, and death set in the ancient world."			
1 Levine , geriatrics	<i>"Fantastic nonfiction account of the election of President James Garfield and the mentally ill man who shot him."</i>			
Milunsky, genetics	"Deals with the business of business, but the lessons are			
Remick, pathology	applicable to health care."			
akai , neuroradiology	"366 cases and more than 3,200 images."			
laypole, pediatrics	"Offers hilarity and insight into the often intense, absurd, tragicomic, and profound pursuit of practicing medicine while being a human being."			
physiology and biophysics	"Investigates thought processes and forces behind the decisions physicians make, why they succeed, and why they err."			
bich , family medicine	"All health professionals with any interest in obstetrics should read both for their education and for their protection lest they one day have a patient who has read it and catches them off guard!"			
ird, family medicine	"One book that I think should be required reading."			
a Cheng, medicine	"(The Citadel) is about an idealistic young doc who encounters patients in the mining			
Levine , geriatrics	towns of Wales. Great story." "(The Death of Ivan Ilyich) is a very			
physiology and medicine	realistic portrayal of terminal illness." "Anything by Tolstoy is worth reading."			
Stillman , medicine	"Read it now and again after years of practice. Quiet insights, humility, and craftsmanship. It's really a masterpiece."			
ott , ob-gyn ; Barbara k , microbiology; Aviva , ob-gyn; David Seldin , itology-oncology	"Tells the story of the development of the first tissue culture line, HeLa, and provides a comprehensive understanding of why IRBs are necessary for clinical research."			
ludspeth, medicine	"Tracks the development of the physician in American society from the inception of the nation through the advent of managed care and provides the thorough history needed to understand how doctors in America have come to occupy their present social role."			
ng, medicine; Deborah cine; Linda Piwowarzyck, nilippa Sprinz, pediatrics; ine Walker, ob-gyn	"Read this regardless of your specialty."			
1 Levine , geriatrics	"It's the story of many of our elderly patients in Roxbury, Dorchester, and Mattapan. Couldn't put this down."			
i nberg , ophthalmology 🖌				
a Sprinz, pediatrics	"Great book on unethical leadership, and how patients and doctors can be hurt by it. A must-read for every physician."			
h Cotton , medicine				
: Carr , medicine	"The history of medicine in the U.S., how it evolved, and the roots of what we do now."			

Research

\$9 Million Grant Fuels Sickle Cell Study

BU Team Uses iPS Stem Cells to Probe Treatments, Cures





oston University researchers have developed a way to test treatments for sickle cell disease-a genetic disorder of the red blood cells—by working with stem cells grown from a small vial of patients' blood. "It's a clinical trial in a test tube," said molecular biologist George J. Murphy, BUSM assistant professor of medicine and a co-director of BU's Center for Regenerative Medicine (CReM).

The BU team received a five-year. \$9 million grant from the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health to grow the versatile

cells—called induced pluripotent stem, or iPS, cellsas well as generate a living library of genetic variations of sickle cell disease. Known as disease modeling, it is one of the ways the scientists at CReM are working in collaboration with clinicians to tackle hereditary and incurable conditions.

Growing iPS cells enables researchers to study a range of subtle genetic factors and mutations and test treatments on human tissue. Reflecting the cutting edge of

About 80,000 Americans live with sickle cell disease, and the genetic trait for the disease, found in people of African, Mediterranean, Middle Eastern, East Indian, Caribbean, and South and Central American descent, affects one in 12 African Americans.

the rapidly evolving field of regenerative medicine, the versatile iPS cells, Middle Eastern, East Indian, Caribbean, and South and Central American which CReM researchers had previously derived from small samples descent, affects one in 12 African Americans, according to the Centers of their own skin, resemble embryonic stem cells. Like embryonic cells, for Disease Control. under optimal conditions they can be made to differentiate into any type The iPS procedure will replace human subjects in the testing of more effective treatments and potential cures for sickle cell disease. With the of cell found in the body, and might replace embryonic cells completely once researchers eliminate risks associated with them. Murphy believes researchers' efforts focused on the disease modeling phase, iPS cells that the iPS cells represent a crucial step toward the eventual use of hold "enormous promise," said Murphy, but also must be approached cautiously. "We have to be prepared for the fact that anything could turn regenerative medicine to customize cells with a donor's own DNA, using the donor's own cells, and replace diseased tissue or organs with out wrong," he said. This article first appeared in BU Today. healthy ones.

'It's a clinical trial in a test tube," says molecular biologist George Murphy, a co-director of BU's Center for **Regenerative Medicine.**

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The recent grant supports BU's multidisciplinary approach—involving a repertory of molecular biologists, hematologists, and genetics experts-to scale up drug studies in iPS lines, production of which is extremely laborintensive. (In Murphy's lab, researchers must tend the delicate cell cultures seven days a week.) "The grant brings together two of the most dynamic entities" on the Medical Campus, said Murphy, referring to BU's Center of Excellence in Sickle Cell Disease in addition to CReM.

Murphy and Martin Steinberg, BUSM professor of medicine, pediatrics, pathology, and laboratory medicine and director of the Center

of Excellence in Sickle Cell Disease, say that the NHLBI grant will see the iPS research to the next level. making it possible to maintain and predict the health and purity of cell cultures. It will be many years before the results of this research translate into human trials, which would be preceded by studies on animals. About 80,000

Americans live with sickle cell disease, and the genetic trait for the disease, found in people of African, Mediterranean,

TO LEARN MORE, VISIT: www.bu.edu/sicklecell and www.bumc.bu.edu/stemcells.





Grant for Development of Early Detection of Lung Cancer Tools

BUSM is the lead institution on a \$13.6 million study aimed at developing novel technologies for the early detection of lung cancer. The five-year, multisite, multiphase study that will focus on active military personnel and veterans is funded by the U.S. Department of Defense (DOD) Lung Cancer Research Program and will be conducted under the direction of principal investigator Avrum Spira, MD, MSc, BUSM associate professor of medicine, pathology and bioinformatics and a pulmonologist at BMC.

BUSM will collaborate with military hospitals and Veterans' Affairs medical centers across the country, including the Detecting Early Lung Cancer Among Military Personnel Consortium (DECAMP), which represents the largest consortium of researchers dedicated to identifying noninvasive ways to detect lung cancer early.

"Current lung cancer detection methods involve invasive procedures that are often done only after symptoms occur, and, by that time, the cancer has spread outside of the lungs and can be difficult to treat," said Spira, who is also the chief of the division of Computational Biomedicine within the Department of Medicine at BUSM. "The noninvasive methods to be developed will have the capability to distinguish between patients with or without lung cancer, as well as identify patients who show early signs of a higher risk for the disease. Lung cancer is the most lethal of all cancers, and this research could potentially lead to fewer people dying from the disease."



NIH Grants to Study Systemic Sclerosis (SSc)

Robert Lafyatis, MD, BUSM professor of medicine, was awarded two grants from the National Institutes of Health's (NIH) National Institute of Arthritis and Musculoskeletal and Skin Diseases to study systemic sclerosis (SSc), also known as scleroderma, a rare and complex rheumatic disease involving widespread scarring and vascular disease within multiple organ systems. SSc remains one of the most difficult rheumatic diseases to manage, with limited effective therapies.

The funding includes a five-year, \$8 million Centers of Research Translation (CORT) (P50) grant as well as a five-year, \$3.3 million (P30) grant. These projects were designed to coordinate multiple scientists and clinicians to accelerate the understanding of the disease process through interactive, patient-oriented studies into markers of disease activity, investigation of pathogenesis, and trials of novel therapeutics.

One of the greatest impediments to finding new treatments for SSc is the heterogeneity of patient presentation and disease progression. Clinical markers are unable to predict onset and/or progression of the major complications, such as progressive fibrotic skin disease, pulmonary arterial hypertension, and interstitial lung disease, each seen in a minority of SSc patients.

"Empowered by a very large SSc clinical population, we propose careful clinical evaluations, coupled with robust molecular approaches to identify skin, serum, and peripheral blood mononuclear cell disease biomarkers," explained Lafyatis, the principal investigator.

\$10M

Grant to Study HIV and Alcohol

Researchers from Boston University Schools of Medicine and Public Health (BUSM/BUSPH); Boston Medical Center (BMC); the University of California, San Francisco; and the University of Pittsburgh have joined together to examine the consequences of alcohol on HIV disease. The Uganda Russia Boston Alcohol Network for Alcohol Research Collaboration on HIV/ AIDS (URBAN ARCH) will conduct and

disseminate interdisciplinary alcohol/HIV research aimed at understanding the consequences of alcohol on HIV disease and advancing clinical approaches to mitigate its harm in the United States and globally. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) is funding this five-year consortium of multiple investigators.

The URBAN ARCH consortium will incorporate the expertise of researchers in epidemiology, internal medicine, addiction medicine, HIV/AIDS, psychiatry, and biostatistics under the leadership of consortium principal investigator Jeffrey Samet, MD, BUSM professor of medicine and chief of the section of internal medicine at BMC, a leader in the field of HIV and clinical addiction medicine.

"Questions about the complex relationship between HIV and alcohol need to be addressed in order to accelerate the development of more effective treatments," Samet said. "By utilizing distinctive cohorts in the United States and abroad, the consortium will be positioned to provide insights about the relationship of alcohol and HIV infection to improve clinical and public health outcomes for the associated consequences."



Grant to Develop Improved Virus Detection System

Researchers from BUSM and BU College of Engineering have been awarded a five-year, \$4.8 million National Institutes of Health (NIH) grant to develop a low-cost, multiplexed virus detection platform. Based on technologies developed with seed funding from BU's Photonics Center, the resulting diagnostic platform should be capable of rapidly detecting viral pathogens such as Ebola, Lassa fever, and Marburg at the point of care.

"We brought together this interdisciplinary team in order to develop a breakthrough detector system that will allow a simple test for the presence of multiple viruses," said John Connor, PhD, BUSM assistant professor of microbiology and principal investigator for the grant.

■ Link Between Salt and Hypertension Clarified

A review article by BUSM researchers debunks the widely held concept that hypertension, or high blood pressure, is the result of excess salt causing an increased blood volume, thus exerting extra pressure on the arteries. Published online in the Journal of Hypertension, the study demonstrates that excess salt stimulates the sympathetic nervous system to produce adrenaline, causing artery constriction and hypertension. The research was led by Irene Gavras, MD, and Haralambos Gavras, MD, both BUSM professors of medicine.

"The purpose of this paper is to correct an erroneous concept that has prevailed for many years, even though scientific evidence has mounted against it," said Irene Gavras.

The term "volume-expanded hypertension" implies that excess salt leads to the retention of extra fluid within the arterial circulatory system, causing an increase in blood volume and added pressure on the arterial walls.

Research has shown that conditions characterized by the expansion of blood volume from other causes do not cause a rise in blood pressure because the extra fluid is accommodated by the distention of capillaries and veins.

Through a review of numerous studies, the BUSM researchers demonstrated that the mechanism of hypertension resulting from the excessive consumption and retention of salt stimulates the sympathetic nervous system in the brain to increase adrenaline production.

The increased adrenaline being circulated throughout the body causes the arteries to constrict, which results in resistance to blood flow and a decrease in circulatory volume.

The over-activation of the sympathetic nervous system—part of the autonomic nervous system that helps maintain the body's homeostasis—has been recognized clinically as a characteristic of hypertension that accompanies renal failure, which is the most typical example of elevated blood pressure from excessive salt retention. Diuretics, which remove excess salt, are widely used to treat this type of hypertension. However, this study provides convincing evidence that the sympathetic nervous system should be the focus of further investigations into treatments for hypertension.

"The implication of our findings shows that the optimal treatment for hypertension, for cases said Irene Gavras.

Primary Health Care Providers Fail to **Report Substantial Cases of Child Abuse**

According to the researchers, two techniques were used to validate the PCPs' initial decision: expert review and provider retrospective self-assessment.

The researchers found that PCPs and experts agreed about the suspicion of abuse in 81 percent of the cases of physical injury. PCPs did not report 21 percent of injuries that experts would have reported. Compared with expert reviewers, PCPs had a 68 percent sensitivity and 96 percent specificity in

reporting child abuse. Reporting suspected child physical abuse is

a two-step process: assessment of the likelihood of child physical abuse and the decision to report. "Child abuse experts and PCPs are in general agreement concerning the assessment of suspected child physical abuse, yet this study demonstrates that primary care providers decide not to report a substantial proportion of child physical abuse cases," explained lead author Robert Sege, MD, FAAP, BUSM professor of pediatrics and director of the Division of Ambulatory Pediatrics at BMC. "To become more certain of their suspicions, PCPs need better education about the recognition of injuries that are suspicious for child abuse, particularly bruises and fractures, and the role of state CPS agencies in investigating the child's circumstances."

associated with renal failure, should not only include diuretics but also the use of drugs that block the central sympathetic nervous system,"

Funding for this research was provided by a series of National Institutes of Health grants.

A team of BUSM researchers and Boston Medical Center report that primary care providers (PCP) fail to report a substantial number of cases of child maltreatment. Published in the November-December issue of Academic Pediatrics, the study is the first to examine the validity of a PCP's decision to suspect child abuse as the etiology of an injury and their decision to report a suspicious injury to child protective services (CPS).

Identifying that a particular injury was caused by child abuse can be difficult. Typically, only the responsible person and child witness the injurious event, and the child may be preverbal or afraid to describe the abuse.

> Reporting suspected child physical abuse is a twostep process: assessment of the likelihood of child physical abuse and the decision to report.





Research in Brief

Agent Responsible for Protection Against Early Stages of Atherosclerosis Identified

For the first time, the A2b adenosine receptor (A2bAR) has been identified as a possible new therapeutic target against atherosclerosis resulting from a diet high in fat and cholesterol. The findings of the BUSM researchers appear online in Circulation.

Adenosine is a metabolite produced naturally by cells at low levels, and at higher levels during exercise or stress. Adenosine binds to and activates cell surface receptors, one of which is the A2bAR. Previous studies have described the A2bAR as anti-inflammatory and protective against kidney ischemia, cardiac reperfusion injury, and restenosis, typically via bone marrow cell signals.

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Monkeypox at

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In mouse models, BUSM researchers found atherosclerosis induced by a high-fat diet was more pronounced in the absence of the A2bAR and they found restoration of the A2bAR in the liver of A2bAR null mice reduced the lipid profile and atherosclerosis.

"A2bAR genetic ablation led to elevated levels of liver and plasma cholesterol and triglycerides, and to fatty-liver pathology typical of steatosis, assessed by enzymatic assays and analysis of liver sections," explained senior author Katya Ravid, MD, BUSM professor of medicine and biochemistry. Most importantly, in vivo administration of a pharmacological activator of the A2bAR in control mice on a high-fat diet reduced lipid profile and atherosclerosis. Thus, this study provides the first evidence that the A2bAR regulates liver hyperlipidemia and atherosclerosis, suggesting that this receptor may be an effective therapeutic target against earlier stages of atherosclerosis."

Funding for this study was provided by the National Heart, Lung and Blood Institute.

Novel Compound to Halt Virus **Replication Identified**

BUSM scientists have identified a novel compound that inhibits viruses from replicating. The findings, published online in the Journal of Virology, could lead to the development of highly targeted compounds to block the replication of poxviruses, such as the emerging infectious disease Monkeypox.

The basic research was led by Ken Dower, PhD, a postdoctoral fellow in the laboratory of John Connor, PhD, BUSM assistant professor of microbiology who is the corresponding author on the paper. They worked with Scott Schaus, PhD, associate professor of chemistry from the Boston University College of Arts & Sciences and coprincipal investigator in the Center for Chemical Methodology & Library Development (CMLD). The researchers collaborated with the United States



Army Medical Research Institute for Infectious Diseases (USAMRIID), which conducted the experiments involving Monkeypox at their laboratory in Maryland.

Poxviruses, such as smallpox, vaccinia virus, and the Monkeypox virus, invade host cells and replicate, causing disease. Utilizing state-of-the-art screening techniques, vaccinia, and a library of chemicals from BU's CMLD, Dower and his colleagues looked for compounds that could stop vaccinia from replicating inside human cells; they identified several. In studying how one of these compounds work, they discovered that the virus can enter the cell in its presence, but once the virus was inside, the compound inactivates an essential piece of virus machinery.

Researchers from USAMRIID then tested the efficacy of the chemical compound on the Monkeypox virus. Their experiments demonstrated similar results, showing that this chemical compound has the ability to inhibit different varieties of poxviruses.

"The compound we identified forces the catastrophic failure of the normal virus amplification cycle and illustrates a new, drug-accessible restriction point for poxviruses in general," said Connor. "This can help us in developing new compounds that fight poxviruses infection."

Funding for this study was provided by the National Institutes of Health and the Transformative Medical Technologies Initiative.

■ High-Dose Melphalan and Autologous Stem Cell Transplantation Increase Survival Among AL Amyloidosis Patients

BUSM researchers have found treatment of selected immunoglobulin light chain (AL) amyloidosis patients with high-dose melphalan and autologous stem cell transplantation (HDM/SCT) resulted in a high organ response rate and increased overall survival (OS), even for those patients who did not achieve a hematologic complete response (CR). These findings appear in the current issue of Blood.

AL amyloidosis is the most common form of systemic amyloidosis, with an incidence of five to 12 persons per million per year. In AL amyloidosis, clonal bone marrow plasma cells produce monoclonal light chains that misfold and deposit in tissues and organs as amyloid fibrils, resulting in progressive system and organ failure and ultimately—in death.

Untreated patients with this disease have a dismal outcome, with a median survival of 10-14 months from diagnosis. Moreover, fewer than 5 percent of patients survived for 10 years before the introduction of HDM/SCT.

"This study provides the longest outcome data on AL patients treated with HDM/SCT, including OS, EFS, and long-term mortality," explained senior author Martha Skinner, MD, BUSM professor of medicine and former director of BUSM's Amyloid Treatment and Research Program. "Our results demonstrate that, with careful patient selection and experienced management, low rates of treatment-related mortality can be achieved."

Funding for this study was provided by the National Institutes of Health, the Amyloid Research Fund at Boston University, and a grant to visiting scientist Dr. Mary Teresa Cibeira from the Instituto de Salud Carlos III (Spain).

Increased Risk of Stroke, Death in Hospitalized Patients with Severe Sepsis and New-Onset Atrial Fibrillation

A BUSM study shows an increased risk of stroke and mortality among patients diagnosed with severe sepsis and new-onset atrial fibrillation (AF) during hospitalization.

Allan J. Walkey, MD, BUSM assistant professor of medicine and a pulmonologist at BMC, is the lead author of the study published in the Journal of the American Medical Association.

Severe sepsis is the tenth leading cause of death in the United States, and atrial fibrillation affects one in four people over the age of 40. While both are common illnesses, and chronic atrial fibrillation is a known risk factor for stroke and death, very little is known about new-onset atrial fibrillation during severe sepsis.

The researchers examined data, provided by the Agency for Healthcare Research and Quality, from more than three million hospitalized patients. Looking at the risks of stroke and mortality, patients with new- onset atrial fibrillation during severe sepsis had three times the risk of having a stroke and a 7 percent increased risk of death during hospitalization.

"It is projected that one million Americans will have severe sepsis this year, and based on our data, approximately 60,000 people will develop new-onset atrial fibrillation," said Walkey. "There are currently no guidelines on how best to care for these specific patients, but this study is a call to action that this under-recognized potential complication of severe sepsis requires further investigation on how to treat these critically ill patients."

40 million Americans suffer from chronic sleep deprivation each year due to disorders such as sleep apnea and insomnia.

is the tenth leading cause of death in the United States, and atrial fibrillation affects one in four people over the age of 40.

This research was funded by the National Institutes of Health's National Heart, Lung and Blood Institute.

Molecular Mechanism Responsible for Wakefulness and Sleep Regulation Identified

BUSM researchers have identified an intracellular signaling enzyme that regulates the wake-sleep cycle,

which could help lead to the development of more effective sleep aid medications. Subimal Datta, PhD, BUSM professor of psychiatry and neurology and director and principal investigator at the Laboratory of Sleep & Cognitive Neuroscience at BUSM, led the study, which points to a specific enzyme inside neurons in the brain that trigger an important shift in



consciousness from sleep to wakefulness and wakefulness to sleep. The results were published in the November 23 issue of the Journal of Neuroscience.

According to the National Institute of Neurological Disorders and Stroke, at least 40 million Americans suffer from chronic sleep deprivation each year due to disorders such as sleep apnea and insomnia. "Sleep, one of the most mysterious regular shifts in consciousness, is regulated by a delicate balance between biological processes, the environment, and behavior, but the mechanisms involved in the regulation are not well understood," said Datta.

Datta and his colleagues identified that an enzyme, calcium/calmodulin kinase (CaMKII), plays a crucial role in the intracellular pathway for sleep regulation and is necessary for the promotion of wakefulness and suppression of sleep. During the study, when the activation of the CaMKII enzyme was blocked using an inhibitor named KN-93, natural REM and non-REM sleep occurred, whereas when the enzyme was activated, wakefulness occurred. Additionally, very minimal doses of therapeutic agents were required to activate or block the system.

"Current treatments for sleep disorders do not achieve the ideal behavioral outcome, and are usually accompanied by many undesirable side effects," Datta explained. "A more specific, fine-tuned approach to treating these disorders by promoting alertness and treating insomnia would greatly benefit the public health of our country."

Funding for this study was provided by the National Institutes of Health.

Severe sepsis



Master of Arts in Medical Sciences Program Celebrates 27 Years



Since its inception, the Master of Arts in Medical Sciences (MAMS) program has offered talented students the opportunity to improve their qualifications for medical and dental school. A celebration to recognize the program's almost three decades of achievements was held on October 28 on the Medical Campus.

"Alumni of this master's program are now doctors, dentists, pharmacists, educators, lawyers, and professionals in an array of health professions," said Dean Karen Antman as she welcomed guests. "Of those here tonight, three earned BU MD-PhDs, 25 earned BU medical degrees, three earned BU dental degrees, and others went on to graduate programs at such places as Suffolk Law School, UC Davis, and Tufts. This is a testament to the value of the MAMS program and to your perseverance and talents." "It fill

Attended by current and former faculty and administrators as well as current students and graduates, the event highlighted the considerable contributions of Selwyn Broitman, PhD, assistant dean of admissions and professor of microbiology, and featured an address by Steven Treon, MD-PhD, a graduate of the MAMS program.

Treon, currently the director of the Bing Center for Waldenström's Research at the Dana-Farber Cancer Institute and an associate professor of medicine at Harvard Medical

School, earned his bachelor's and medical sciences master's at BU as well as his PhD in tumor immunology. Before earning his medical degree from BUSM, he completed a postgraduate fellowship in the Department of Microbiology at the School of Medicine. After completing his residency in internal medicine at Boston Medical Center, he was a fellow in hematology-oncology at Massachusetts General Hospital, followed by a research fellowship at the Dana-Farber Cancer Institute. An accomplished researcher on the genetic basis and pathogenesis of Waldenström's macroglobulinemia and the development of effective therapeutics, he serves on the editorial boards of the *Journal of Clinical Oncology*, *Blood, Clinical Cancer Research*, and *The Lancet*.

"The Master of Arts in Medical Sciences program is indeed a unique academic experience, one that has been the portal for thousands of students to pursue a successful career in medicine and the medical sciences," said Treon. "Some of us have had the opportunity to see our own mentees come through this program and become part of the next generation of successful physicians and scientists.

"At last count, five of my mentees were among those who pursued their studies under the Master of Arts in Medical Sciences program. One is currently a hematology-oncology fellow at Yale University, two are pursuing their studies in MD/PhD programs; one is completing his PhD here at BU, and another is leading a successful clinical trials program at a Harvard affiliate hospital and will be entering medical school next year.

"It fills me with great joy to take pride in their success, and to have been part of their training. It is the same pride that I know that Dr. Broitman holds for his mentees, and for the graduates of the Master of Arts in Medical Sciences program. It is a great privilege for me to join you in this celebration and to honor the contributions of Dr. Broitman for his role in the creation of this program, and for the mentoring, teaching, and guidance that he provided to me and to many others who studied here on the BU Medical Campus."

Broitman, one of the founders and longtime champion of the program and its students, was honored with a plaque in recognition of his more than 47 years of outstanding service and commitment to Boston University School of Medicine and, in particular, to the students within the Division of Graduate Medical Sciences (GMS). "That the Division of Graduate Medical Sciences has grown and flourished is a testament to the hard work and dedication of faculty and staff, and no one more appropriately represents that group than Dr. Broitman," said Linda Hyman, PhD, associate provost of GMS and professor of microbiology.

In emphasizing the success of the MAMS program, Carl Franzblau, PhD, former associate dean of GMS and professor of biochemistry, noted that of the 2,500 graduates of MAMS, more than 600 of them are School of Medicine graduates. "This is a testament to Selwyn Broitman, whose dedication to the students is emblematic of the true spirit of Graduate Medical Sciences," he said.

Gwynneth Offner, PhD, is director of the MAMS program and an associate professor of medicine and director of the biochemistry course for the program. In addition to teaching, she advises and mentors students. "There is no question that the Master of Arts in Medical Sciences program has offered talented and highly motivated students greater opportunities to realize their professional goals," she said. "I am immensely proud of their academic and professional accomplishments and I look forward to building upon Dr. Broitman's solid foundation as the program continues to evolve to best meet the needs of present and future students."



A Bridge to Success

Master of Arts in Medical Sciences (MAMS)

Excerpts from a History of the MAMS Program by Selwyn Broitman, PhD, Professor of Microbiology, Assistant Dean of Admissions

The Master of Arts in Medical Sciences (MAMS) program was a concept developed for a cohort of students who were serious about pursuing careers in medicine. As undergraduates, these individuals did not meet the necessary standards required to be admitted to medical school in the United States. They needed the opportunity to demonstrate that they possessed the academic skills necessary to succeed in a highly competitive environment and get accepted to medical school.

Working with John O'Connor, MD '57, BUSM associate dean for admissions at the time, students on the wait list were offered an opportunity to improve their credentials in a one-year program consisting of selected first-year medical school and graduate courses. In my role as assistant dean of admissions, I designed the program with Glenn Zamansky, PhD, and Herbert Kupchick, PhD, both members of the Department of Microbiology.

As the program evolved, the design was a graduate format with courses offered within the medical curriculum and graduate curriculum in advanced medical sciences. Carl Franzblau, PhD, who succeeded Dr. Ruth Levine as associate dean of Graduate Medical Sciences, developed arrangements where students could conduct research projects with a mentor at local laboratories and, on occasion, in their home state as well as at the National Institutes of Health.

It also became apparent there were students seeking opportunities in other areas of the health care field. By adding ways students could receive combined degrees in other specialties, the MAMS program extended its reach as a "bridge" program to offer students a wide range of options in the health sciences.

A program was developed with the Henry M. Goldman School of Dental Medicine to accommodate a medical sciences degree with a focus on oral health. Joint degrees in medical sciences and public health were created in conjunction with the BU School of Public Health that provided a more global perspective of health concerns as well as epidemiology and other options. An option in health care management for a master's degree in business administration (MBA) was developed as a joint program with the BU School of Management, and as the program gained acceptance, a combined MBA/MD degree was added. A specialized program in clinical research provided supplemental opportunities to manage clinical studies.

Our goal of offering students a bridge to establish careers as health professionals in one or more health-related specialties was accomplished.

Aspiring Physician Finds His Answer in the MAMS Program



Born and raised in France, Flavien Leclere enjoys volunteering and traveling. When he graduated from the University of Wisconsin-Madison in 2008 with a degree in molecular biology, he combined those interests with his desire to be involved in the medical sciences. With some assistance from his research mentor at the University of Wisconsin and his African drumming instructor, who were both from Ghana, he traveled to that western African country.

The health center where he worked was in an area that lacked running water, electricity, and roads. "For the time I was there, I had more clinical exposure than most medical students," Leclere says. "It was a community of about 5,000 people and I delivered babies and assisted with simple surgeries. This was a test for me—I loved it and knew I wanted to go to medical school."

When Leclere returned to the United States, he joined AmeriCorps and worked for a year in a Milwaukee health center while applying to medical schools. "While my undergraduate GPA was not bad, I knew I could do better," he explains. "I had been involved in so many activities in college that my academic record didn't really reflect my abilities, so I didn't get accepted."

"After speaking to BUSM and GMS faculty and staff, I realized that if my goal was to go to medical school, the MAMS program was right for me," says Leclere. "Between the classes that are at a level equal to medical school, mentoring, confidence building, and the maturity that comes with graduate school, the program answers the question—can this person handle medical school? Getting better at the academics is something you learn along the way, and being on the Medical Campus is great because of the opportunities for volunteering in clinical settings." He also credits the accessibility of faculty and staff, who offer guidance and support.

Leclere reports that he has a 4.0 GPA and received the Robert F. Troxler Award in Biochemistry, awarded to the student at the top of the class in biochemistry and cell biology. He has been accepted to BUSM and Tulane University School of Medicine and has 10 interviews lined up, including one at Harvard.

"There is so much to practicing medicine," he says. "Social interaction, innovation, professional empathy, and compassion must all come together to be a physician, and I think this is what I will be best at."

JOHN MCCAHAN **MEDICAL CAMPUS EDUCATION DAY** Fostering a vibrant community of educators Wednesday, May 23 in the Hiebert Lounge Keynote Speaker: Constance Bowe, MD, Senior Consultant, Partners Harvard Medical International **By Attending Education Day, You Can:** BUMC faculty, fellows, residents, students, staff, alumni, and Network with other creative educators in the BUMC community • Showcase your educational innovations and ideas friends are invited • Cultivate your skills for clinical, lecture, and lab teaching Attend for all or part of the day 8:30-9:30 a.m. Panel of Academic Deans 12-12:45 p.m. Lunch and Networking 9:30-10:30 a.m. Poster Session & Networking 12:45-1:45 p.m. Awards 10:45-11:45 a.m. Keynote Lecture (TBA) 2-3:30 p.m. Workshops

For more information or to submit an abstract, go to **www.bu.edu/jmedday**

Education Day is proudly sponsored by the Boston University Schools of Medicine, Dental Medicine, and Public Health, and the Division of Graduate Medical Sciences.

Postdoctoral Affairs Office Aids the Development of Research Scholars

"...young scientists today face much greater burdens than in the past. They experience lengthening training periods in the form of multiple postdoctoral fellowships, limited pay, and greater hurdles to receiving federal funding... postdoctoral fellows and young research scientists face struggles similar to those of early-career faculty."

The future of biomedical science depends on developing new genera-An important but often overlooked aspect of the postdoctoral tions of researchers. Training research scholars is a long, demanding, experience is preparing for life after training. The office has developed and expensive process. Even though postdoctoral fellows have advanced programs to assist postdocs not only in making the transition to postdegrees and conduct original research, they continue to work under the doc life but also to their eventual lives as research scholars. Some of mentorship of a senior scientist and also help train predoctoral candithe programs offered include monthly seminars with senior postdocs dates, so they function as faculty as well. Postdoctoral Affairs was crewho speak candidly with their new colleagues about postdoctoral life; ated to engage these early scientists and is dedicated to enhancing the a speaker series featuring experts from BU and other academic instituquality of life of more than 500 postdocs on the Medical Campus. tions as well as industry representatives; and a panel discussion with The office is housed within the Division of Graduate Medical industry experts on early career issues. "Ultimately, when our postdocs Sciences (GMS) and is led by Yolanta Kovalko, an 18-year veteran of the leave BUMC, we hope that they will look back on their training as an University who has spent her career advocating for students and postenriching one - and that it will serve as the foundation for their sucdocs. "BUMC's continued success in developing treatments to improve cessful careers," notes Kovalko.

The office is housed within the Division of Graduate Medical Sciences (GMS) and is led by Yolanta Kovalko, an 18-year veteran of the University who has spent her career advocating for students and postdocs. "BUMC's continued success in developing treatments to improve human health depends on the skills and intelligence of our hard-working postdocs," says Kovalko. "Postdoctoral Affairs was established as a way to give these researchers something in return. The office was designed to become a primary resource for support in their work lives, especially in terms of professional development. At the same time, we are also building community."

Boston is new to many postdocs and, in some cases, the United States is new as well. Postdocs can now get advice and help with housing, transportation, immigration laws, taxes, child care, cell phone service, banking, credit cards, and more. The office also helps them navigate the maze of services and organizations scattered across both the Medical and Charles River Campuses. Communication vehicles have been created to assist and inform the postdoc community.

In addition to helping postdocs settle into their new roles, the office offers a centralized portal that allows postdocs to access professional development seminars and skill development workshops to hone skills that will enable them to better compete for academic and industry opportunities. Programming includes workshops on teaching and mentoring, successful networking, and résumé/CV and cover letter writing. Future initiatives will include grant writing, lab management, and negotiating skills.

"Advancing Research in Science and Engineering" AMERICAN ACADEMY OF ARTS AND SCIENCES, 2008

"Postdoctoral fellows now have a resource to help them educate themselves about the campus community, policies, postdoctoral rights, and other concerns," says Adrian Oblak, PhD, a postdoctoral fellow in the Laboratory of Cognitive Neurobiology in the Department of Anatomy & Neurobiology. "The office provides resources to build the effective career management and professional skills needed to establish successful research careers."

The office has organized a number of social networking events, including a welcoming reception and orientation sessions for incoming postdocs every eight weeks, a fall ice cream social on Talbot Green, and a holiday party. The office has also created easily accessible webpages that provide a virtual gateway to resources at www. bumc.bu.edu/gms/gateway/post-doc/. An e-newsletter for postdocs highlighting campus and outside events and funding opportunities is published weekly. In addition, both a printed and electronic postdoc guidebook are now available to all postdocs and can be accessed at www.bumc.bu.edu/gms/files/2011/07/Guidebook.pdf.

Two Endowed Chairs & Four Distinguished Professors

New Zoltán Kohn and Alexander Graham Bell Professors Named

An installation ceremony was held in November to mark the change in incumbents of two endowed professorships at the School of Medicine. The two faculty members who have been the first to hold the chairs, the two new faculty assuming the professorships, and the donors who endowed the chairs were honored. "Endowed chairs—nothing could be so quintessentially academic," said Dean Karen Antman. "Does any other field have anything like an endowed chair? They support time to think and create."

ALEXANDER GRAHAM BELL PROFESSOR OF HEALTH CARE ENTREPRENEURSHIP

Since it was anonymously established in 1996, the Alexander Graham Bell Professor of Health Care Entrepreneurship at BU has been held by Richard Egdahl, MD. Egdahl served as a professor and chair of surgery at BUSM before stepping down in 1973 to become director of the Boston University Medical Center, the entity formed by centralizing the administration of the School of Medicine and Massachusetts Memorial Hospital. In 1975, he founded BU's Health Policy Institute and the Health Care Entrepreneurship Program (HCEP) and held professorships in the Schools of Management and Public Health in addition to being a University Professor.

He is being succeeded by Professor of Medicine Avrum Spira, MD, MSc, an internationally recognized leader in cancer-based genomics and pulmonary bioinformatics. His group has characterized the genome of the airway epithelium and how gene expression activity in these cells serves as a clinically relevant biomarker for lung cancer and chronic obstructive pulmonary disease.

"Endowed chairs—nothing could be so quintessentially academic," said Dean Karen Antman. "Does any other field have anything like an endowed chair? They support time to think and create."

In explaining Spira's achievements, his mentor, Jerome S. Brody, MD, professor of medicine and former director of the Pulmonary

Center, referred to one of Spira's principles for academic success: don't nostics company in Maynard, Mass. He is also founding chief of the let simple technical problems stand in the way of progress. "When Avi Section of Computational Biomedicine in the Department of Medicine, (Spira) was finishing his bioinformatics training, he decided to contrast director of the Translational Bioinformatics Program in the BU Clinical & global gene expression of tumors and normal uninvolved lung tissue in Translational Science Institute, a member of the NIH Cancer Biomarker the two sets of patients, but at the time BU didn't have the equipment Study Section, senior editor of Cancer Prevention Research, and co-chair to measure global gene expression," said Brody. "Somehow—and to of the lung collaborative group of the NCI's Early Detection Research this day I don't know how-Avi took our samples over to the Harvard Network. He serves on NHLBI and NCI advisory committees and genomics laboratory and talked them into running the samples on recently received the Caine Halter Hope Now Award from the Uniting arrays at night after all of their Harvard work was finished. The results Against Lung Cancer foundation. of these midnight studies led to two papers." "This is a great honor to be named the Alexander Graham Bell

Spira was named BU Innovator of the Year in 2011, which recognizes a faculty member "whose cutting-edge research and ideas lead to the formation of companies that benefit society at large." He

PERFECT TIMING

Avrum Spira's Discoveries Translate Into Early Detection of Lung Cancer

It is said that timing is everything. For Avrum Spira, MD, associate professor of medicine, pathology and laboratory medicine, and bioinformatics, the timing was perfect to utilize his training as a pulmonologist and his expertise in bioinformatics to address one of the major public health problems in this country, lung cancer.

Ten years ago, as major new advances were made in the understanding of the human genome and the technology to process the large amount of information produced by the advances evolved, Spira began his quest for such a method. "The timing was perfect," he notes. "Here I was, a physician training in bioinformatics at the same time the human genome project was being completed and the technology for measuring gene activity on a large scale—called microarrays—was just emerging and being applied to clinical specimens."

According to Spira, who also is the chief of the Division of Computational Biomedicine at BUSM and director of the Translational Bioinformatics Program in the Clinical & Translational Science Institute at BU, the challenge is that 90 percent of people who have lung cancer have a history of tobacco use, but only about 10-15 percent of people who smoke get lung cancer.

Working with Jerome S. Brody, professor of medicine, Spira has spent the last decade chipping away at a method for the early identification of that subset of smokers who are at risk for having or developing lung cancer. "The challenge is that lung cancer is the number-one cause of cancer death in the U.S. because it is usually not picked up at an early enough stage to be curable," says Spira. "So, as a physician who takes care of these patients, it is very frustrating when you do make the diagnosis as the patient will most likely die within months. I

felt if we could develop tools to identify the disease at an earlier and potentially curable stage, it would really address a major public health problem, especially here at this medical center."

Utilizing the "field of injury" concept and the computational platforms afforded by arrays, Spira and his colleagues have discovered a gene expression signature—or biomarker—that distinguishes smokers with lung cancer from those with benign lung disease. They developed a relatively noninvasive test to sample the epithelial cells of the upper airway (or windpipe), reducing the need for the more invasive procedures or exploratory surgery to harvest the cells for examination.

The "field of injury" concept says that all of the epithelial cells that line the respiratory tract-from the mouth and nose through the windpipe and all the way down into the lungs-are altered at a genetic level by the exposure to the toxins in cigarette smoke. These changes turn on and off a set of genes that respond to the toxins in the smoke, but some smokers respond differently and have a different pattern of gene activity in these cells which associates with the development of lung cancer.

"We developed a diagnostic tool to test the gene activity of a number of genes in cells that line the airway that can distinguish those smokers with lung cancer who need surgery versus those with benign lung disease who can be followed with repeat chest imaging. This diagnostic biomarker is now being validated in a large clinical trial by a molecular diagnostics company, AllegroDx," Spira says. He hopes that the biomarker will be available for clinical use as either a CLIA- or FDAapproved test within the next 24 months.

"We are also working on developing a test that could be used very early on with patients before they get lung cancer; a screening test," he



is co-inventor of five patents using airway gene expression for early detection of lung cancer, and co-founder of Allegro Diagnostics, a molecular diag-

Professor of Health Care Entrepreneurship," said Spira, "I would like to thank the anonymous donor and the many mentors and guides at Boston University who have brought me to this day.'

explains. "We think that the gene expression changes in airway epithelial cells of smokers precede the development of lung cancer." Equally important, he notes, is that he and his colleagues have demonstrated that the changes that occur prior to the development of lung cancer might be reversed by treatment with a natural compound, myo-inositol. "We found that the gene activity level in the cells of people who took

> the compound could be returned towards normal," he says. "And their pre-malignancy cells in the airway reverted back to normal cells. This was a pilot study with a very small number of people so our lab is trying to expand on that work and look at a larger population to find out if there is a way to change their risk."

> Spira and his colleagues are also studying another type of molecule (called micro RNAs) that regulate the airway gene expression changes that occur with cancer and that turn on and off other genes that lead to cancer. "They are the drivers of the changes in cells, so we are trying to develop biomarkers there as well, both for diagnosis and predicting future risk," he says.

Spira's group has received a \$13.5 million Department of Defense grant to further develop the tools for early detection of lung cancer among active military personnel and veterans who have high rates of exposure to tobacco smoke and other inhaled toxins, as well as a National Institutes of Health-funded study to examine airway gene activity among the population of the Yunan province of China, which has one of the highest rates of lung cancer in the world caused not by smoking but rather by indoor air pollution.

Ultimately, Spira believes that the "field of iniury" concept of sampling readily available cells that can provide a surrogate measure of disease activity deeper within an organ and the large-scale analysis of genomic data from those cells can be applied to cancers other than lung cancer, and possibly other diseases as well.

ZOLTÁN KOHN PROFESSOR IN MEDICINE

Alfred I. Tauber, MD, the inaugural Zoltán Kohn Professor in Medicine, became the first to hold the chair in 2003. A hematologist and biochemist, he joined the School of Medicine faculty in 1982. He is also a professor emeritus of philosophy in the BU Department of Philosophy and holds a visiting professorship at Tel Aviv University, where he teaches philosophy of science at the Cohn Institute for the History and Philosophy of Science and Ideas. Tauber served as director of the Center for Philosophy & History of Science from 1993 to 2010, and in addition to publishing 125 research papers in immunology, biochemistry, and cell biology, he is the author of a number of books on philosophy and science.

Tauber noted that Zoltán Kohn was a rabbi, a doctor of philosophy, and a leading figure in the cultural and intellectual life of Hungarian Jewry in the 1930s and early 1940s. Known as an outstanding teacher

(Top, L to R) Professor of Medicine Jerome S. Brody, MD; Dean Karen Antman; and Alexander Graham Bell Professor of Health Care Entrepreneurship Avrum Spira, MD, MSc.

(Bottom, L to R) Professor of Philosophy Emeritus, Zoltán Kohn Professor Emeritus in Medicine, and professorship donor Alfred I. Tauber, MD; Wade Professor and Chair of the Department of Medicine David Coleman, MD: and Zoltán Kohn Professor in Medicine Barbara E. Corkey, PhD.





and highly esteemed by many of his students, he helped found Libanon. diabetes and obesity," said Corkey. "I am ever-mindful of the fact that a scholarly Jewish journal that aimed to strengthen the spiritual resolve although I am being honored, my accomplishments are shared with an of Hungarian Jews, especially after their rights were increasingly outstanding team that includes technicians, postdocs, students, faculty, restricted by a spate of anti-Jewish laws. In 1945, he was executed by friends, and family, as well as the hospitable research environment of the Hungarian Fascists, who shot him just days before the Soviet libera-Department of Medicine at BUSM. Most importantly, I want to thank the tion. It is through the generosity of the Tauber Family that the Kohn Tauber Family for their generosity and support of research." Professorship was established at BUSM in memory of those who per-Vice chair for research in the Department of Medicine, Corkey has ished in the Jewish Holocaust. been instrumental in establishing a number of cores, including cellu-

Succeeding Tauber is Barbara E. Corkey, PhD, internationally renowned for her work in insulin secretion and pancreatic beta cell function, which is central to the critically important public health problems of obesity and diabetes. She has established that metabolites of fat are central to insulin secretion, and recently identified food additives and reactive oxygen species as potentially important contributors to insulin over-secretion and the obesity epidemic. She leads one of the preeminent Beta Cell groups in the world and is a magnet for trainees and junior faculty.

"Dr. Corkey is someone who sees things differently," said David L. Coleman, MD, the Wade Professor and Chair of the Department of Medicine. "She is a superb scientist whose dedication to collaboration to advance the research is the hallmark of her very successful lab."

"My commitment is to use the welcome resources of this chair to train the next generation of researchers to passionately and competently tackle the two major metabolic diseases afflicting our society:

SEEING THINGS DIFFERENTLY

Award-Winning Metabolic Disease Scientist Barbara Corkey, PhD, Explores Public Health Problems

Barbara Corkey always thought she wanted to attend medical school until one day between classes at New York University, when she passed the laboratory of Nobel Prize winner Otto Loewi as he was perfusing a beating heart. "I didn't know the heart could beat outside of the organism so I stopped and watched him," says Corkey. "He explained it was because of calcium. He changed the pump to one with no calcium and the heart stopped beating. Then he replaced the one with the calcium and the heart started beating again. This convinced me that research was what I needed to do."

It was not until after marriage, children, and many years working as a research technician that she received her doctoral degree in biochemistry and biophysics from the University of Pennsylvania at age 43. Today Corkey, professor of medicine and biochemistry, vice chair for research in the BUSM Department of Medicine, and director of the Obesity Research Center at Boston Medical Center, is a renowned leader in the fields of metabolism, diabetes, and obesity.

In 2011, the American Diabetes Association honored Corkey with the prestigious Banting Medal for Scientific Achievement Award, the highest scientific honor the association bestows. The medal is awarded to an individual who has made significant, long-term contributions to the understanding of diabetes and its treatment and/or prevention. In November, BUSM named Corkey the Zoltán Kohn Professor in Medicine. With more than 100 publications to her credit, Corkey has served as editor-in-chief of the journal Obesity and associate editor of the journal Diabetes, and was co-founder, director, and a member of the scientific advisory board for AdipoGenix, Inc., a biopharmaceutical company that developed drugs to treat obesity.

Her seminal work on the molecular basis of nutrient signal transduction has had a major impact on the current understanding of health and disease. By her own account, she always has been fascinated by systems. "Metabolism is the kind of system I enjoy working with. It is a very integrated signaling system, sort of like a road map where things interdigitate," says Corkey. "I study how the foods that we eat and all of the things that we ingest interact in the body's systems. If you eat a lot of sugar, your blood sugar will rise and will cause insulin to be secreted from the pancreas to promote storage of the glucose. If you have a rise in metabolic fuel that triggers a response, the net result will be restoration to a normal level or homeostasis through these metabolic signals." Because there aren't receptors for these fuels she wants to know how the fuels generate the signals and how cells know about the signals.

Currently her laboratory is examining the possible role of food additives and reactive oxygen species in the over-secretion of insulin leading to the epidemic of obesity—and thus diabetes—in the United States.

Looking at this public health problem in a different way, Corkey believes we are blaming the patients, "In the 1940s, hypertension was said to be caused by excessive anxiety, so if you could calm down, you wouldn't have high blood pressure," she explains. "A similar stressor was believed to cause ulcers until h-pylori was discovered. For both of those cases there weren't any good treatments, so the patients were blamed. That's what we are doing now with obesity and diabetes."

She believes something in the body's signaling system causes a person to eat beyond what it needs for fuel. "When you look on the Internet you find some 4,000 things that are different about our food supply



lar imaging, analytical instrumentation, immunohistochemistry, animal resources, high throughput screening, biostatistics, and clinical research resources core within the Clinical & Translational Science Institute (CTSI), Together with Coleman, she conceptualized the Evans Center for Interdisciplinary Biomedical Research, which funds interdisciplinary research initiatives involving more than 100 faculty members from both campuses, as well as other academic institutions and industry. She has also supported bridge and pilot funding programs and a junior faculty program for internal grant review, and developed "Fair Expectations" and "Code of Conduct" guidelines for faculty and trainees.

Corkey has received two most important awards for scientific achievement in research related to diabetes: the Charles H. Best Award from the University of Toronto given annually to the individual who makes the most important contributions to diabetes research, and the Banting Medal for Scientific Achievement Award by the American Diabetes Association.

today," she says. "Just about everything is wrapped in plastic, foods are brightly colored and last much longer, and the internal content of our fruits and vegetables has changed. Are any of these changes the problem? I don't know, but all of those things—in addition to overeating and lack of exercise-have changed. But we focus on two out of 4,000 and they may not be the right two."

Corkey explores how the different fuels humans ingest react in different cells, which as a whole is what creates the total response in the body. "Whatever we come up with has to make some sense in terms of human physiology and human disease," she says. "I've always thought from the disease angle and always from the patient perspective."

For the past four years, Corkey has been vice chair for research in the Department of Medicine, which has given her the opportunity to develop a number of research cores that give researchers from across the University access to the very sophisticated equipment they need to secure grants. "It is very satisfying to help provide the infrastructure that allows everyone to be successful. I like the concept of working together, collaborating, and sharing whatever you have," she says.

She also credits Boston University and the School of Medicine: "This is a fabulous place, where I have been free to do what I do," she says. "Here, everyone can achieve based on their merit. Nothing can hold you back. It's your ability to get grants that determines your viability as a scientist and that is fair."

"All great scientists have, in a certain sense, been great artists; the man with no imagination may collect facts but he cannot make great discoveries."

-KARL PEARSON, MATHEMATICIAN

WHEN SCIENCE BECOMES ART

Last fall, Provost and Dean Karen Antman, MD, requested submissions from the Medical Campus community for images derived from science that would be displayed as art throughout campus.

From the brain to the lung to the pancreas, from bone marrow to epithelium to neurons, from viruses to jellyfish to mice, images of such intricacy and striking vibrancy rolled out of the laboratories of our campus scientists.

With such an array of images, it seemed fitting to hold a competition. At the February BUSM faculty meeting, Antman unveiled the top three choices. Katya Ravid, PhD, won the top spot with an image of preplatelets titled *Platelets' Birth Place: A Multi-Star Globe.* "It took three hours to get this picture just the way we wanted it," Ravid said. She is a professor of medicine and biochemistry and director of the Evans Center for Interdisciplinary Biomedical Research.

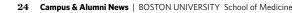
Second choice was the jellyfish *Aequorea victoria* from Osamu Shimomura, PhD, professor emeritus of physiology and the 2008 Nobel Prize winner for chemistry for his discovery of green fluorescent protein found in the *Aequorea victoria*.

Third choice, titled Detection of Object Motion by Individual Neuronal Dendrites, was from Charles L. Zucker, PhD, associate professor of

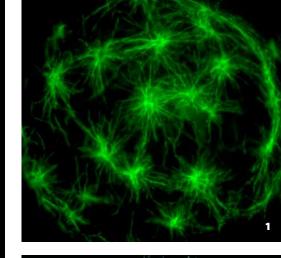
anatomy and neurobiology. "A fundamental aspect of vision is the ability to perceive the direction in which objects move," noted Zucker. "Here, an individual starburst amacrine cell has been filled with a fluorescent dye, which allows all of its processes to be visualized."

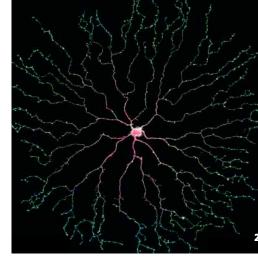
Twenty-six other images from faculty, postdocs, and students were also chosen to be displayed on a rotating basis around campus and on the flat-screen panels located in the School of Medicine lobby.

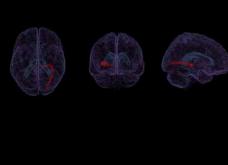
"I congratulate our colleagues for their interesting and visually vibrant scientific contributions," said Antman. "Their creativity and the variety of work they have produced are impressive."

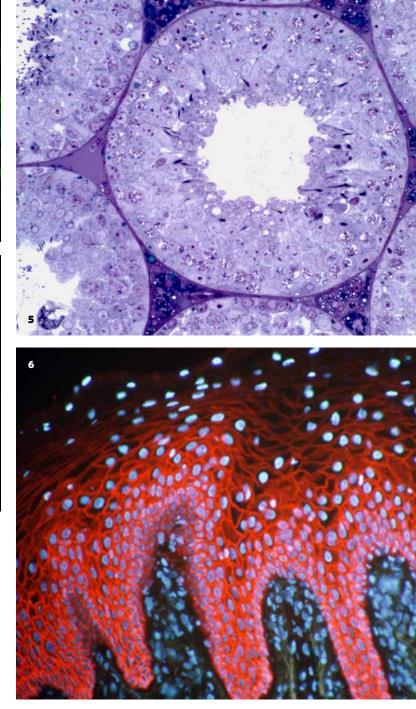












OPPOSITE PAGE: Boundaries in the Brain; Olig2 and Dlx2 expression in the mouse embryonic brain; by Jose Luis Olmos Serrano, postdoc

1. *Platelets' Birth Place: A Multi-Star Globe*, by Katya Ravid, professor of medicine and biochemistry, and director of the Evans Center for Interdisciplinary Biomedical Research

2. Detection of Object Motion by Individual Neuronal Dendrites, by Charles L. Zucker, PhD, associate professor of anatomy and neurobiology

 ${\bf 3.}\ {\it Glass}\ {\it Brain}\ {\it Triptych},$ by Seth Elkin-Frankston; PhD candidate, Department of Anatomy & Neurobiology

4. *Cancellous Bone Structure at 4x magnification*; photograph by Nick Zell, GMS student, Forensic Anthropology

5. *Mammalian Spermatogenesis*, photograph by Paul Toselli, MD-PhD, associate professor

6. Vaginal Epithelium, photograph by Caitlin Blaskewicz, 5th-yr PhD candidate in Molecular Medicine



THE HISTORY OF THE EVANS MEMORIAL DEPARTMENT OF MEDICINE

The modern history of the **Department** of Medicine arguably began on July 4, 1909.

While preparing for the arrival of U.S. President William Howard Taft, wealthy industrialist Robert Dawson Evans was riding a horse on his Beverly, Massachusetts, estate when the horse stumbled, throwing him to the ground.

Evans' family transported him to the Massachusetts Homeopathic Hospital in Boston's South End, where surgeons operating on him discovered that his small and large intestines were distended and full of fluid. They inserted a metallic tube into the small intestine to allow gas to escape and closed the abdominal wound with catgut. For two days, Evans received oxygen, small amounts of food, brandy, and even champagne. Despite massive efforts to save him, Evans died on July 6, 1909, at the age of 65.

To commemorate her husband's life, Maria Antoinette Evans made two major charitable gifts: One to the Museum of Fine Arts to build the Evans Wing for Paintings, which fronts the Fenway; the other established the Robert Dawson Evans Memorial Department for Clinical Research & Preventive Medicine, one of the first centers in the country to combine clinical care and research.

The cornerstone for the Evans Memorial's first building, now known as the A-Building, was laid in February of 1911. The four-story brick structure—which cost \$500,000 to construct-on East Concord Street was designed to include wards for patients participating in research, laboratories, offices, and a rooftop sun parlor. "The building now will make possible a noble work and will serve as a fitting memorial of a life that furnished an example of the finest ideals and broadest humanitarian instincts," declared Dr. Frank Richardson, the new department's medical director.

Mrs. Evans attended the building's formal opening in 1912. Five years later, when she died, she left an additional donation and established the goals of the department as clinical research, training, and public education. Although technically a separate research institute, the Evans Memorial Department has always operated in close connection with the Boston University School of Medicine and the Massachusetts Homeopathic Hospital and its successor hospitals, University Hospital, Boston City Hospital, and Boston Medical Center.

& COUNTING...





SPECIAL SYMPOSIUM October 5 & 6

Dean Karen Antman cordially invites you to attend the **Evans Memorial Department of** Medicine: 100 Years of Healing, Discovery, and Education.

INTERVIEW WITH DAVID L. COLEMAN, MD, WADE PROFESSOR AND CHAIRMAN, DEPARTMENT OF MEDICINE



TIMELINE OF ACCOMPLISHMENTS

1912 Robert Dawson Evans Memorial Building on East Concord Street opens. Inscription above the entrance and on a symbolic key reads "Truth Above Everything," 1913 Howard W. Nowell, a pathologist in the Evans Memorial Department, announces the discovery of the cause of cancer—an inorganic poison derived from human carcinoma. 1932 M. B. Strauss demonstrates that thiamine can cure alcoholic neuropathy despite continued alcohol use. 1938 Doctors at Massachusetts Memorial Hospitals identify the first confirmed human cases of equine encephalomyelitis. 1940 Boston University purchases the original Robert Dawson Evans Memorial Building on East Concord Street (now the A-Building). Two years later the new Evans Memorial Building opens at 65 East Newton Street. 1942 Franz Ingelfinger establishes the specialty of gastroenterology and heads the first section of gastroenterology in the United States. 1948 In cooperation with the National Heart, Lung and Blood Institute, Evans Memorial Department faculty members administer the Framingham Heart Study. 1952 Core faculty number 17 researchers; research funds total \$162,129. 1958 Robert W. Wilkins wins the Lasker Award. He and his team are the first to use chlorothiazide to treat hypertension. 1960 Chester S. Keefer, Wade Professor of Medicine, is elected president of the American College of Physicians. 1967 Alan S. Cohen presents discovery of the fibrillar nature of amyloid at the First International Symposium on Amyloidosis. 1968 Gordon L. Snider creates a clinical, research, and training program in pulmonary medicine. 1970 Robert Valeri develops techniques to freeze red blood cells and platelets for long-term storage and use on the battlefield. 1971 With 100.000 square feet of space for clinical research, the current Evans Building opens on the Boston University Medical Campus. 1972 Boston University becomes the sole academic affiliate of Boston City

"Our talented faculty members hold excellence at the core of their commitment to advancing the health of our patients."

WHAT HAVE BEEN SOME OF THE SIGNAL RESEARCH ACHIEVEMENTS OF THE **EVANS MEMORIAL DEPARTMENT?** During World War II, Chester Keefer se as medical officer of the government's chief scientific research agency. In that position, he had the task of distributing limited supplies of penicillin the civilian population. Patients from around the country petitioned him access to the drug, so he was able to collect clinical data about how peni worked.

Robert Wilkins received a patent for the G-Suit that reduced the effects of gravity acceleration on pilots during crashes and forced landings. In the 1940s and 1950s, he and his colleagues were the first to delineate an effective treatment for hypertension. Before then, many who suffered from hypertension, like Franklin Roosevelt, died prematurely.

The most important longitudinal study of cardiac risk factors ever conducted—the Framingham Heart Study—is based at Boston University and is strongly supported by investigators in the Departme of Medicine. In fact, one of the directors of the study, William Kannel coined the term "risk factors."

WHAT AREAS OF RESEARCH IS THE DEPARTMENT CURRENTLY FOCUSING ON? Tissue Regeneration (Regenerative Medicine). More than 150 faculty mem· The department's research plan is based on attracting and supporting the bers are working in ARCs. During 2010–2011, faculty working collaboratively most outstanding MD and PhD investigators. We are attempting to facilitate through the Evans Center received funding for 13 new grants and one program discovery by enhancing core services and strategic investments that leverage project grant from the NIH. research and training. We are particularly eager to focus on disease areas that afflict our patient population and to find new interdisciplinary research WHAT DO YOU SEE AS THE NEW FRONTIERS IN BIOMEDICAL RESEARCH? The paradigms. medical research community will be increasingly required to show the

The department's research grant funding was over \$126 million impact of our work in improving public health. We will continue to invest in the 2010-11 academic year, placing it in the top tier of researchas a department and as a society in translational research and intensive departments. These figures do not include research funding assemble new research team structures that create novel

Hospital. Norman G. Levinsky assumes directorship of the Evans Memorial Department of Medicine and remarks, "I feel strongly that the Boston University Medical Center cannot sit in a deprived area without doing its utmost for its neighbors who live in the same part of Boston. It is a duty and a challenge." 1975 Evans Medical Foundation is established as a nonprofit corporation to provide patient care. 1977 Haralambos Gavras introduces captopril for the treatment of hypertension. He was also among the first to investigate ACE-inhibitors to treat congestive heart failure. 1980 Cardiologists Thomas Ryan and David Faxon run clinical trials integral to evaluating the long-term results of coronary artery surgery and the value of angioplasty and thrombolytic therapy. 1982 Renal specialist and faculty member Leah M. Lowenstein is named dean of Jefferson Medical College, thus becoming the first female dean of a coeducational medical school in the United States. 1985 The first Evans Day celebration of research activity is held. 1987 By its 75th anniversary, the Evans Memorial Department comprises **85 researchers**. 1989 Former hematology faculty member **Louis W. Sullivan** is installed as Secretary of the U.S. Department of Health and Human Services. 1993 Judith Vaitukaitis, former director of BU's General Clinical Research Center, is named director of the National Institutes of Health's National Center for Research Resources. 1996 Boston City Hospital and University Hospital merge; the combined Department of Medicine includes more than **500 faculty and research personnel**. Combined federal and private grant support makes the Boston University Department of Medicine one of the top 10 funded departments in the United States. 2005 The ambulatory practices conduct more than **200.000 patient visits annually**. 2009 The Evans Center for Interdisciplinary Biomedical Research launches with Katva Ravid as the founding director.



E	of faculty at the Boston VA or Roger VVIIIIams Medical Center. We have	
erved	439 faculty, including more than 100 PhDs.	
n	The department has internationally renowned research programs	
n to	in a number of areas including cardiovascular biology, risk factors for	
for	cardiovascular disease, pulmonary inflammation and immunology, stem	
nicillin	cell biology, diabetes and obesity, androgen biochemistry and biology,	
	arthritis, alcohol/substance abuse, amyloidosis, scleroderma, vasculitis,	
9	inflammatory bowel disease, HIV/AIDS, tuberculosis, renal glomerular	
	disorders, health care disparities, geriatrics, and sickle cell disease.	
st		
	WITH SO MANY RESEARCHERS AND PROGRAMS, HOW DO YOU	
	FACILITATE COLLABORATION? The Evans Center for Interdisciplinary	
	Biomedical Research was established to facilitate interdisciplinary research	
	in novel areas of interest to our faculty. The Evans Center provides resources	
	and infrastructure for faculty from across the University to work in interdis-	
nent	ciplinary teams that create new approaches to the discovery process. The	
el,	center has organized Affinity Research Collaboratives (ARCs), including	
	the Mitochondria Consortium, Protein Trafficking and Neurodegenerative	
	Disease, Sex Differences in Adipose Tissue Remodeling, and iPS-Driven	
N?	Tissue Regeneration (Regenerative Medicine). More than 150 faculty mem-	

of faculty at the Boston VA or Roger Williams Medical Center We have

opportunities for answering compelling research questions.

100 Years

The dramatic advances in biomic research have created vast amounts of data that must be rigorously compared to human phenotypes and analyzed for their clinical utility. One of the strategies adopted by the department to meet this challenge was to establish a new section of Computational Biomedicine in 2009-10. This new section serves as an important home for research and training on genomic and computational approaches to disease pathogenesis, diagnosis, and treatment. The section's faculty and trainees use high-throughput technologies (i.e., microarrays and next-generation sequencing) to generate genome-wide data sets that are then analyzed with state-of-the-art computational tools.

We are also excited about the National Emerging Infectious Diseases Laboratories (NEIDL) funded by NIH, Boston University, and Boston Medical Center. This 200,000-square-foot research center will attract 20 research teams to study emerging infectious diseases and will contain state-of-theart biocontainment facilities (Biosafety Level 4). The NEIDL, already having recruited world-class investigators into many departments, including the Department of Medicine, will provide extraordinary opportunities for collaborative research in infectious diseases.

HOW DOES THE DEPARTMENT FULFILL ITS EDUCATIONAL MISSION? The department continues its longstanding tradition of training national leaders in discovery, clinical care, and medical education. Our educational programs include a medical residency program in internal medicine totaling 151 residents, 24 percent of whom have an advanced graduate degree. Residents may opt for a primary care track, which enriches the curriculum with an expanded experience in ambulatory medicine. All of our residents receive mentorship to pursue scholarly projects.

The department also oversees a PhD program in molecular medicine. Trainees take a series of core courses in the genetics and epidemiology of disease, cancer biology, immunity and infection, and the translation of molecular observations to clinical implementation. They rotate through laboratories in the department before choosing one in which to conduct dissertation research.

WHAT DO YOU LOOK FORWARD TO AS THE DEPARTMENT CELEBRATES ITS

CENTENNIAL? At the 50th anniversary of the Evans Memorial, Robert Wilkins spoke about excellence as the guiding principle of the department. He said, "Mindful of the high price of excellence, the great demands and the many difficulties it will impose, we nevertheless embrace it as our model and our method. For whatever the price of excellence, the cost of compromise and mediocrity is greater." The Department of Medicine is steadfastly committed to the excellence exemplified by our predecessors in research, education, and patient care.

We are fortunate to work with an extraordinarily diverse patient population that encompasses a range of socioeconomic and cultural backgrounds. Our talented faculty members hold excellence at the core of their commitment to advancing the health of our patients. It is also very exciting to train the next generation of physicians and scientists who will provide exceptional and high-value clinical care and discover innovative strategies to prevent, diagnose, and treat disease into the next century.

Evans Memorial Department of Medicine: 100 Years of Healing, Discovery, and Education

The Evans Memorial Department of Medicine at Boston University School of Medicine will celebrate its 100th anniversary on October 5 and 6, 2012. All former and current residents, fellows, staff, faculty, and alumni are invited to attend a special symposium dedicated to reflecting on the department's past century and predicting the future of health care and discovery. Check our website:

www.bu.edu/cme/seminars/CENTMED12 for details.

THE SCHEDULE INCLUDES:

Friday, October 5

- Welcome from Karen Antman, provost of the Medical Campus and dean of the Boston University School of Medicine
- Tours of the Medical Campus
- Social gatherings with section and residency program colleagues

Saturday, October 6

Research poster session

• Symposium and panel discussion: Training health care professionals to meet the health care needs of urban populations

• Reflections from Aram Chobanian, MD, University Professor and John I. Sandson Distinguished Professor of Health Sciences, dean emeritus of Boston University School of Medicine, and president emeritus of Boston University

• Frontiers in Translational Medicine including a presentation on personalized medicine by Joseph Loscalzo, MD, PhD, Wade Professor and Chair of the Department of Medicine, current Hersey Professor of the Theory and Practice of Medicine, Harvard Medical School, and chair of the Department of Medicine, Brigham and Women's Hospital

A Life Well Lived—and Remembered The widow of a BUSM alumnus pays tribute to his career and passion

for teaching through student scholarship



"What better way to commemorate his life than contributing to a program that will assist another surgical student?"

JOY AND MICHAEL ROHMAN MET AT NEW YORK UNIVERSITY IN JULY 1946, just days after he was released from the army, where he served in the infantry in the European Theater of World War II. "In fact," remembers Joy. "when I met him he was dressed in half combat clothes and civilian clothes—he hadn't had time to go shopping."

At the time, Joy was a dancer with the Ballet Society in New York City (which George Balanchine later renamed the New York City Ballet). That September, Rohman applied to medical school and got into his top choice: Boston University School of Medicine. Deciding that she would not attain the goal of being a principal dancer with a ballet company, Joy moved to Boston; she and Michael were married in his second year and moved into a tiny, one-room apartment on Queensbury Street. "Michael picked it out," says Joy. "The rent, I recall, was 49 dollars a month. We made do, beautifully. I didn't think so at the time, but looking back now, we probably gained some good values about the important things in life, in what really matters." Michael spent many late nights studying, writing papers, and

preparing lessons in that apartment. Joy, with training as a medical assistant, worked for a gynecologist at Massachusetts General Hospital. Curious about his studies, she would read his texts and always ask questions. "He was very generous about teaching me," she says.

After graduation from BUSM in 1950—and an additional eight years of residencies—Michael began a long and distinguished career as a cardiothoracic and trauma surgeon. Joy, who is also a photographer,



-JOY ROHMAN

would sometimes document his more challenging procedures in the operating room. In 2002, while still teaching and active in the hospital, Michael died suddenly. "Since then," says Joy, "I've wanted to establish a program that would carry on his work in some meaningful way."

To honor the memory of a man who loved his profession and teaching, Joy decided to create a scholarship fund at the BU School of Medicine in Michael Rohman's name: "What better way to commemorate his life than by contributing to a program that will assist another surgical student? He would be delighted to know about this. I look at the life we established and it's enviable in many ways. You live, you work, and you enjoy the fruits of your labor. It's time now to give back to the source of Michael's learning."

Mrs. Rohman made her initial gift by taking advantage of the charitable IRA rollover legislation (which expired on December 31, 2011) that allowed investors aged 70 and a half and older to directly transfer up to \$100,000 from an IRA to charity without paying income tax on the amount transferred.

If you are interested in learning about the opportunities for making a planned gift to benefit Boston University School of Medicine, please email Assistant Dean Karen Engelbourg at engelbou@bu.edu or call 617-638-4560. You can also visit our website at www.bu.edu/ supportingbusm.

Deans' Recognition Dinner



David Rothbaum '82; David Edelstein '80; Jeff Herrmann. PhD; Marcia Edelstein Herrmann '78; and Robert Rothbaum '14 eniov the reception prior to the annual Deans' Recognition Dinner held in the Board of Trustees Ballroom on Saturday, October 29, 2011.



School of Medicine Dean Karen Antman, MD, and Henry M. Goldman School of Dental Medicine Dean Jeffrey Hutter, DMD, co-hosted the Deans' Recognition Dinner. The annual event recognizes leadership donors.

Newly appointed Assistant Dean of Academic Affairs Douglas Hughes, MD (left), accepts a hand-carved dowel, a gift made by retired professor of surgery Robert Beazley, MD, at the Deans' Recognition Dinner on October 29, 2011.









DEAR ALUMNI AND FRIENDS

Spring is here and many exciting things are taking place in the next few months. We have wonderful plans for the School of Medicine Alumni Weekend on May 4 and 5. I personally invite you to visit the Medical Campus, even if you are not celebrating a class reunion in May-the changes that have taken place at the School of Medicine are truly amazing. Whether you are a recent graduate or have been away for some time, you will be impressed.

Class Reunion Dinner parties and the Annual Meeting and Banquet will be held at the Taj Boston (formerly The Ritz Carlton), located across from the Public Garden. Please make a weekend of it and enjoy all the city has to offer while reconnecting with your classmates, old friends, and family! At the banquet, Distinguished Alumnus awards Have you made your contribution to the School? If so, you will

will be presented to Steven L. Berk '75 and Michael J. Kussman '68. receive a personal phone call from a medical student or BUSM

ALUMNI PHONATHONS

1. Roberta Apfel '62, 2. Jean

Ramsey '90, 3. Don Grande '73, 4. Adil Yunis '14, and 5. Kate Phaneuf '88 were among

the Phonathon volunteers who

pledges from 171 alumni during

raised more than \$99,000 in

BUSM Phonathons are an opportunity for medical students and alumni to connect with BUSM graduates across the country. Students report that they receive valuable advice on everything from specialty paths to the advantages and disadvantages of practicing in certain geographical locations, and alumni are eager to reminisce and ask about particular professors, courses, curriculum, and current campus life. For more information go to: www.bumc.bu.edu/medalumni, www.bumc.bu.edu/give2BUSM, or www.facebook.com/alumbusm.



Phonathons held on October 4 and 18 last fall. Between the two nights of calling, 10 alumni and 25 students gathered in Hiebert Lounge, volunteering their time to reach more than 540 alumni Dean Karen Antman, Assistant Dean Jean Ramsey, and Assistant Dean Phyllis Carr expressed appreciation for the volunteers' dedication to this annual fundraising event. Many of the student volunteers belong to oncampus organizations supported by the Alumni Association 6. Ben Isakson '13 and Elizabeth Steinfield '13 join together to celebrate a pledge to the Schoo

of Medicine Annual Fund. 7. Elizabeth Steinfield '13, Stacy Brown '13, and Erin Brooks '13 prepare to connect with alumn during the Phonathor on October 18.

Attending the donor recognition dinner are Mariko Sakai and Osamu Sakai, MD, PhD, BUSM professor of radiology and proud parents of Yu Sakai, CAS '14.

Special guest speaker Eric Grigsby, MD '84, brought a piece of Napa Valley to New England, showcasing some of the fine wines from the vinevard he and his wife, Mary Rocca DMD '84, own and operate.

graduate to thank you during our Thank-A-Thon on April 24.

The new medical student residence is slated to open in June to welcome incoming first-year and returning medical students, and on Friday, September 21, we will hold the official grand opening celebration.

If you cannot visit in person, I encourage you to virtually visit BUSM at www.bu.edu/medalumni and see the many wonderful changes for yourself!

Best regards,

Jean E. Ramsey

Jean E. Ramsey, MD '90, MPH '08 Assistant Dean for Alumni Affairs Associate Professor of Ophthalmology and Pediatrics Vice Chair of Education and Program Director

ALUMNI CLASS NOTES

1950 Henry B. Schoenberger of Laconia, New Hampshire, writes, "The attached photograph was taken in July 2011 in Maine. Third from the left is Ramon Isales MD '49, who is 92 and completed a 10K race this past year. L to R: Ramon's daughter, Lydia; his wife, Phoebe; Hank Schoenberger MD '49; and Hank's wife, Pat."



1951 Richard J. Rihn of Walnut Creek, California, writes, "After 43 years of general practice, I semiretired to work in various administrative positions in HMOs. Retiring from medicine completely, I then built an airplane from plans produced by my son (who is chief engineer for Advanced Design of Northrop/ Grumman). I still fly that aircraft after 11 years and 282 aerobatic hours. I taught pilots for many years (1,800plus hours of flight instruction given). Accolades garnered along the way are Master Certified Flight Instructor and Master Pilot Award from the FAA. My wife, June Hall Rihn, known to many classmates as a nurse on the Smithwick service, died suddenly in 2002."

1952 Alvin N. Eden of New York, New York, writes, "Looking forward to our 60th reunion in May. I am still working, teaching, writing—especially about iron deficiency in toddlers-and playing tennis, so I have much to be thankful for. I hope to see a bunch of my 1952 classmates at the reunion."

1957 Mark N. Ozer of Washington, D.C., writes, "This is my first class note. I thought it appropriate to sum up my career now that it has been 55 years since my graduation in 1957. I had a fruitful career

in neurology, ending as professor at the Georgetown University Medical School as well as associate medical director of the National Rehabilitation Hospital here in Washington. I attribute my interest in neurology to the exciting lectures given by Charley Kane my freshman year at BUSM. I still remember those lectures that took place at the Mallory Building at Boston City Hospital. My work focused on how to help persons and their families with chronic neurological illness live fuller lives. Starting with children, I branched back into adult neurology with focus on persons with strokes and spinal cord injury. The last of my 10 books in neurology was published by Butterworth-Heinemann and is called The Management of Persons with Chronic Neurological Illness. It sums up that focus in that it contains chapters on persons with migraine, seizure disorder, Parkinson's disease, MS, etc., as well as head injury, spinal cord injury, and stroke. Note the focus on persons with illness rather than on disease categories. After retirement, I went back to my first love-history. I have since become accepted as a local historian of the Washington, D.C., area and have had several books published, lectured on the history of most of the world's great cities at the Osher Lifelong Learning Institute at American University, and organized a Civil War Discussion Group at the Cosmos Club, where I am now a member. All this keeps me busy, but my major legacy is my five children and seven grandchildren with whom I have maintained close relations as they have grown in their own productive family lives and careers. I have just finished a family memoir recounting those years in Boston including the time at the Boston City and the Home Medical Service at BUSM that profoundly influenced my career."

1962 Norman C. Gaudrault of Topsfield, Massachusetts, writes, "I

am pleased to announce that a novel I wrote in French entitled Deux ans en Amerique was published earlier

this year in Paris by the Société des Ecrivains. The story was coauthored with a French friend, Georges Idier. A translation of excerpts of the back cover summary reads as follows: In the Benoit family there is the father, Pierre, a scientist in infectious diseases; the mother, Dominique, a teacher; and their two children: Julie and Philippe, both adolescents. It is a French family about to cross an entire ocean to go spend two years in the United States where Pierre has been invited by the NIH. They are understandably a bit overwhelmed to be flying off to Washington where they will become acquainted with the lifestyle of Americans and learn to live their own way, the 'American way of life.' From east to west, from north to south, the family wanders around the United States and embraces the New World in its diversity, its particularities, its thinking patterns, its culture, its customs, and its myths. More human and sensitive than a tourist guide, this novel of Norman Gaudrault and Georges Idier offers a total immersion into this fascinating American society. Turn the pages and embark on an adventure that risks

1965 Hernan F. Mendez of Dorado, Puerto Rico, writes, "Memories of the South End: My first apartment I rented from Mrs. Hathaway, in Worcester Square, next to **Dominick** Sampogna '65, who had many girlfriends and introduced some of them to me. Old lonely people lived in the other apartments. I then moved to AKK fraternity house where I stayed until graduation. There I met Vince Russo '64, Ken Vaughn '64, Sarkis Kechejian '63, Joe Migliore '66, Ralph Holmes '67, Nick Dushku '64, and many others who created an

welling up in you many desires!"

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.

www.facebook.com/alumBUSM

BUSM Alumni Association Facebook

and having parties after exams. Many other students lived in the square. Many old drunks walked around at night but there was no criminal activity at that time. At AKK they used to keep a file of old exams which we all shared for review before exams, and they helped a lot. We used to go to Washington Street to eat hot dogs and Chinese food at night. All of it was a great experience that I will never forget. Now I see all those new buildings and new student dormitories in construction and compare it with our time, and it is quite different. But the same process of producing excellent physicians at the School still exists, as before. That was 50 years ago. How it will look 50 years from now, nobody knows, but excellent physicians will continue to graduate from the School."

excellent environment for studying

1967 David A. Bailen of Newton, Massachusetts, writes, "After nearly 40 years of practice in internal medicine at University Hospital and Boston Medical Center, I fully retired on October 1, 2011, to spend more time with my wife, Helene, who is still a gallery instructor at the Museum of Fine Arts, Boston. My son, Laurence S. Bailen, MD, a 1993 graduate of Tufts University School of Medicine, currently practices as a gastroenterologist at Newton-Wellesley Hospital and also serves as an assistant professor of medicine at Tufts. He and his wife, Jennifer Weber, live in Newton with their children, Daniel, Lilly, and Molly. My other son, Mark I. Bailen, is a lawyer specializing in First Amendment and media law at the law firm of Baker & Hostetler in Washington, D.C. His wife, Jessica Rosenworcel, a telecommunications lawyer, has been nominated by President Obama to serve

as a commissioner at the Federal Communications Commission (FCC) They live in Washington, D.C., with their children, Caroline and Emmett."

1968 Edward Glinski of Milton, Massachusetts, writes, "2011 ushered in my seventh decade of life and found me a happy man. I have two sons, one a junior at Boston College High School and the other a freshman cadet at the U.S. Air Force Academy, and three older stepsons, all doing well. My wife, Denise, and I also have two beautiful grandchildren, ages one and two."

1969 Marc F. Hirsch of Bowling Green, Kentucky, writes, "Forty-two years after I graduated from BUSM I have retired. My last few years have been as a hospitalist at a small hospital in Kentucky. I am now fulfilling my dream of writing; I have been working on a murder mystery for the past two years and am almost done. Another dream was to be a bartender. I have been working behind the bar at the Tennessee Performing Arts Center



in Nashville for the past year, since before I retired. It's just like practicing medicine, only less paperwork. I have fond memories of struggling through medical school at BUSM. I never regretted it. My career has transitioned from mainly surgical, to board certified in family practice, to intensely internal medicine as a hospitalist. I have been a speaker at the local college, Western Kentucky University, to the pre-med honors

society. They sent me one of their tee shirts to thank me. My only advice to medical students facing a life in medicine, and to any young person in any job, is to live as cheaply as possible so you never have cause to doubt your reason for being in your profession and you never feel trapped in a job you no longer love. When I finally understood that, I traded my BMW for a Prius, paid off my mortgage, quit my country club, and retired to bartend and write my book. I do volunteer work as a doctor in a free clinic for working people who cannot afford health insurance. Keeping the promise to cover every American and lower the cost of medical care did not support the lifestyle of the HMO."

1975 Steven L. Berk of Lubbock, Texas, has recently published a true crime memoir, Anatomy of a Kidnapping: A Doctor's Story. Dr. Berk is dean of the Texas Tech School of Medicine and provost of Texas Tech Health Sciences Center. As a physician certified in infectious disease and geriatrics, Berk has treated an outstanding diversity of patients in his forty-year medical career.

Joseph M. Matthews of Chico, California, writes, "My son, Richard Douglas Matthews '03, just joined me in surgical practice as a boardcertified colon and rectal surgeon specializing in laparoscopic colectomy. We are glad to have him home along with the three grandchildren and one on the way."

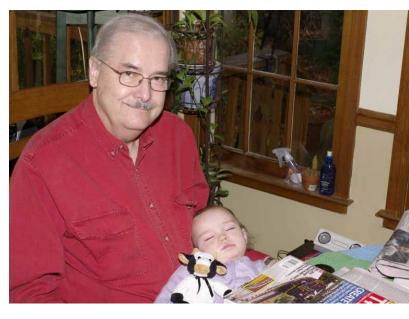
Joseph Edward Paris of Marietta,

Georgia, writes, "2011 was a good year. I was appointed chair of the Policy and Standards Committee of the National Commission of Correctional Health Care (NCCHC), the nationally recognized creator of the standards in use for the accreditation of health services in prisons and jails. I continue to work part time at a couple of local jails and at the Public Health Department. These jobs entail consulting on HIV and HCV care. These diseases did not exist when I went to BU! 2011 was also



good because I became a grandfather. Attached is a photo with Maddie Paris, my granddaughter by way of my son, Joseph John Paris, and his wife, Elisa Wilson Paris. At 71 I am not as strong as I was decades ago, but life is good."

my medical education. It enlightened my views of people and their lives, and I think made me a better person and physician. During our stay in the 70s, the Boston City Hospital cafeteria had full dinners available



1977 Laura L. McCann of Newton, Massachusetts, writes, "I came to the east from the southwest and thus I was in a winter coat by the end of September. I remember seeing my first icicles from outside the secondfloor classrooms. Our welcome speeches in Keefer Auditorium with the old wooden chairs consisted of being told to 'look to your left and your right and one of you will not be here next year'...what a thing to say to our class when everyone had worked so hard to get to this point in our lives...but they were wrong, as there were few that did not finish with the class. All of my surroundings were such a change from the southwest, as we had no subways and rare buses for travel, as everyone drove. The area around the Medical School was such a change from the University of Arizona in Tucson. One had to walk down from the elevated train line on Washington Street and pass dilapidated brownstones, strewn garbage, homeless people, rats, and large cats. No one wanted to live around the area, yet I knew that this was a place to get a full range of experiences in

for, I think, less than a dollar-hard to believe. In my capacity as a member of the American Medical Women's Association I mentor the local student branch at Boston University. Their events are frequently on 'the 14th floor,' which is the same as I remember with the breathtaking view of Boston."

1978 Edith E. Braun of Medfield. Massachusetts, writes, "Jim and I celebrated our 30th wedding anniversary in January-and we're still not quite empty nesters!"

1980 Richard I. Rothstein of Etna, New Hampshire, has been named interim chair of medicine at Dartmouth Medical School and Dartmouth-Hitchcock. Currently the chief of the Section of Gastroenterology and Hepatology and a professor of medicine and of surgery at Dartmouth Medical School, he will serve during the transition to a new permanent chair. Rothstein has been a member of the DHMC staff since 1985 and became section chief of Gastroenterology in 1997. During

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his leadership, the section developed centers of excellence in gastrointestinal and liver disorders and endoscopy. He has a special interest in esophageal function and disease. His research has included the development of less-invasive endoscopic therapies for the management of gastroesophageal reflux disease, Barrett's esophagus, and obesity. Rothstein is considered a pioneer in the evolving field of natural orifice translumenal endoscopic surgery, and he is evaluating the role of robotics in endoscopy. He is a principal investigator in the Norris Cotton Cancer Center, studying the effect of dietary supplements to prevent gastrointestinal cancer. He is the associate dean for continuing medical education at Dartmouth Medical School and has been actively involved in professional education and leadership development.

Alan R. Horowitch of Yuma, Arizona, writes, "Joe Malone '80 and I, along with significant others, met up in Kenya this past summer. It was a short trip for Joe, who is working on the Gates anti-malaria project in Ethiopia, but a longer trip for me from Arizona. There were many incredible



sights and experiences. I've attached a photo of Joe practicing with a Maasai spear. Wilson, our Maasai guide, had used that spear to kill a lion in the



past. We photographed the lions and practiced sending the spear into the ground."

1983 Arnold I. Pallay of Towaco, New Jersey, writes, "I have just celebrated 25 years in family

> medical practice as medical director of Changebridge Medical Associates, P.A., in Montville, New Jersey. Most recently I have started a Personalized Genomic Medicine program at the Atlantic Health System (a three-hospital, 2,000-physician system) where I serve as the program director. We just received a \$1 million private capital donation to support clinical activities in this growth area of medical practice. (Jacobs-Levy Equity Management Personalized Genomic Medicine program at Atlantic Health.) I have

four children with my wife, Robin, two of whom are engineers; the oldest is a special projects manager. His wife is a second-year ob/gyn resident at

Tufts. Our youngest is a high school junior who will soon start his college search in the Boston area or somewhere in the northeast."

1984 Marcia F. Katz of

Houston, Texas, writes, "I am a pulmonary and critical care medicine physician, having completed all my training at BU and BCH, and have been a Baylor College of Medicine faculty member for 11 years. I am the director of the Adult Cystic Fibrosis Center, and hold the Brown Foundation Professorship in Adult Cystic Fibrosis. I have recently been appointed to be the associate chair of medicine for clinical affairs and the chief

of adult medicine at Texas Children's Hospital. Most importantly, I am married to Asher Aremband and have four beautiful daughters: Rebecca Wolinsky, 19, a sophomore at Brown University; Jessica Wolinsky, 16, a junior in high school; Lisa Aremband, 22, a graduate student in Jewish education at The Jewish Theological Seminary; and Jody Aremband, 20, a sophomore at American University. The highlight of 2011 was a wonderful reunion of Class of 1984 lifelong girlfriends, Kathy Bennett, BJ Entwisle, Julie Kaufman, Jennifer Hosmer, and me in Boston, where we toasted with champagne our wonderful memories of medical school at BU and how we have not aged a bit. If you come to Houston, give a call! mkatz@bcm. edu.'

Kurt R. Wharton of Orinda, California, writes, "Greetings from California. I still have my Boston winter clothes, but I haven't worn them much in the past 27 years since graduation. I was

cology and Reproductive Medicine at the University of California San Francisco (UCSF) where I also did my residency. I am the site director for resident education at Alta Bates Summit Hospital in Berkeley, where I teach advanced laparoscopic surgery and pelvic reconstruction. I am past department chairman at ABSMC (thankfully). While I was chairman, our hospital was the busiest ob department in the Western United States. For many years, I have sat on the Claims Advisory Committee for NORCAL Mutual, a physician-owned malpractice company based in San Francisco that provides coverage to physicians throughout the country, including Pennsylvania, Rhode Island, and Massachusetts. My wife, Jill, and I have two daughters in college (USC and UC-Davis) and two sons in high school. The boys row crew and hope to row in the Head of the Charles next year; I'll definitely return to Boston for that event. My sons are also active in Boy Scouts, and I am an Adult Leader, which has allowed me to backpack quite a bit and enjoy life outside of medicine. It seems I spend my life teaching the tying of knots to either my residents or my scouts. I was fortunate to have many great teachers in medical school and in residency whom I do my best to emulate. I hope my classmates have been able to enjoy their careers as much as I have."

just promoted to clinical professor in

the Department of Obstetrics, Gyne-

1985 David S. Kam of Weymouth, Massachusetts, writes, "I joined the Massachusetts Eve and Ear Infirmary on December 1, 2011. Please see the press release on my practice website: www.ssent.org for details."

I. Michael Leitman of Roslyn Heights, New York, writes, "Greetings from Manhattan. I was appointed professor of clinical surgery at Albert Einstein Medical College and chief of Graduate Medical Education/DIO at Beth

Israel Medical Center. I work closely with Burton Surick '86 as directors of the surgical residency program."



1986 Ziv J. Haskal of Cockeysville, Maryland, writes, "In January, I was recruited to be editor-in-chief of the Journal of Vascular and Interventional Radiology, the lead journal in the specialty. Since then, the time to first decision for manuscripts has dropped nearly sixfold, the number of manuscripts submitted monthly has doubled, international papers have increased, and impact factor has climbed 15 percent. Our new monthly podcasts appear in many locations, including iTunes—one recently received more than 22,000 clicks to play. Reading and editing over 1,100 manuscripts does a lot for one's perspective on where the field is going. I keep a full clinical and research schedule and have built up and run the division at the University of Maryland. I also travel, lecture, and try to get out on my bike. Thank goodness for my lovely wife and two talented daughters."

Lorraine Potocki of Houston, Texas, writes, "I just published a book entitled Human Genetics: From Molecules to Medicine. Preface by Dr. James Watson and many photos by Rick

Guidotti of Positive Exposure. Happy nonprofit organization called Ageno Foundation International, Inc. Our reading!" **1987 Linda Burke-Galloway** of Winter Springs, Florida, writes, "Greetings, my fellow alumni! I can't believe we're approaching the 25th anniversary of my graduation. I am 1,600 mosquito nets in the fight pleased to report that I am the proud parent of two wonderful sons whom we adopted from Ethiopia in 2008. They were six and seven at the time and did not speak English but are now straight A students and were 2010 Junior Olympians in track and field. Kayamo and Mamush placed 13th and 14th in the 1,500 meter for the entire country. After 20 years of serving medically underserved

website is www.agenofoundation.org. We service Eastern Africa and the Caribbean, providing medical support, nutrition, scholarship funds, and school supplies. Last year, we donated against malaria in Gulu and Kampala, Uganda, during one of our medical missions. One of the students we supported graduated from law school in Burundi this August. Our nutrition program, which began in January 2011, has fed over 1,000 people. We focus on pregnant females and children under five years old. This is just a short note of what I have been up to. Please consider partnering with us." women in public health, I have unofficially retired from direct patient 1990 Kathleen M. Kelly of care and am a blogger and author of Kingston, New Hampshire, writes, The Smart Mother's Guide to a Better My husband and I got married twice Pregnancy. Please visit my website, because friends asked us to be godwww.smartmothersguide.com, and parents to their second son, but



follow me on Twitter @Lingal17.com, there was a new parish priest with or "Like" me on Facebook at www. new rules (married in the backyard facebook.com/SmartMothersGuide. doesn't count in church, so we had I look forward to seeing everyone at to get married again in church so we the next Alumni Weekend. BUSM 4 could be godparents at the baptism a ever!!" week later). I'm recovering from knee reconstruction after losing an argu-1988 Jamel Y. Patterson of Pomona, ment with gravity from the painting scaffold this spring. Oddly enough, it several medical missions, and have a feels much better after a day of hiking

New York, writes, "I have been on

in the mountains than a day of working in the office. The other change is that I'm now officially an escapee from primary care medicine, now working full time in wound care and palliative medicine. Better late than never. Best wishes."

1991 Charnjit Singh of Garden City, New York, writes, "Hope all is well with all of my classmates. Still here in Garden City and enjoying practice. I am expanding my horizons a bit as I start an Executive MBA at NYU Stern School of Business. I plan on continuing clinical work, but will change the scope (pardon the pun) of my work to include more management. We did enjoy a fun and interesting trip this summer to Walnut Grove, Minnesota, and De Smet. South Dakota, as we followed the path of the Ingalls family (Little House on the Prairie). I always enjoy reading about



classmates' great professional accomplishments and family/personal joys. Best wishes to everyone."

1994 Adam I. Perlman of Cary, North Carolina, writes, "Moved down to North Carolina as the new executive director for Duke Integrative

ALUMNI CLASS NOTES



Medicine as of September 1, 2011. My oldest of five children started at Tufts this year and the others have settled in nicely down south. Sorry BU, but go Blue Devils!"

2000 Konstantin M. Linnik of

Charlestown, Massachusetts, submitted the following: The law firm of Nutter McClennen and Fish LLP announced that Konstantin Linnik. PhD, has joined the firm as a partner in the Intellectual Property group. He will use his extensive industry expertise to benefit biotechnology, pharmaceutical, and medical device clients and support their innovation goals. His work will focus on IP strategy, competitive analysis, patent portfolio development, licensing, enforcement, and patent litigation. Before joining Nutter, Linnik was senior corporate counsel for Pfizer research, the world's largest pharmaceutical company, where he was lead patent counsel for Pfizer research units in the U.S., Canada, and Germany. Before joining Pfizer, Linnik represented a number of biotechnology and pharmaceutical companies as external counsel. Linnik is active in the Boston legal community and currently chair of the Biotechnology Committee of the Boston Patent Law Association.

2001 Anna F. F. (Andrade) Barbosa of Norwell, Massachusetts, writes,

"I am happy to announce the birth of

Alexander Djinzinho Barbosa, born on my husband Armando's birthday, 11/30/11. Ariana is 6, Armando is 5, and Angelica is 3. I enjoy working full time as an internist at South Shore Medical Center in Norwell, Massachusetts. Hope you all have a happy and healthy 2012!"

2002 Laura Harris of Newburyport. Massachusetts, writes, "Laura Harris and Abby Harris are proud to announce the birth of a baby boy, Hayden George Harris. He was born

on June 6, 2011. He joins big brother, Oliver (15 months) and they've already started stirring up trouble together. Would love to hear from old friends! Lsgalaburda@gmail.com."

ALUMNA LAUNCHES HEALTHY COOKING APP

With the help of six BU students and alumni, Deborah Chud '84 of Chestnut Hill, Massachusetts, has launched "Trufflehead," a healthy cooking app for iPhone/iPad users. Chud's app has been featured



by Apple on both its "What's Hot" iPhone app and "New and Noteworthy" lists, on which only 30 apps out of 500,000+ appear at any one time. Check it out on iTunes http://itunes.apple.com/us/app/ trufflehead/id450174950?mt=8 and see it in action on http://www.youtube.com/watch?v=7NsSQV1PzPw. A cookbook author and food blogger (www.aDoctorsKitchen.com), Chud also blogs for HuffPo Food at http:// www.huffingtonpost.com/deborah-chud/six-steps-to-a-healthy-20_b_1210636.html.

> For more, go to BU Today at www.bu.edu/today/2011/ healthful-cooking-madeeasy.

When New England Patriots fan Terrence Oder '95 of Gloucester, Massachusetts, attended a playoff game between the Pats and the Baltimore Ravens in January, Raven kicker Billy Cundiff missed a 32-yard field goal. Oder was the happy fan who caught the ball after the misplaced kick that won the game for the Pats and sent them to the Super Bowl. For more details, visit www1.whdh. com/news/articles/sports/ patriots/12006510341516/ pats-fan-catches-missedkick-memory-of-alifetime/#ixzz1kUe6vyxm.

And www.boston.com/ Boston/names/2012/01/ billy-cundiff-missedfield-goal-findshome-with-pats-fan/ efQeGocLH8JeS7pm-4HRC2H/index.html. (Featured in the Boston *Globe* photo with Oder is Rob Bouchie, manager of the BUSM anatomy laboratory.)

→ In Memoriam



1939 Timothy L. Curran of Avon, Connecticut, on August 28, 2011, at the age of 97.

An otolaryngologist, Timothy L. Curran joined St. Francis Hospital staff in 1946 and opened his ear, nose, and throat practice in Hartford, Connecticut. For the next 40 years, he appreciated the privilege of knowing and caring for his many patients. Curran served in the U.S. Army Air Force's Medical Corps as a flight surgeon in Africa, Sicily, and Italy during World War II. During his retirement, he penned the story of his early life in Boston, his military service, and his love of medicine in his autobiography, The Joys and Tears of a Doctor.

1943-A • John T. Barrett of Providence, Rhode Island, on January 26, 2010, at the age of 94. A pediatrician, he served in the U.S. Army Medical Corps during World War II in the European Theatre and again during the Korean Conflict. He is survived by his wife, Mary.

1943-B • 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 concept of occupational medicine, both directly treating employees and creating totalhealth programs for its 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 the University Hospital (now Boston Medical Center), and an associate visiting physician of the Boston Medical Center. He served as a 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, he was named by Boston Magazine as one of Boston's Super Doctors and as One of Five "Doctor's Doctors." The Gillette Company medical/surgical unit at Boston Medical Center was dedicated in his name in 1994.

1947 • Edward A. Beeman of

Bethesda, Maryland, on March 17, 2011, at the age of 87. A virologist at the NIH and a commissioned officer with the Public Health Service, he was an internal medicine resident at the Mavo Clinic in Rochester, Minnesota, and received a master's degree in medicine from the University of Minnesota. He was among the first infectious disease specialists in Montgomery County, Maryland. In addition to his private practice, he was on the clinical faculty of the Georgetown University and George Washington University medical schools and participated in weekly grand rounds at Holy

Cross and suburban hospitals. He also published articles on virology and nephrology in professional journals. In retirement, he became a docent at the National Museum of Health and Medicine and joined the National Institutes of Health's history office. His postretirement publications included two books on NIH virologists Robert J. Huebner and Charles Armstrong.

Lester Rich of West Hills, California, on September 9, 2011, at the age of 89. As a member of the Army Specialized Training Program at Boston University School of Medicine, Dr. Rich was assistant chief of medicine at USAF Hospital, Westover AFB in 1952. In 1953 he brought his family to southern California and worked for Kaiser Permanente for five years. Board certified in 1956, he started his private practice in 1958 in Encino, California, and later served as chief of staff at Encino Hospital and chief of staff at Tarzana Hospital from 1987 to 1989. He retired from private practice in 1991 and worked as senior vice president of Physicians Relations at Tarzana Hospital from 1991 until 1997.

1948 • Robert J. Griffin of Chapel Hill, North Carolina, on October 4, 2009, at the age of 86. A cardiologist in private practice for more than 40 years, he was the former chief of staff at Bon Secours Hospital and St. John Hospital. He enjoyed world travel, gardening, reading current events and history, and his cats.

Frederick N. Talmers of Bloomfield Village, Michigan, on May 26, 2011, at the age of 87. An internist with a specialty in cardiology, he was chief of cardiology at the VA Medical Center in Allen Park and professor of medicine at Wayne State University School of Medicine. In 1949, he was assigned to the Far East Command for the U.S. Army as a medical officer in Iwo Jima, Japan. His professional career encompassed not only research, but patient

care and teaching. He was a fellow of the American College of Physicians, a fellow of the American College of Cardiology, a diplomat of the American Board of Internal Medicine, and belonged to numerous other professional organizations.

1949 • Sylvan B. Baer of Denver, Colorado, on August 4, 2010, at the age of 86. He was a general surgeon. He is survived by his wife of 60 years, Arlette, and his six children and seven grandchildren. His spirit lives on through his family and friends and all his patients and their families.

Paul M. Burke of Lowell, Massachusetts, on Friday, June 24, 2011, at the age of 87. A general surgeon, he practiced in Lowell, Massachusetts, for 37 years. He served as chairman of the Department of Surgery at Saints Medical Center and president of the Medical Staff at Lowell General Hospital. He was a fellow of the American College of Surgeons and a member of the Massachusetts Medical Society. He served in the U.S. Army during World War II. After completing his surgical training in Boston, he re-enlisted in the service of his country during the Korean War. serving as a captain in the U.S. Air Force, stationed in West Germany.

1951 • Joan Zilbach Fried of Amesbury, Massachusetts, on November 1, 2010, at the age of 83. Author of many publications on psychoanalysis, children and family therapy, and adolescence, she was a renowned psychotherapist and served as the president of the Boston Psychoanalytic Society and Institute in 1999. In private practice for many years, she was affiliated with the Judge Baker Guidance Center, the Fielding Graduate University, and the Boston Psychoanalytic Society and Institute, among others. One of her major publications was Young Children in Family Therapy (with contributions from Sharon Gordetsky and David Brown, 1986).



Harry W. Fritts Jr. of Northport, New York, on April 22, 2011, at the age of 89. Though trained in electrical engineering, Fritts decided to pursue a lifelong dream to attend medical school. An internist, he worked at Columbia University's Pulmonary Function Laboratory at Bellevue Hospital in New York with Drs. Andre Cournand and Dickinson Richards, whose groundbreaking research earned them the Nobel Prize in Medicine and Physiology and revolutionized the fields of modern cardiology and pulmonology. His appointments include the Dickinson W. Richards Chair of Medicine at Columbia University, as a visiting senior scientist at Brookhaven National Laboratory, and the Edmund D. Pellegrino Chair of Medicine at Stony Brook University. He also was a visiting professor at the University of London and a William Harris Visiting Professor at the National Medical School of Taiwan. In 1987, he retired as a professor and the first chair of the Department of Medicine at Stony Brook University School of Medicine. He authored On Leading a Clinical Department, a Guide for Physicians and wrote a number of short stories and articles.

Joseph C. Merriam, Jr., of Framingham, Massachusetts, on September 28, 2011, at the age of 89. A pathologist, he worked for the Veterans Administration as a research pathologist until his retirement in 1986. He was a distinguished scholar of classics and history, and a member of the Speckled Band, the Boston division of the Baker Street Irregulars, a national club devoted to the study of Sherlock Holmes.

1952 • **Ruth M. Ellis** of Pisgah Forest, North Carolina, on April 14, 2011, at the age of 84. She was an obstetrician and gynecologist in private

practice for more than 40 years in Midland, North Carolina.

1954 • Lowell S. Hunter of Clin-

ton, Connecticut, on April 9, 2011, at the age of 84. He established his Wall Street offices in 1958 and practiced internal medicine for 33 years. After building what evolved into a 10,000-patient practice, he retired in 1991. He will be remembered for the extraordinary level of care he extended to his patients and for being among the last of his era to make house calls.

Martin C. Manin of New Rochelle, New York, on February 15, 2011, at the age of 82. An orthopedic surgeon, he worked until the end of his life.

1955 • Gordon W. Gritter of Avila Beach, California, on August 19, 2010, at the age 83. He was a forensic psychiatrist and a fellow of the American Psychiatric Association. He is survived by his wife, Dianne Long, five children, and two stepchildren. He was preceded in death by his son, James.

1957 • John C. Coniaris of Needham, Massachusetts, on February 22, 2011, at the age of 85. A psychiatrist, he began his medical career in general practice in Hopedale, Massachusetts. He later became the director of the Framingham Youth Guidance Center. In 1977, he founded Framingham Psychiatric Counseling Associates, which he directed for 27 years until retirement in 2004. He pioneered the education of teachers and school administrators in child psychology. He was also past president of the New England Council of Child Psychiatry.

Leonard D. Leibowitz of Monroeville, Pennsylvania, on July 2, 2011, at the age of 79. A pediatrician in Monroeville for more than 35 years, he served in the U.S. Air Force hospital in Lajes, Portugal, and was a Civil War historian. He is survived by four children, five grandchildren, and his brother.

Charles T. Reynolds of Westwood,

Massachusetts, on November 13, 2011, at the age of 81. A general surgeon, he served on the staffs of Newton-Wellesley Hospital, the New England Baptist Hospital, and the Deaconess Hospital. He received a Master's in Business Administration from Babson College in 1979 and a Master's in Public Health from Harvard University in 1990.

1958 • Morton G. Feldman of Stamford, Connecticut, on March 13, 2010, at the age of 76. A head and neck surgeon, he served on the faculty of Mount Sinai Hospital, New York City, and later established a practice in Bridgeport, Connecticut. In 2001, he was chosen by his fellow physicians as one of the top doctors in Connecticut, as reported in a special issue of *Connecticut Magazine*. He had been formulating a plan to create a summer camp for children with cancer in Yangzhou, China, where he taught medical students for a semester.

Paul J. M. Healey of Warren, Rhode Island, on September 11, 2011, at the age of 79. He was in practice in general and vascular surgery in Pawtucket, Rhode Island, from 1963 until 1991, and was instrumental in establishing the BUSM Surgery Residency community surgery rotation at The Memorial Hospital, which allowed him to continue to be involved in the education of surgical residents. He was an early champion for ambulatory surgery, opening the Blackstone Valley Surgicare in 1976, a freestanding ambulatory surgery center. He was a member of a number of surgical societies, including the American College of Surgeons, the New England Surgical Society, and the Rhode Island Medical Society. He

is survived by his 10 children and 28 grandchildren.

1962 • Donald E. Norman of

Weston, Florida, on June 27, 2010, at the age of 74. A neurologist, he worked at Jackson Memorial Hospital, with his offices located in Ft. Lauderdale until he retired in 1995. He served as a captain in the U.S. Air Force during the Vietnam War.

1964 • Steven P. Shearing of Las Vegas, Nevada, on July 10, 2011, at the age of 76. An ophthalmologist, he was internationally known as the inventor of the first widely implanted intraocular lens, which restored vision to millions of cataract patients. After his residency, he and his family moved to Karachi, Pakistan, so he could perform eye surgery on indigent patients at the Spencer Eye Hospital. He opened his ophthalmology practice in Las Vegas, Nevada, which eventually grew into The Shearing Eye Institute and attracted patients from around the globe. He trained doctors throughout the world in the surgical techniques he had pioneered.

1971 • **Courtland Harlow Jr.** of Kingston, Massachusetts, on June 20, 2011, at the age of 66. A plastic surgeon, he was an acting assistant professor of surgery in the Division of Plastic and Reconstructive Surgery in the Department of Surgery at Stanford University School of Medicine, with affiliations at the Palo Alto Veterans Hospital and Stanford University Children's Hospital.

1996 • Linda Lucetta Wolfenden

of Atlanta, Georgia, on July 24, 2010, at the age of 40. A specialist in critical care and pulmonary medicine, she served as a general pulmonologist at Emory University Hospital. An interest in cystic fibrosis led her to advocate for an adult program.

Living Legends of BUSM

To honor some of Boston University School of Medicine's most distinguished faculty and alumni, a Living Legends Wall was installed on the first floor of the School of Medicine. The wall will be updated annually. Please send suggestions to busmdean@bu.edu.



The wall display above includes Marcia Angell '67, former editor in chief of the *New England Journal of Medicine*; June Jackson Christmas '49, pioneer of psychosocial innovation, founder of the Harlem Rehabilitation Center, and former Commissioner of Mental Health for New York City; Rear Admiral Christine S. Hunter '80, deputy director of TRICARE Management Activity and principal advisor to the U.S. Assistant Secretary of Defense for Health Affairs in the Department of Defense (appointed 2009); Thomas R. Insel '74, director of the National Institute of Mental Health; Howard K. Koh (BUSPH '95), former BUSM professor of dermatology, medicine, and public health and the 14th Assistant Secretary for Health for the U.S. Department of Health and Human Services (appointed 2009); Osamu Shimomura, recipient of the 2008 Nobel Prize in Chemistry and BUSM professor emeritus of physiology and senior scientist emeritus at the Marine Biological Laboratory in Woods Hole, Massachusetts; Louis W. Sullivan '58, appointed by President George H. W. Bush as Secretary of the U.S. Department of Health and Human Services (1989-1993) and founding dean and first President of Morehouse School of Medicine, now president emeritus; Judith Vaitukaitis '66, director of the National Center for Research Resources of the National Institutes of Health (1993-2005) and former BUSM professor of medicine; Jonathan Woodson, Assistant Secretary of Defense for Health Affairs (appointed 2010) and BUSM professor of surgery and former associate dean for diversity and multicultural affairs.