

Message From The Dean



DEAR FRIENDS,

From the White Coat ceremonies we highlight here to the celebration of Commencement, a BUSM education is a resource-rich environment for students. Enhancing their experience creates a healthy environment for them to meet the challenges of modern medical and science education and facilitates their development as confident, aware physicians and scientists attuned to patients and to the complex issues in health care delivery and scientific research.

Astronaut and doctor Mae Jemison said, "The difference between science and the arts is not that they are different sides of the same coin, or even different parts of the same continuum, but rather they're manifestations of the same thing...science provides an understanding of a universal experience, and arts provide a universal understanding of a personal experience." The arts play a vital role in the lives of our students, faculty, and alumni through a variety of activities on the Medical Campus, including a College of Fine Arts program created to bring the arts across the University. We make available diverse electives like Visual Thinking Strategies, the linkage for that universal experience and understanding. In this issue, we showcase some of

these opportunities. Alumnus and travel and nature photographer Paul Gitman (MED'66) is a perfect example of melding a life of clinical practice with visual representation of the cultural variety of human and animal societies. Some of his wonderful work is included in this issue.

Diverse populations bring diverse thinking and perspective. Seeing things differently can be a key component to effective research teams. Creating a pipeline of diverse students interested in the biomedical sciences is important to the School and to the future of scientific discovery. We highlight here the Division of Graduate Medical Sciences' (GMS) STaRS program. Initiated by GMS Associate Provost Linda Hyman and developed and directed by faculty member William Cruikshank, STaRS is creating access for underrepresented minority students to advanced biomedical education and expanding opportunities for engagement in scientific pursuits.

Alumnus Howard Bauchner (MED'79) received the University's highest alumni award during University Alumni Weekend last fall. Renowned editor-in-chief of JAMA and a former BUSM pediatrics professor. Bauchner shares some of his thoughts on publishing one of the world's premier medical journals in the digital age.

The Campaign for Boston University has raised \$768 million of the billion-dollar goal. We are gratified that School of Medicine efforts have raised \$127 million of our \$200 million goal. With the receipt of gifts such as the \$1.3 million beguest of Class of 1959 alumnus Frank Gazzaniga and his wife, Florence, for scholarships, we look forward to reaching our goal that supports the training of our students and the teaching and scholarship of our faculty.

Best regards,

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

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Boston University **Medicine**

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embers of the BUSM Class of 2018 were advised to dismiss any expectations of 9-to-5 jobs as they assembled on Talbot Green for the White Coat Ceremony, which symbolizes the beginning of medical training and a commitment to the ethics and values that go along with the profession.

"You will be a doctor all the time, wherever you are, and you will expect things of yourself even when no one else knows you're a doc," guest speaker Robert Lowe, MD, BUSM associate professor of medicine, told the 166 students. "You will be calm in crisis, you will step forward to help when others hang back, and you will comfort and heal at accident scenes, Little League games, and on airplanes. The coat is very nice, but the oath you are about to take is the key to this ceremony, and the way in which you adopt those principles and make





Far left: Jeffrey Choi and Yeon Woo Lee came to Boston from South Korea. They enrolled at BU three years ago for their undergraduate studies in the Seven-Year Med program.

Left: Robert Lowe, MD, associate professor of medicine at BUSM and fellowship director of the Section of Gastroenterology at BMC, borrows the words of a famous doctor to tell students that they are now embarking on a profession of unlimited hours.

Below right: Vonne Lee has been braving the Boston winters for a while now—she graduated from Boston University School of Public Health in 2012 and has been working at Boston Medical Center for the past two years.

Below left: Students wearing their fi



them a part of you is the most important part of your education.

"So just know that when this is over, you can do it without the coat and to paraphrase the famous Dr. Suess, '... you can do it in a box and you can do it with a fox... you will do it here and there, you will do it everywhere.' And soon you'll learn just what I mean, so welcome, Class of 2018."

Lowe also stressed that the tradition of students donning the white coat begins to instill the values of professionalism from the very start of medical training. The coat is meant as a reminder of the qualities they need to embrace as future doctors—hard work, humility, the ability to stay calm and

handle a crisis, and putting others before self. These qualities, he advised, will come to "be in you, not on you."

This year's class ranges in age from 20 to 32. Some members are only a few months out of their undergraduate programs, while 34 hold a master's degree or above. They come from 31 states and 23 countries. The majority of the class—86 percent—is bilingual, and together they speak a total of 28 languages. Women make up 51 percent of the class and under-represented minorities 20 percent.

With help from their professors and in the presence of family and friends, the class put on their white coats for the first time, marking the



start of their journey to becoming physicians.

The ceremony closed with the students reciting the Hippocratic Oath, a promise to respect the physicians who have come before them and to practice with compassion and ethics, which they will recite again at graduation.

Inaugural Physician Assistant Class Receives White Coats

THE INAUGURAL PHYSICIAN ASSISTANT (PA)

class received their white coats at the PA White Coat ceremony July 16. Accompanied by family and friends, the 25 members of the Class of 2016—who were of diverse backgrounds and hailed from all parts of the country—were welcomed into the profession by Associate Dean for Academic Affairs Doug Hughes, MD, and BU PA Program Director Mary Warner, PA-C.

Carl Toney, PA, a graduate of the Duke University Physician Assistant Program who has had a long career in primary care,

he white coat you wear is a symbol to patients of a safe haven; a symbol of help with their pain, injury, or disease. They give us their trust and we cannot abuse that trust. As clinicians we take a vow to put someone else ahead of ourselves.

public health, and public policy, delivered the keynote address. "Two pillars of truth as a clinician are first, the practice of medicine is not just a job or career, it is a sacred calling, a lifelong pledge; and second, our patients come to us because they have to, not because they want to," Toney said. "The white coat you wear is a symbol to patients of a safe haven; a symbol of help with their pain, injury, or disease. They give us their trust and we cannot abuse that trust. As clinicians we take a vow to put someone else ahead of ourselves."

Toney, currently assistant professor of clinical medicine and health policy at the University of New England, served as a health manpower specialist in the Georgia Division of Public Health and as the director of the HIV/STD Prevention Program for the Maine Bureau of Health. In 2000, he founded the Center for Transcultural Health at the University of New England, where he served as founding director for 11 years. He is a community ambassador for the National Health Service Corps and a member of the Diversity Cabinet for the United Way of Greater Portland and the Maine State Advisory Committee to the United States Commission on Civil

David Coleman, MD, Wade Professor and Chair of the BUSM Department of Medicine, also addressed the class. "We have worked long and hard to establish this program," he said. "We are inspired by the students we have attracted who understand the obligation and privilege we have to our patients, whether they are homeless or victims of violence. Our enduring gift as clinicians is to help people."

After donning their coats, the class recited the PA Professional Oath.



Physician Assistant Professional

I pledge to perform the following duties with honesty and dedication:

- I will hold as my primary responsibility the health safety, welfare, and dignity of all human beings.
- I will uphold the tenets of patient autonomy, beneficence, nonmaleficence, and justice.
- I will recognize and promote the value of diversity.
- I will treat equally all persons who seek my care
- I will hold in confidence the information shared in the course of practicing medicine.
- I will assess my personal capabilities and limitations, striving always to improve my medical practice.
- I will actively seek to expand my knowledge and skills, keeping abreast of advances in medicine
- I will work with other members of the health care team to provide compassionate and effective care of patients.
- I will use my knowledge and experience to contribute to an improved community.
- I will respect my professional relationship with the physician.
- I will share and expand knowledge within the profession.

These duties are pledged with sincerity and upon my honor.





BUSM Class of 2018 Parents Reception

ON AUGUST 4, THE SCHOOL OF MEDICINE HELD A RECEPTION for parents and guests of the BUSM Class of 2018, who enjoyed refreshments while mingling with department chairs and other BUSM faculty members before being welcomed by Dean Karen Antman, MD.

The dean spoke of the importance of family support for first-year medical students, what students should expect during the first year of medical school, and recent campus enhancements, including the renovated classrooms and new electronic testing center in the Instructional Building. Following the ceremony, students and their guests joined BUSM faculty and staff on Talbot Green for a dessert reception.

Below left: Keith Parker, Savan Parker, and Javshri Parker

Below right: Dr. Dwayne Baharozian, Alyna Baharozian, Christine Baharozian, and Douglas Hughes, MD, associate dean for academic affairs

Bottom left: Terry Ng, Jessica Ng, and

Bottom right: John Batter, Rafael Ortega, MD. and Lisa Batter









David C. Seldin, MD, PhD, Installed as Wesley and Charlotte Skinner Professor for Research in Amyloidosis

n June 12, the School of Medicine installed David C. Seldin, MD, PhD, whose collaborations with colleagues at BU and elsewhere have contributed to an outstanding academic career, as the incumbent Wesley and Charlotte Skinner Professor for Research in Amyloidosis. Colleagues, friends, and patients celebrated the honor with remarks by Dean Karen Antman, MD; David Coleman, MD, Wade Professor and Chair of the Department of Medicine; Martha Skinner, MD, professor of medicine and special projects director of the BU Amyloidosis Center; and Aram Chobanian, MD, president emeritus of BU and dean emeritus of BUSM.

Professor of Medicine and Microbiology, Seldin joined the BUSM faculty in 1994, was promoted to professor in 2005, and became chief of the Section of Hematology-Oncology in 2008. In 2011, he became director of the internationally known BU Amyloidosis Center. His research interests focus on cancer and blood disorders, particularly the light chain form of amyloidosis. He and his colleagues developed a publically available database of amyloidogenic light chains and the first transgenic model of AL, or primary amyloidosis, used to test novel therapeutics. He also is an active clinical investigator, serving as principal or co-investigator on trials of immunomodulatory drugs, proteasome inhibitors, and anti-fibril antibodies for AL. He and his colleagues work on refining techniques of autologous stem cell transplantation and developing therapies for other forms of amyloidosis.

Seldin serves as an attending physician and member of the Stem Cell Transplant Program at Boston Medical Center. His clinical skills have been recognized on a variety of "Best Doctors" lists. He is a member of the executive committee of the BU Clinical and Translational Science Institute and of the BU Cancer Center. He also serves on the Medical Executive Committee of Boston



Medical Center. Seldin was the first director of the graduate program in molecular medicine in the Division of Graduate Medical Sciences and established graduate courses in cancer biology and in diseases of protein misfolding. He has mentored more than 20 pre- and post-doctoral trainees in his own laboratory, served on innumerable thesis committees, and trained a generation of clinical fellows.

BUMC Pride

Members of the Medical Campus Community, including BUSM, BUSPH, and BUGSDM students, proudly marched in the 44th annual Boston Pride Parade on June 14. The parade was sponsored by Boston Pride, an organization that promotes



events and activities to advance inclusivity, equality, respect, and awareness in Greater Boston and beyond. Boston Pride advocates for social justice for the LGBTQ community by disseminating news, encouraging dialogue, and mobilizing people to act on issues of local, national, and global significance.

Department of Pediatrics Remembers Longtime Faculty Member Joel Alpert, MD

ON MAY 22, THE DEPARTMENT OF PEDIATRICS

remembered a longtime BUSM faculty member and esteemed pediatrician for his remarkable professional achievements and his passion for improving the health and welfare of children. Their program, "Joel Alpert, MD, A Celebration of his Life and Legacy 1930–2013," was a wonderful event that Dr. Alpert himself—who chaired the BUSM Department of Pediatrics from 1972 until 2000—would have greatly enjoyed.

Dr. Alpert passed away on December 31, 2013, after a more than four-decade career at BUSM and Boston Medical Center. But as the many distinguished speakers affirmed during the memorial program, Dr. Alpert's legacy lives on in the impact he had on the practice of pediatrics, the public health initiatives he spearheaded, the patients he cared for, and the many physicians he trained and mentored.

Attended by colleagues, friends, and family, including his wife Barbara and his children Norman, Deborah, Mark, and their spouses, the event featured fond remembrances of Dr. Alpert's deep attachment to BUSM and Boston Medical Center, his pioneering pediatric research, his national leadership in pediatrics, and his dedication to ensuring support for future leaders and practitioners of pediatrics.

"Joel tenaciously advocated for increased funding for junior faculty and clinical services," said Dean Karen Antman, MD. "He was a fierce advocate for medical students and was passionate about getting them into pediatrics and the right residency for their careers."

Barry Zuckerman, MD, professor and chair emeritus of pediatrics at BUSM who trained under Alpert and was his colleague of 40 years, highlighted his mentor's sense of justice, his lifelong support of universal health care, and his expert skills as a clinician. "He was a fanatic about the physical exam. We watched him use all of his senses and learned the importance of listening to the patient and the family. He would not let up when he believed something. He was extremely confident...so that he seemed invincible. That's why his dying was so hard."

"Nothing was more important than his family," recalled Robert Vinci, MD, the Joel and Barbara Alpert Professor and Chair of Pediatrics at BUSM and a former trainee of Alpert. "He treated all of us like family, setting the standard for this department. Today's ceremony is not to thank Joel or only remember him; it is really about this department ensuring that we complete the next chapter of Joel's career. We can and will honor him and his career by continuing ours with the same passion that drove his. We will continue to advocate for children and fight the tough battles as his guiding legacy for this department."

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We watched him use all of his senses and learned the importance of listening to the patient and the family. He would not let up when he believed something. He was extremely confident...so that he seemed invincible.

—Barry Zuckerman, MD



Howard Bauchner, MD, **Receives BU's Highest Alumni Award**

is editor-in-chief of the Journal of the American Medical Association (JAMA), the most widely circulated and one of the most prestigious medical journals in the world. Boston University recognized Bauchner's outstanding contributions to the medical profession by presenting him with a Distinguished Alumni Award, BU's highest alumni recognition, during the University's Alumni Weekend on September 20.

oward Bauchner, MD (MED'79).



BAUCHNER OVERSEES the

publication of 48 JAMA print issues per year with a circulation of more than 325,000, and several weekly online releases accessed more than 14 million times annually. Until he assumed his role at JAMA in July of 2011, he spent more than 35 years of his academic and professional life at BU as

a medical student, resident in pediatrics, teacher, researcher, and clinician. He completed his undergraduate training at the University of California, Berkeley, and pediatric residencies at Boston City Hospital and Yale-New Haven Hospital and served as a Robert Wood Johnson Foundation Fellow in General Pediatrics at Yale from

1984 to 1986. He rose to the rank of professor of Pediatrics and Public Health at BUSM and served as director of the Division of General Pediatrics and vice-chair of Academic Affairs at BUSM and Boston Medical Center. While a member of the BUSM faculty, he was selected to be a scholarin-residence at the Center for the Future of Children at the David and Lucile Packard Foundation and associate visiting professor of pediatrics at Stanford University. He also served as a child and adolescent health scholar-in-residence for the Agency for Health Care Research and Quality in Washington, DC.

He conducted clinical and health services research for more than two decades, publishing more than 125 papers in peer-reviewed journals. His research has received support from the National Institutes of Health, foundations, and industry.

You became editor-in-chief of JAMA three years ago. What made you want to be part of publishing a medical journal?

I have always been a journal junkie. I always was reading the medical literature, keeping up with it and using it for teaching and making clinical decisions. Then journals went electronic and that radically transformed the world of medical journalism. About 10 years ago, I was lucky that my old mentor, the late Joel Alpert (former professor and chair of pediatrics at BUSM), recommended me to the journal Archives of Disease in Childhood. the official publication of the Royal College of Paediatrics and Child Health in the United Kingdom. They were looking for an editor-in-chief and took me

as their first American editor: I ultimately became editorin-chief. They gave me many opportunities for experimentation. I have worked to understand how print and digital iournals should be used to move scientific information from investigators into the broader medical community.

Why is JAMA important?

Journals are the conduit by which the scientific community communicates with the larger medical community and with the public; they move scientific information around the world. Few journals do that as effectively as JAMA. JAMA is a legacy journal in the sense that it originated in print along with the three other weekly journals—NEJM, Lancet, and the BMJ—that are the most prestigious medical journals in the world. Though we are a weekly, with the onset of digital media we publish almost daily online, so just five minutes ago we published online, ahead of print, a viewpoint on Ebola and the crisis in Africa. There are many media outlets that are doing an excellent job covering the Ebola crisis, but that coverage has not focused on important ethical and public health issues, which are the focus of the viewpoint. As a respected voice in medicine around the world, JAMA can influence clinical care and policy debates.

What is your philosophy of communicating scientific/ medical research?

First, what we publish must be valid. Second, it is very important that authors not overstate the value of their research. Very few studies change practice overnight; most often they add to a complicated

story about a particular issue. At JAMA, we make sure that the authors interpret results appropriately and we use our editorial pages to place articles in the broader context of health, health care, and the health care system.

As a communications network, it is very important that content is communicated in different formats. In some regards we need to be an agnostic communicator of information. Our readers should have access to print or electronic versions of our content, on mobile devices or computers. We need to have audio and video. The way the world of communication has changed in the past 10 years necessitates changes in the way journals must communicate their content.

What are some of the recent changes at JAMA?

JAMA has been a magical name for decades so I thought the use of the name as a brand was very important. The notion of creating a network of journals all branded JAMA was a priority, hence JAMA and The JAMA Network. What used to be nine archives of journals now have the JAMA name and the name change—and the new and unified website—have raised their

Although I think this was difficult for many people, the print redesign of JAMA was symbolic in signaling updates to our content. The redesign allowed us to create domains for our readers whether they access our content in print or electronically, and helped to reinforce the major domains. For example, in a discussion with a senior member of American medicine, he mentioned that he really loves JAMA's viewpoints

and was pleased we added them to the journal. Actually, JAMA has had opinion pieces for many years, but they were in the back of the journal and hard to discover. Even though we had great content it was hard to find, so the redesign has enhanced the visibility of our content.

We have moved aggressively into social media. When I came to JAMA we had about 20.000 followers on Twitter and Facebook, and our online version went to 50,000 people. Now, we have 225,000 Twitter and Facebook followers, and we send out our weekly ETOC (electronic table of contents) alert to close to 400,000 physicians. The way we connect with the world has fundamentally changed over the past three years. We touch between 750,000 and 1,000,000 readers with our content each week. We know ultimately we

have to engage with our readers more effectively; we are not quite there yet. I think Twitter and Facebook may serve a different purpose than the normal website or print. Social media connects us with the world in a way print and web content don't. There is a multiplier effect. In some regards you do it because it is the modern way to touch the medical community but also it is a way to drive people to our website. Yet, the conversation remains unidirectional. Our goal is to develop effective bidirectional communication with the scientific and clinical communities.

We have created a new app called the JAMA Network Reader that allows our content to be disseminated free around the world. We have created many new article types called "shorts." These are two-page synopses of the literature,

including meta-analyses, guidelines, and statistical methods, that are useful and easy to read for the busy clinician. It has been a busy three years.

Will social media help you to better connect with medical

We know medical students value JAMA, but they may want to engage with us in a different way. I think it is how an individual wants to engage with our content that is important. For example, some folks may not like the content in shorter versions, but some certainly will. Reading habits have changed and will continue to evolve. We want to give people options with respect to our content. Although we have accomplished a great deal—and I do mean we—there are many people in editorial and publishing working long hours to modernize JAMA. We have much, much more to accomplish.

Do you see yourself as an advocate?

I want to ensure that the pages of JAMA can critically add to the discussion about complex clinical, policy, and ethical issues that affect patients around the world. It is my preference to ensure that JAMA is a platform for experts to communicate their thoughts and ideas about important topics. For example, nine months ago we commissioned a viewpoint on uterine morcellation by two leading scholars. Subsequently, we published a research letter that details some of the associated risks of cancer in women who undergo uterine morcellation. Along with other publications and professionals, a critically important discussion about this procedure has ensued as well as

a review of how it is used. This is an important example of how JAMA can contribute to discussion and debate about complex medical issues.

How did your years at BU prepare you for your career?

It has been the richness of the Boston University community for 30-plus years that has allowed me to thrive. Whatever I have accomplished in my life is due to my mentors and the environment that I was allowed to succeed in. Howard Koh, the former US Assistant Secretary for Health, was my resident as a medical student During residency, Joel Alpert, then professor and chair of pediatrics, and faculty members Ben Siegel, Steve Pelton, and Barry Zuckerman were such wise and caring physicians who taught me about the importance of clinical care and listening to patients. Jerry Klein, a gentleman and scholar, has provided lifelong wisdom. I was allowed to complete sabbaticals under Alpert and his successor, Zuckerman, allowing me time to think without the pressure of writing grants or seeing patients. And of course my many, many colleagues over the years—Bob Vinci, Bobbi Philipps, Bill Adams, Megan Sandel, Jason Wang, and Michael Silverstein—have provided continued stimulation and inspiration

What is in the future?

JAMA will continue to be one of the most influential journals in the world, but it must continue to evolve and adapt to changes in publishing. We must reach out to our authors and readers to seek their advice as to what we can do better, and how we can improve.

Dean's Advisory Board Meeting and Scholarship Dinner

he Dean's Advisory Board held its annual fall meeting on October 23. Dean Karen Antman, MD, opened the proceedings with a discussion on campus planning and renovation, as well as current BUSM research strategies. Robert Witzburg, MD (MED'77), associate dean and director for admissions, presented a profile of the incoming Class of 2018. Michael Silverstein, MD, vice chair for research in the Department of Pediatrics, spoke about innovative research practices within the department that aim to improve the lives of vulnerable children and families.

Nahid Bhadelia, MD, director of infection control at the BU National Emerging Infectious Diseases Laboratories (NEIDL), and Elke Muhlberger, PhD, director of the biomolecule production core at the NEIDL, gave the Board a timely synopsis of BUSM's clinical and research impact on the Ebola outbreak.

Board members later joined scholarship donors at the Hotel Commonwealth for a dinner celebrating the impact of scholarship funds, where Kate Weber (MED'18) discussed the critical role scholarship support is playing in her medical school education.







Dean Antman Visits BUSM Community in California

LAST SUMMER DEAN KAREN ANTMAN, MD,

traveled to northern and southern California to meet with alumni, parents, and students prior to the start of the school year. Neda and Shahram Gholami (MED'96) and Stacy Weiss, MD, and Pedram Salimpour (MED'00), graciously hosted receptions at their homes. These events gave attendees a great opportunity to connect with each other and meet current and incoming medical students.



Faculty Couple Donates Collection of Rare Historical Books to Medical Library

t a ceremony honoring John Noble, MD, BUSM professor of general internal medicine, and Ewa Kuligowska-Noble, MD, BUSM professor of radiology, the couple stands in front of a bookcase that houses the collection of rare books they donated to the BUSM Alumni Library.

"We are here today to celebrate two Boston University leadership careers in radiology and medicine," said Dean Karen Antman, MD. "We thank them for making this collection of rare and important titles available to our medical and graduate students to read from the original texts, and for realizing their historical context."

A treasury of unique and historical medical books from the Nobles' personal medical library that John Noble carefully selected during 35 years of service at BUSM, the collection includes rare Vesalius volumes, many works by and about William Osler, books on infectious diseases (such as smallpox) from the 1700s, books published as early as the 1500s, and textbooks edited by John Noble himself.

"The smartest thing we ever did was come to Boston University to work with a

variety of people and care for some of the most difficult patients," said Noble. "It has been a wonderful place to spend our lives. We are pleased to have this collection here in the Alumni Medical Library to give present and future generations the opportunity to see things from perspectives that are no longer easy to attain."

It is important to Noble that the books be placed in a highly visible location in the library, rather than stored in a locked archives room not to be seen and enjoyed. Both he and his wife have expressed hope that their donation might inspire other physicians or faculty to donate additional materials, and thus build an even more robust collection of historical medical texts.

"Building such an inspiring collection requires knowledge, passion, and commitment," said Mary Blanchard, director of the Alumni Medical Library. "This valuable collection sets a foundation and brings perspective to the entire BU Medical Campus community. We are deeply grateful to Dr. Noble and Dr. Kuligowska-Noble." ■



STaRS: Advancing Access to Biomedical Science Training

IN JULY OF 2012, THE NATIONAL

Institutes of Health (NIH) issued an advisory report that recommended creating new research training models to increase diversity among the ranks of scientists. Three years earlier, Linda Hyman, PhD, associate provost of the Division of Graduate Medical Sciences (GMS), was ahead of the curve in piloting a program with Xavier University designed to help increase interest in and access to graduate programs in the biomedical sciences among underrepresented minorities.

Her early initiative is now a programfunded this year for the first time with a grant from the NIH National Health, Lung, and Blood Institute (NHLBI)—that welcomed 17 students from across the country to the Medical Campus. The Summer Training as Research Scholars (STaRS) program offers an introduction to graduate science education for talented undergraduates from minority groups traditionally underrepresented in the biomedical sciences including African American, Hispanic, Native American/Native Alaskan, and Pacific Island and Native Hawaiian students.

"Diversity breeds better science," says William Cruikshank, PhD, BUSM professor of medicine and assistant dean of diversity and multicultural affairs, who garnered the NHLBI funding and directs STaRS. "By increasing diversity and engaging those with different life experiences, different and better questions are asked that open up avenues for better research."

"We are very interested in increasing diversity in the biomedical sciences at BU and in general," notes Cruikshank, who is also director of the Molecular and Translational Medicine Graduate Program in the Department of Medicine and director of immunology at the Pulmonary Center. "One of the most effective ways to do that is to bring students to the Medical Campus, expose them to research, and get

them excited about scientific discovery. We hope that when they finish up their undergraduate studies they will strongly consider applying to graduate programs in the biomedical sciences. In addition, we hope that as a result of their STaRS experience, they will include BUSM on their list of schools. It's really a dual mission: Increase the pipeline of minority students in the biomedical sciences and included in that, increase the pipeline of those students to BUSM." He also sees the program as a faculty recruiting tool, as one day these students may return to the University in that capacity.

The program is designed specifically to enhance the skills required for successfully entering and completing a graduate or MD/PhD program in the biomedical sciences. It offers motivated and academically talented students a hands-on, mentored opportunity to realize a strong interest in doctoral studies, particularly in the areas of heart, lung, and blood research. During the ten-week summer internship, students—or research scholars-are mentored in the laboratory by faculty and laboratory staff from GMS's doctoral departments and programs. Placements are aligned with their research interests. The research scholars are trained in the use of equipment and become familiar with the laboratory environment and routines. At the close of the program, students present their projects at a symposium.

With 400 applicants for the 13 funded positions, competition is strong. Four additional students, whose colleges were so enthusiastic about the STaRS program that they provided full support, were also accepted. "While a majority of those we

William Cruikshank, PhD, (center) with (from left) STaRS Program Administrator Lynese Wallace, Jennifer Leahy (MED'17), and Chino Igwebuike (MED'17).

accept are highly academically qualified, we also want to make a difference for students who are closer to the 3.0 GPA than the 4.0," Cruikshank says. "We accepted some students on the cusp because we want to promote, and help them get into, a program and the biomedical field. Our goal

y increasing diversity and engaging those with different life experiences, different and better questions are asked that open up avenues for better research.

.....

-William Cruikshank, PhD

is to help them get over some hurdles and successfully apply for graduate school where otherwise they would either not apply or not have the credentials to be accepted."

Research scholars receive a \$4,800 stipend for STaRS participation, travel expenses to come to Boston, housing on the Charles River Campus with fellow summer scholars, and travel funds to attend a scientific meeting and present their research. They have the opportunity to participate in enrichment and professional development activities offered through GMS, departmental affiliations, and labs. Activities include the journal club, research seminars, science talks, and workshops focused on building specific career development skills. STaRS also

offers opportunities for participants to explore Boston and meet like-minded students through the Charles River Campus summer term programs.

Considering the time and resource commitment the program requires, the faculty response has been tremendous, says Cruikshank. "They take their role as mentors very seriously," he says. "It is a time sink to train students with little or no experience, but they have a lot of desire and enthusiasm. We also have had great support from the GMS administration and from our graduate students and postdocs in all the departments."

"When I was accepted I was really excited. This is my first experience with research," Kailah Simon says. "It has been eye-opening and has swayed me a bit.

My undergraduate work is in elementary education, but I decided to do a post baccalaureate program for pre-med. With the STaRS program, now my game plan probably will include doing an MD-PhD." Simon worked in the Pulmonary Center in Dr. Joseph Mizgerd's lab, studying the relationship between infection site and the ability of pneumococcus bacteria to activate macrophage NF-KB signaling in pneumonia.

"Kailah is exactly the type of student we are looking for," says Cruikshank. "Most students are familiar with clinician careers, but very few know what conducting research is all about. For Kailah, who is very smart and wants to be a doctor, this type of experience hopefully makes her aware that she can be a physicianscientist. In college science, your professor knows the answer; you go into the lab and conduct an experiment and you either do it correctly or you get the wrong answer. In research, we don't yet know the answer. In this program, we hope to instill in students the excitement of investigating and discovering something that no one has discovered before."

The word is spreading at BU. The Neuroscience Department approached Cruikshank to develop a program for them and they have submitted a grant for funding. "We also wrote into that proposal bringing some undergraduate faculty to the Medical Campus to spend 10 weeks in a neuroscience lab, then go back to their classrooms to present stateof-the-art ideas on neuroscience. We are looking for the faculty to spark an interest in college students and perhaps get them thinking about pursuing a research career in the field of neuroscience."

"Expanding the diversity of research scientists is vital to the pursuit of biomedical discovery, which in turn translates into the health of the public," says Hyman. "Dr. Cruikshank and the faculty engaged in this program have done a superb job. Even in the short time of 10 weeks, it is evident that the excellent exposure to biomedical research that the research scholars experience catalyzes and heightens their interest in the field. We all benefit from this."

ITEMS FACULTY ITEMS

FACULTY PROFILE:

Ann Zumwalt, PhD, Anatomist and Educator



BENJAMIN FRANKLIN SAID, "Tell me and I forget. Teach me and I remember. Involve me and I learn."

Ann Zumwalt would agree.

Assistant professor of anatomy and neurobiology and a BUSM faculty member since 2007, Zumwalt is a teacher to the core whose research focuses on the neurobiology of education. She is course director for gross anatomy and also teaches the subject to medical, doctoral, and master's degree students.

"The theme of my life has been teaching, and it is the driving force for what I have done," says Zumwalt. "Along the path to becoming a teacher of anatomy, I learned it's not just about teaching the science; it's about teaching students the humanity of the work we do in dissecting the human body to understand it."

She describes anatomy class as a rite of passage for students where they learn about life and death—and themselves. She guides

them to walk the line between learning from the bodies they are dissecting and remembering the humanity of the person who donated the amazing gift of their body. "I think it is an important part of my job to usher the students through this process. This is true of all anatomists at BUSM, and I consider myself lucky to teach a subject that has a human side to it as well as being an interesting science."

To bring humanity to her class and guide students through the rite of passage that is gross anatomy, she openly discusses the complexity of the process, encouraging students to communicate their own feelings and thoughts. She describes the body donation program and how donors specifically choose BUSM because they want to help medical students there become excellent physicians and scientists. "I think that knowledge is important to helping students feel comfortable about what they are about to do,"

she says. "We do an exercise in which they draw out their feelings about their anticipation of doing human dissection. I then show them results of this exercise from previous classes. What becomes apparent is the same themes are repeated over and over again: Questioning whether they can handle it, thinking about the human person and the journey they took to get there, and paralleling their own journey to becoming a doctor to the journey of donor."

Zumwalt earned her doctorate in 2005 from the Center for Functional Anatomy and Evolution at The Johns Hopkins University School of Medicine, where her research demonstrated that endurance exercise does not affect the surface morphology of skeletal muscle attachments. She subsequently joined the Animal Locomotion Laboratory in the Department of Biological Anthropology and Anatomy at Duke University, where she

investigated the effects of hypermuscularity on locomotor patterns and bone morphology in rodents. She also collaborated on various research and educational projects with clinicians in radiation oncology, obstetrics and gynecology, and neurology.

She joined BUSM because of its emphasis on teaching. "Many research institutions don't tend to value educators, but at BUSM not only the Anatomy and Neurobiology Department, but the School itself, values educators. My department teaches the core subjects of gross anatomy, neuroscience, and histology, so a majority of our members are educators as well as researchers. Also, I work with other course directors and faculty from other departments who are extremely dedicated to teaching. This is a wonderful place to be."

Zumwalt also instructs a course for graduate students on how to become an effective educator of biomedical sciences, explicating the theory and practice of teaching. She mentors master's degree and doctoral students in teaching anatomy and develops collaborations with other departments so students can demonstrate their knowledge through pedagogy.

"What makes Dr. Zumwalt such an outstanding educator is her commitment to the education of her students, as well as her profound interest and dedication to her students themselves," says Jarrett Rushmore, PhD, assistant professor of anatomy and neurobiology. "She is a consummate educator who thinks deeply and carefully about how to convey complex concepts and thoughts. She brings to bear a high level of attention to detail coupled with creativity, inspiration, and enthusiasm. Dr. Zumwalt is a tireless mentor and advocate for her students; the graduate students she has mentored have emerged from her tutelage as better writers, educators, and scientists, and she has fostered an environment among the medical students that is supportive and encouraging while still being intellectually challenging. This balance between being creative as well as precise and creating a supportive yet challenging academic environment is something for which all

he brings to bear a high level of attention to detail coupled with creativity, inspiration, and enthusiasm.

—Jarrett Rushmore, PhD

educators strive. Dr. Zumwalt achieves it effortlessly."

Her research also dovetails with her teaching, providing an objective way to study learning. Capitalizing on the strong neuroscience program in her department, Zumwalt looks at how knowledge of brain function can inform educators and further their work. "My personal interest is the transition from naïve learner to expert; what happens to a person when they go from knowing little to nothing about a particular topic—like medical students entering the gross anatomy course—to becoming an expert radiologist who can look at an abstract representation of the body and quickly see a tumor or lesion." Zumwalt recently published a paper in which she and her research team used gaze tracking to document that progression.

Inspired by the educational endeavors of her colleagues, she directs John McCahan Medical Campus Education Day, an annual event that fosters a community for educators on the BU Medical Campus who are interested in educational innovations and scholarship. She also participated in the task force to develop and implement a professional development program for junior faculty.

Currently, she is revising the first-year medical curriculum as a co-chair of the BUSM I Revision Subcommittee of the School's Medical Education Committee. "It is challenging to change curriculum, as there are so many ripple effects of any substantial change," she says. "But to be able to take a step back to look at what we do well and identify what needs to be

improved is an exciting and interesting responsibility. We all want to get it right; to do what is best for the students."

Advising students is a big part of her BU life. "Advising is a great way to engage with students and get to know them. The School has a wonderful system of advising in the Academy of Advisors. I know it takes a lot of time, but it's most rewarding to help them when they're struggling and to see them fulfill their goals." Zumwalt also advises master's degree students, is the faculty advisor for BUMC Pride, the Medical Campus LGBTQ organization, and has served as a School of Medicine representative to the University Faculty Council. On a national level, she is involved in the American Association of Anatomists (AAA), having served on the AAA's Advisory Committee of Young Anatomists and Board of Directors.

HONORS

Richard Babayan, MD, chief and chair of the Department of Urology, was named president elect of the American Urological Association (AUA), effective in May 2015; he will assume the presidency in May 2016. He is the first Boston urologist to be elected national AUA president since 1988. Babayan has served in a number of capacities for the AUA's New England section over the years, including in the role of section president and representative to the AUA Board of Directors.

Domenic A. Ciraulo, MD, professor and chair of psychiatry and chief of psychiatry at BMC, was appointed as the chair of the National Institute of Alcohol Abuse and Alcoholism (NIAAA) study section AA-3, which reviews all grant applications requesting funding for clinical studies of treatments for alcoholism and health services research on alcoholism. He has been funded by NIAAA for more than 18 years, serving as a Principal Investigator (PI) at the BUSM site for the COMBINE study, PI on his own R01 grants, and mentor for a number of K awards.

Gerard Doherty, MD, chair of the Department of Surgery and chief of surgery at BMC, was elected president of the American Association

of Endocrine Surgeons. He will serve as president through 2015.

Michael F. Holick, MD, PhD, professor of medicine, physiology and biophysics, was awarded the American Society for Bone and Mineral Research's (ASBMR) 2014 Louis V. Avioli Award, which honors a member of the ASBMR for fundamental contributions to bone and mineral basic research. It is named for ASBMR's first president and founding member, Louis Avioli, MD, who was one of the world's leading medical authorities on osteoporosis and calcium metabolism.

Judith A. Linden, MD, vice chair for education and associate professor of emergency medicine, was honored as the 2014 Community Clinician of the Year by the Suffolk District Medical Society, one of the district societies of the Massachusetts Medical Society, the statewide professional association of physicians. The Community Clinician of the Year Award was established by the Massachusetts Medical Society to recognize a physician from each of the Society's 20 districts who has made significant contributions to his or her patients and the community and who stands out as a leading advocate and caregiver.

Christine Pace, MD, assistant professor of medicine and primary care physician at BMC, was selected as one of the Greater Boston Chamber of Commerce's "Boston's 2014 10 Outstanding Young Leaders." The list acknowledges the contributions of young leaders who come from the public, private, and nonprofit sectors of Greater Boston. Pace leads an interdisciplinary team at BMC that integrates behavioral health services into care provided at the Adult Primary Care Clinic.

Vasan Ramachandran, MD, professor of medicine and senior investigator of the Framingham Heart Study, was awarded the American Heart Association (AHA) 2014 Population Research Prize for "brilliantly seizing upon opportunities to translate cuttingedge bench science into an epidemiological context, thereby making fundamental contributions to identifying systemic markers for cardiovascular risk, both here and in developing countries."

Rose Razzino, administrative manager in the Laboratory of Neuropsychology and Behavioral Neuroscience, received the 2014 **BUSM Academic Affairs Office Excellence** in Service Award. With BU since 1971. Razzino began her outstanding work with the Behavioral Neuroscience PhD Program at its inception 29 years ago. She manages all administrative aspects of the Behavioral Neuroscience PhD Program, coordinating activities in the Behavioral Neuroscience Program within GMS and clinical departments affiliated with the Laboratory of Neuropsychology, and grant-related administrative activities for the Laboratory of Neuropsychology. She supports the PhD Program in its numerous and frequent interactions with other BU departments and the VA Boston Healthcare Service.

Dr. Erika Wolf, assistant professor of psychiatry and a psychologist in the Behavioral Sciences Division of the VA National Center for PTSD, was selected as the 2014 recipient of the Chaim and Bela Danieli Young Professional Award from the International Society for Traumatic Stress Studies. The award recognizes outstanding contributions to the traumatic stress field by an early career professional and reflects her exceptional scholarship in the areas of PTSD genetics and assessment.

(2002-2012 and 2012-2013)

APPOINTMENTS

Ronald Corley, PhD, was appointed director of BU National Emerging Infectious Diseases Laboratories (NEIDL) effective October 1. He



succeeds John R. Murphy, a BUSM professor of medicine and microbiology, who has served as interim director since 2011. Corlev has served as associate director of the NEIDL

for five years as well as associate provost for research on the Medical Campus and chair of the Department of Microbiology.

Corley will continue as professor and chair of microbiology, though not as associate provost for research.

"Dr. Corley's leadership and vision will allow the NEIDL to reach its potential of being one of the premier centers for research on emerging and deadly infectious diseases," said Gloria S. Waters, vice president and associate provost for research. "His experience as the associate director over the past five years will ensure a smooth transition and has shown that he has the collaborative style necessary to run a center like this and strengthen this area of research excellence at BU."

The lab has been approved for some Biosafety Level 3 (BSL-3) research and is currently working to secure the necessary permits and approvals for BSL-4 research from

Thomson Reuters Names BUSM Faculty and Framingham Heart Study

Researchers Among World's Most Influential Scientific Minds 2014

BUSM faculty members and Framingham Heart Study researchers are listed in Thomson

Reuters' The World's Most Influential Scientific Minds 2014. Reuters' list of "some of the best

ers have produced work that is most frequently acknowledged by peers. Reuters analyzed

citation data over the last 11 years to identify those who published the highest-impact work

Faculty members **Michael Holick** (medicine, physiology and biophysics) and **Alice Jacobs**

Framingham Heart Study researchers **Emelia Benjamin** (medicine/cardiology), **Ralph D'Agostino**

(mathematics/statistics), Martin Larson (mathematics/statistics), Daniel Levy (medicine/

cardiology), Joseph Massaro (biostatistics), and Vasan Ramachandran (medicine/cardiology).

"Everyone acknowledged in this book is a person of influence in the sciences and social

sciences. They are the people who are on the cutting edge of their fields. They are performing

and publishing work that their peers recognize as vital to the advancement of their science.

(Thomson Reuters' *The World's Most Influential Scientific Minds 2014*)

These researchers are, undoubtedly, among the most influential scientific minds of our time."

(medicine/cardiology) are included on the list under clinical medicine as are BUSM/BU

and brightest scientific minds of our time" is determined by analyzing data on which research-

CDC. Corley's goal is to begin BSL-4 research in the NEIDL in 2015. He also plans to begin a significant recruitment campaign across a number of different disciplines. Corley earned a BS in zoology and a PhD

the Boston Public Health Commission and the

in microbiology and immunology from Duke University. He has been MED's microbiology chair since 1994, a position he says taught him to work across disciplines and build broad collaborations between the Charles River and Medical Campuses.

-Barbara Moran, BU Today

Sandro Galea, PhD, an internationally respected physician and epidemiologist known for his research linking health to such



social disadvantages as poverty and lack of education, has been appointed the new dean of the School of Public Health. Galea. formerly the Anna Cheskis Gelman and Murray

Charles Gelman Professor and chair of the department of epidemiology at Columbia University's Mailman School of Public Health. assumed the BU post on January 1.

Galea, who in 2006 was named one of Time magazine's epidemiology innovators, served on the New York City Board of Health and chair of the New York City Department of Health and Mental Hygiene's Community Services Board. His research has examined many aspects of public health, from the causes of brain disorders to the consequences of mass trauma and conflict worldwide, including the September 11 attacks, Hurricane Katrina, conflicts in sub-Saharan Africa, and the American wars in Iraq and Afghanistan. He was the lead author on a groundbreaking study published in the American Journal of Public Health in 2011 that calculated the number of deaths caused by six social factors. That study, a meta-analysis of 47 earlier studies, concluded that each year 133,000 deaths could be attributed to poverty and 176,000 deaths could be attributed to racial segregation.

Galea has published more than 450 scientific journal articles, 50 book chapters and commentaries, and 9 books. His latest book, coauthored with Katherine Keyes, is the textbook Epidemiology Matters: A New Introduction

to Methodological Foundations. He is a past president of the Society for Epidemiologic Research and an elected member of the American Epidemiological Society and of the Institute of Medicine of the National Academy of Sciences. Galea trained as a primary care

physician at the University of Toronto and practiced in rural communities in Canada and Somalia. He then returned to academia and earned a master's degree in public health at Harvard and a DrPH at Columbia.

—From a BU Today story by Art Jahnke

Publications

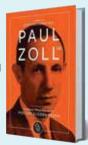
Dermatopathology Interactive Atlas, Second Edition Online at: www.dermpathatlas.com Jag Bhawan, MD

Jag Bhawan, MD, professor of dermatology and pathology and head of the **Dermatopathology Section** and vice chair in the BUSM Department of Dermatology, and co-authors Hugh Randolph Byers, MD, PhD, and Purnima Sau, MD, have made the Dermatopathology Interactive Atlas available online. The 5,000 images and 10,000 links contained in the atlas can be accessed at no cost for anyone to learn. review dermatopathology, or aid in diagnosing skin lesions. The atlas is also useful to prepare for examinations in dermatopathology and dermatology and includes a quiz following the review.

Paul Zoll, MD: The Pioneer Whose Discoveries Prevent Sudden Death Free People Publishing, 2014 Stafford I. Cohen, MD (MED'61)

Paul Zoll MD: The Pioneer Whose Discoveries Prevent Sudden Death is an account of the life

and work of Dr. Paul M. Zoll, the physician and medical researcher behind the treatments and techniques we



premature deaths from other forms of heart failure. The biography examines his childhood, education, military service, family relationships, recreational interests, and social associations from 1911 to 1999. The book focuses on Dr. Zoll's contributions to medicine, especially his breakthroughs in cardiac care and his development of closed-chest pacemakers and defibrillators, implantable pacemakers, and heart monitors. Through documented historical analysis, the book shows how Dr. Zoll created and was the first physician to use devices that are forbearers of life-saving implements commonly used today.

use today to save victims of

heart attacks and to prevent

The author, Dr. Stafford I. Cohen, was a medical resident under Dr. Zoll and, later, his colleague at Beth Israel Hospital in Boston. His book, the first full-length biography of Dr. Zoll, firmly establishes him as a world-class innovator whose treatments and inventions truly make him the father of modern electrocardiac therapy.

The House of Black and White: My Life with and Search for Louise Johnson Morris Strategic Book Publishing, 2014

David Sherer, MD (MED'84)

The House of Black and White is the story of a young boy so strongly influenced by his family's maid that, as a man, he begins searching for her three decades after she

went missing. This compelling memoir begins in 1959 in suburban Washington, DC, and concludes in 2012.

Impact of Energy Balance on **Cancer Disparities** Springer, 2014 Gerald V. Denis, PhD. co-editor

Dr. Gerald Denis, associate professor of pharmacology and medicine, co-edited this volume that reviews

disparities in cancer genetics, etiology, treatment. and survivorship that are associated with differences in energy

mpact of iergy Balance on Cancer Disparities

balance and how those differences and disparities may be affected by geography, socioeconomic status, ethnicity, biology, behavior, and other factors. State-of-the-art strategies are outlined to alter these problems at the individual, community, and policy levels.

The book provides a comprehensive assessment of the multiple contributions of disparities in energy balance and how they affect cancer.

Students

Jasmine Chobanian, cherished wife of Aram V. Chobanian, MD, President Emeritus of Boston University and Dean Emeritus of BUSM, on July 25, 2014, after a brief illness. Considered the "First Lady" of Boston University and the Medical Campus by her many admirers, Mrs. Chobanian was honored by the University in 2006 with a gala dinner and arts program.

Much beloved and warmly regarded by the entire BUSM community, Mrs. Chobanian will be greatly missed.

A graduate of Brown University (Pembroke College), Mrs. Chobanian was a research hematology technician at Harvard's Thorndike Memorial Laboratories. She was also a talented portrait painter who attended the Boston Museum School and studied under the late artist Conger Metcalfe. A patron of the arts, she served as a member of the Board of Trustees of the Boston Ballet Company. Much beloved and warmly regarded by the entire BUSM community, Mrs. Chobanian will be greatly missed.

Alvin Essig, MD, professor emeritus of physiology and medicine, on July 22, 2014, at the age of 91. A BUSM professor for more than 40 years, Essig was an international scholar regarding the application of thermodynamics to epithelial transport processes. He worked with Ora Kedem, a pioneer in the development of irreversible thermodynamics, at the Weizmann Institute

in Rehovot, Israel. He later joined Tufts Medical School faculty, lectured in biophysics at Harvard Medical School, and joined BUSM in 1973 as a professor of physiology and research professor of medicine, where he worked until his retirement in 2013.

He received his BS in mathematics from Harvard College and his MD from The Ohio State University. After internships at Kings County and Jewish Hospital in Brooklyn, New York, he served as a lieutenant (junior grade) in the US Navy. He specialized in nephrology at New York Presbyterian Hospital and Massachusetts General Hospital. He published numerous scientific articles and in 1983 authored, with Roy Caplan, what is now considered a classic textbook, Bioenergetics and Linear Nonequilibrium Thermodynamics.

Terrell Gibbs, PhD, associate professor of pharmacology & experimental therapeutics, on August 15, 2014, at MD Anderson Cancer Center in his home state of Texas. A BUSM faculty member for 24 years, Dr. Gibbs received his undergraduate degree in biology from MIT and his doctoral training in pharmacology from Harvard Medical School. He pursued his interests in neuropharmacology, first at Downstate Medical Center in the Department of Anatomy & Cell Biology at SUNY Health Science Center in Brooklyn, New York, and then at Boston University, working in close collaboration with Pharmacology Chair Dr. David Farb.

Dr. Gibbs' research involved elucidation of the molecular

mechanisms of modulation of GABAergic function by benzo-diazepines and neurosteroids and of CNS abnormalities such as autism. His discoveries were revealed in more than 45 publications and many abstracts presented at the Society of Neuroscience annual meetings.

A recent recipient of the Excellence in Education and Mentoring Award from the Neurosteroid Congress, he played a key role in the design and implementation of the cur riculum for the Biomolecular Pharmacology Predoctoral Training Program at Boston University and guided innumerable PhD candidates. He taught medical, dental, and master's degree students at BU, and all medical students over the past 23 years have learned the principles of pharmacodynamics under his tutelage.

PhD, former BUSM associate professor in obstetrics and gynecology, in a car accident July 24, 2014, on the University for Development Studies (UDS) campus in Tamale, Ghana, at the age of 74. He was

the Acting Dean of the UDS

School of Medicine and Health

Kwabena Kyei-Aboagye, MD,

Sciences.
In addition to his work at
BUSM, Dr. Kyei-Aboagye was a
member of the Department of
Obstetrics and Gynecology at
BMC. He joined the BUSM faculty in 1984 and left in 2008 to

He was instrumental in establishing BMC's program to care for pregnant women with addiction issues and was recognized for this effort

ioin UDS.

by the Boston Public Health Commission in 2001.

Dr. Kyei-Aboagye earned his bachelor's degree from the University of Ghana, and both a PhD in pharmacology and MD degree from McGill University in Montreal, Quebec, Canada.

Arnold Relman, MD, former

BUSM professor of medicine, on June 17, 2014, at the age of 91. Editor of the New England Journal of Medicine (NEJM) from 1977 to 1990, Relman graduated from Cornell University in 1943 with Distinction in Philosophy and received his medical degree from Columbia University in 1946. After his internship and residency at Yale-New Haven Hospital, he served as a National Research Council Fellow in medical sciences at BUSM. In 1951, he joined the BUSM faculty as an assistant professor of medicine, achieving the rank of professor in 1961, and was named the Conrad Wesselhoeft Professor of Medicine in 1967. He also served as director of the V and VI Medical Services at Boston City Hospital, now BMC. He was editor of the Journal of Clinical Investigation from 1962 to 1967 and 1968 to 1977, and the Frank Wister Thomas Professor of Medicine and chair of the Department of Medicine at the University of Pennsylvania School of

Medicine.

He also was a professor of medicine at Harvard Medical School (HMS) and senior physician at Brigham and Women's Hospital in Boston. In 1991, he became editorin-chief emeritus of *NEJM* and professor of medicine and of social medicine at HMS.

He was a fellow of the American Academy of Arts and Sciences, a member of the Institute of Medicine of the National Academy of Sciences, and president of the American Federation for Clinical Research, the American Society of Clinical Investigation, and the Association of American Physicians. He was a member of the American Board of Internal Medicine, as well as of the board of directors of the Hastings Center for Bioethics. He was a master of the American College of Physicians and a fellow of the Royal College of Physicians of London.

Gene Stollerman, MD, BUSM professor emeritus, on August 5, 2014, at the age of 93. Dr. Stollerman joined the faculty of BUSM in 1981, where he advocated for research and clinical training in geriatrics, preventive medicine, health services research, and primary care. Appointed a distinguished physician of the US Department of Veteran Affairs in 1986, he promoted research to aid aging veterans and helped establish a research center in Bedford to evaluate the outcomes of geriatric care.

He graduated from Columbia University College of Physicians and Surgeons and served as chief resident in medicine at Mount Sinai Hospital in New York. He also served at the Percy Jones Army Hospital in Battle Creek, Michigan, where he was a captain in the US Army Medical Corps. Returning to Mount Sinai in 1948, he completed his residency and was a microbiology fellow at New York University.

On the Farm at the Medical Student Residence



HONORS

Yvette Joon Ying Boon, a Department of Pharmacology and Experimental Therapeutics doctoral student, was selected to receive the Perdana Scholar Award from the Education Department of Malaysia for students studying in the United States. The goal of the program is to identify, document, and promote Malaysian students who have excelled in areas including academics, leadership, sports, entrepreneurship, invention, and research. The Prime Minister of Malaysia presented the award September 26 in New York.

Katrina Ciraldo and Daniel Silva were named recipients of the American Society of Tropical Medicine and Hygiene (ASTMH) 2014
Benjamin H. Kean Travel Fellowship in Tropical Medicine. Through a highly competitive process, 22 fellows from 18 medical schools were selected. This fellowship is the only medical student award dedicated to nurturing a career path for physician-scientists in tropical medicine and is presented annually to full-time medical students at accredited medical schools in North America.

Leslie Maness, a third-year medical student, was one of six 2014 Margaret E. Mahoney Fellows. The Mahoney Fellowship program of the New York Academy of Medicine (NYAM) provides stipends for outstanding medical, dental, public health, public policy, and graduate nursing students to conduct summer research projects on some aspect of health care delivery transformation for vulnerable populations and/or early childhood health and development, with an emphasis on policy implications. Maness conducted her research at New York University School of Medicine/Bellevue Hospital on the impact of low health literacy and limited English proficiency on parent/caregiver medication dosing errors when delivering liquid medications to children. She presented her summer research project at the NYAM.

Lauren Sweetser, a first-year student, was named an Albert Schweitzer Fellow for the 2014-15 Class. She and approximately 220 other 2014-15 Schweitzer Fellows will spend the next year developing lifelong leadership skills while learning to effectively address the social factors that impact health. Schweitzer Fellows follow the example set by famed physician-humanitarian Albert Schweitzer, for whom the fellowship is named.



HOW THE BU ARTS OUTREACH INITIATIVE IS CREATING A NEW WAY TO THINK ABOUT STUDENTS, PATIENTS & MEDICINE. BY MARY HOPKINS



oisès Fernández Via once volunteered in the pediatric oncology department of a local hospital in his hometown of Barcelona, Spain, where the now world-renowned concert pianist says he learned about life and the power of the arts. After a young patient asked him to "make music," he envisioned bringing a performing arts program to the

hospital and ultimately established the first-ever such program in a Spanish medical facility. He extended his vision to Boston University, where he has piloted the BU Arts Outreach Initiative, a collaboration between the BU Medical Campus (BUMC) and the College of Fine Arts (CFA). "My endeavor at BU is a continuation of the work I started in Barcelona a decade ago—a way to continue following that request to make music," he says.

Fernández Via, the initiative's project curator and researcher, sees Boston University as a unique environment for an arts outreach program. "Under the umbrella of a prestigious research university, BU is home to a first-class medical education institution, an affiliated teaching hospital with one of the most rich and diverse populations, and a conservatory arts college with the oldest degree-granting music program in the United States," he says. "The Arts Outreach Initiative aims to articulate an innovative dialogue among these three realities that coexist at BU. Our goal is to nurture cross-disciplinary collaborations, edifying an avenue for creativity for qualitative expressive outlets and celebration among our Medical Campus community."

As designed, the program builds relationships between artistic creativity and health care practice. "Medicine and the arts have in common their committed dedication to life," notes Fernández Via. "Both possess an endless curiosity about the human condition and its challenges; both aim to care, nurture, and transform at some level. A dialogue between medicine and the arts seems to me a conversation between two perspectives observing the same object. A productive relationship between the two means a two-way endeavor that mutually benefits each other."

Through the Arts Initiative, CFA students come to the Medical Campus to share their artistic gifts with students, faculty, staff, and patients. In turn, Medical Campus students, faculty, staff, and patients are given opportunities to display their artistic talents and learn from their CFA counterparts. The arts play a role in the early intellectual and personal education of many medical students. This program supports the presence of creativity in their medical training, encouraging them to embrace both art and medicine without having to choose between them.

During the 2013–2014 academic year, the program offered 59 arts-related activities including campus and hospital musical performances, theater projects, life-study drawing sessions, and musical flashmobs. The program also fostered the School of Public

Health Student's Art Society, inter-school art projects including a dance flashmob, and a National Public Health Week music video. Collaboration between patients of the BMC/BUSM Department of Neurology and the BU Jazz Combo and BUSM faculty dedicated a performance to the physicians and hospital staff who cared for the patients involved. Also, study break concerts are arranged for Medical Campus students.

Waiting is a central part of the hospital experience. It can heighten anxiety and in some cases, exhaustion. In BMC's Cancer Center, students from the BU Theater Department read poetry and stories to chemotherapy patients to help pass the long and sometimes empty waiting periods they must tolerate. During these times, staff members report that patients request staff attention less frequently, which helps with the workflow on the unit. In waiting areas throughout the hospital, Arts Initiative students singly and in groups perform the finest of classical music, thereby turning these spaces into concert halls.

Some Arts Initiative projects address specific issues in delivering health care. "Silence," a project implemented in a surgical unit at BMC, utilizes curated musical performances by students. The unit aims to both heighten the awareness of and reduce the noise level in their area.

"Not only for the patients, but for the nurses and other health care teams, [music] provides an overall comfort on the floor. Whenever the music starts, the levels of noise get reduced, it gets quieter and quieter, and you can feel it ... it almost becomes spiritual," wrote the unit nurse manager.

Musical performances also occur in hallways adjacent to where patients are recovering from surgery, followed by performances in individual patient rooms. Understanding that many victims of the 2013 Boston Marathon bombing were cared for on the Medical Campus, the program on the one-year anniversary of that event included Medical and Charles River Campus students and BUMC faculty and staff performing an impromptu concert to commemorate the tragedy.

Fourth-year medical student Harin Patel explains that his involvement in the Arts Initiative meshes with his interest in narrative medicine. "Narrative medicine is the clinical practice of listening to patients' stories and using the patient-doctor interaction as the foundation of the entire clinical encounter," he says. "I think that participating in artistic endeavors—whether acting in or watching a play, writing or reading literature, singing, dancing, or something else entirely—is a critical aspect of being able to practice narrative medicine. If in the future, I am fortunate enough to practice at an academic medical center, I hope I will be able to use my experiences with the Arts Initiative in promoting creative expression in those around me. You don't need to be an artist to be affected by art."

"These artistic activities create an impact far beyond the originally planned goals, educating staff and patients alike in artistic forms generally inaccessible to them, restoring a general sense of dignity, or simply promoting environments suitable for recovery," says Fernández Via.

Having consolidated the pilot phase of the Arts Initiative, his future plans include potential collaboration with the medical residency program and BMC's Witness to Violence program, among others. "We could say that the awareness phase is accomplished," he says. "Now we hope that the campus sees us as a reliable partner to team up with to envision and utilize creativity to continue transforming the campus' vibrant human and intellectual capital." ■



"Medicine and the arts have in common their committed dedication to life. Both possess an endless curiosity about the human condition and its challenges." Moisès Fernández Via







VISUAL THINKING STRATEGIES: BUILDING COMMUNICATION AND TEAMWORK

WHILE MEDICAL CARE IS COMPLEX and delivered in teams, it is often framed by individual practitioners. More than 60 percent of medical errors are due to poor communication. Also, research indicates a strong relationship between a health care team's communication skills and a patient's adherence to medical recommendations and adaptation of healthy lifestyles.

In order to train medical students to be active, effective communicators who observe and listen well, Suzanne Sarfaty, MD (MED'88), assistant dean for academic affairs and enrichment, piloted a Visual Thinking Strategies (VTS) program in the ambulatory medicine fourth-year clerkship.

"Developing and reinforcing critical thinking skills as well as instilling a strong capacity for teamwork are essential goals of the medical education at BUSM," says Sarfaty. "VTS, by using facilitated discussion of art work, builds skills in observation, listening, and communication that enhance critical thinking and support effective team building."

The program is now in its second year at BUSM. Students view and discuss works of visual art with a group of their peers, focusing on identifying characteristics of a highly functioning team. They work collaboratively to maintain a climate of mutual respect, listen carefully, and encourage ideas and opinions of other team members. Students explore working within a team to probe ambiguity,

Research indicates a strong relationship between a health care team's communication skills and a patient's adherence to medical recommendations and adaptation of healthy lifestyles.

integrate viewpoints of all team members, and recognize the benefit of teamwork in organizing, managing, and completing complex tasks. They also examine conflict within a team or with challenging patients.

"A major goal in my life is to find art in medicine, so naturally Visual Thinking Strategies applied to medical education was immediately of interest to me," says third-year medical student Tripp Leavitt, course manager for the Visual Education in Medicine elective. "Before medical school, I found myself reading about the importance of observation and history taking from Drs. Lisa Sanders and Jerome Groopman. When I first stepped onto the floors as a first-year medical student, I found the skills of observation developed in the art studio and in museums coalescing with what I'd read, and I wanted to provide other students with more insight into active looking in clinic."





Through the elective, Leavitt found that students became better active observers and came to understand the difference between observation and inference by looking closer at images and artwork, deducing what might be happening, and then backing up their opinions.

"This kind of observation also involves an internal processing of visual information," says Leavitt. "The first step of any patient encounter is observation. The amount of information that can be gleaned from the subtlest of clues can be immense. What is the patient's posture like? Why are the blinds down? Is the patient obese or is what appears to be fat distributed in an irregular or pathological way? Enhancing observational skills is useful to both clinicians and artists, and can be achieved through the practice of drawing. VTS also works to enhance communication and collegiality among co-workers, both of which are core to good patient care in today's team-based medicine."

"It is fascinating to participate in the evolution of a story the students create about the artwork they are viewing, building on each other's thoughts," says Sarfaty. "They practice respectful dialogue, express differences in opinion, and learn how to speak up. We explore conflict resolution strategies. These are skills that can be used in the high stakes environment of clinical medicine but practiced in the low stakes environment of a classroom with peers."

VTS training also is included in a first-year elective, Visual Education in Medicine. The departments of Medicine and Surgery have held VTS training sessions for their faculty, and the BU Goldman School of Dental Medicine has implemented it for their first-year dental classes and included a VTS segment in a faculty development workshop. While Sarfaty is writing a grant proposal to expand the program, she is working with the new physician assistant (PA) program to offer VTS to PA students. ■

THE BEAT: **STORIES BY STUDENTS**

REACHING BY TEACHING

By Lauren Sweetser (MED'17)

I WILL NEVER FORGET THE TIME I helped a child learn to walk. When I first met him, though he was past the appropriate age to be walking and had no significant disabilities, he just wasn't able to. He was living in a homeless shelter with his 17-year-old mother, and I worried that he simply wasn't getting enough stimulation. Unfortunately, while this teenage mother was very well-intentioned, she had just never been taught about child development and thus didn't even realize her son needed to be encouraged to walk. As a firstyear medical student, I was taking Human Behavior in Medicine at the time, and was coincidentally learning about the important milestones in child development. I could hear the lecture playing in my head as I showed the mother how to encourage her son to walk. Since I visited this shelter weekly, I was able to watch the progression of my little champion and felt a great sense of pride when he took his first steps. I had never felt more connected to my medical education.

I met this family through a service-learning project I started in the fall of 2014. After years of volunteering at a shelter for teen mothers and their young children, I arrived at BUSM and began to see the potential to combine our rigorous clinical curriculum with the work I was doing at the shelter. It appeared that these young teens had few positive, sustained relationships and certainly didn't have a reliable source of health information. I was inspired to create a group that would share the resources of BUSM with these young women while also educating new medical students about the social determinants of health.

I began sharing the story of these young teens with fellow classmates, and gathered students interested in working with this population that I had come to know and love. In the first few weeks of school, with the help and encouragement of BUSM faculty and staff, our new service-learning project, "Resources and Education for Adolescents and their Children (REACH)," was born.

For the past nine months, our team of 20 enthusiastic medical students has piloted this unique service-learning project with great success. The mission of REACH has been to work with and learn from these homeless teenage mothers and their young children by actively supporting them through educational workshops, constructive childcare, and longitudinal, multifaceted mentorship.

Once a month, we conduct interactive workshops for what the shelter advertises as "Health Night." These hour-long sessions focus on specific health and wellness issues relevant to the young mothers and their infants, including mental health, nutrition, illness prevention, and infant environmental safety. In addition, we have partnered with Horizons for Homeless Children to provide weekly, safe, creative, and playful activities for these young children in order to counteract the negative effects of homelessness and to encourage their appropriate social, motor, and cognitive development. Our goal is to encourage solid, healthy relationships between inexperienced teen mothers and their new children. This double-



faceted approach has proven to be one of the keys to the project's quick success thus far and has helped REACH gain enthusiastic support at BUSM and beyond.

Health care is all-encompassing and extends far beyond the clinic. My hope was that relationships fostered between the medical students and families at the shelter would help to increase student awareness about the unique struggles of homeless teenage mothers. I wanted to design a project that aimed to better educate and prepare our generation of medical students to understand the social determinants of health, while encouraging them to be compassionate and informed patient advocates prepared to tackle important issues in health care for Boston's communities and beyond.

REACH's recognized success and the energy created by its passionate members have helped spread awareness about this vulnerable and sometimes marginalized population. These teens need mentor support, and medical students can provide that. REACH gives medical students an opportunity to connect with our community in a meaningful way while providing an engaging complement to our demanding medical education.

Creating REACH has been one of the most rewarding experiences of my life. Precious moments at the shelter provide context and significance to my studies and I am thankful for every one of them. Those inspiring first baby steps were not just the first steps of that young boy, but also the first of my journey in medicine.

For more information about REACH, contact Lauren Sweetser at laurensw@bu.edu or reachbusm@gmail.com.

LEADING THE PACK

By Kristin Schwarz (MED'14) and Miriam Ruiz (MED'16)

"DO YOUALL WANT TO RACE to the last stop sign?" Janisa* asks the group. Her friends reply to this challenge in a harmony of enthusiasm-"Yup!" "Alright!" "Okay, Let's Go!"-then take off in a full sprint for the last city block. We race all the way to the stop sign, not slowing down until we have broken through the imaginary finish-line tape. We all high-five each other for a job well done—our first two-mile run together without stopping to walk.

We are the Boston University School of Medicine-Forest Hill Runners (BUSM-FHR), volunteer "running buddies" for this group of ninth graders, and we've seen them come a long way this

year, from reluctantly starting out on a run during our first practice, to joyfully celebrating at the finish of two full miles. We stand together, clapping and cheering for the other groups as they come in, some jogging, some speed-walking, and some running. Everyone, volunteers and ninth graders alike, starts out at a different level of athletic ability, but we push ourselves and one another to improve and be strong—and together, we make it to the finish line.

Meet BUSM-FHR

In fall 2011, a group of BUSM students founded the Forest Hills Runners community running group and joined with Alexis Agrinsoni of the Hyde Square Task Force (HSTF) to establish an after-school running program for teens in Jamaica Plain, A community center and youth development nonprofit organization for dis-

advantaged teens who attend Boston Public Schools, HSTF serves youths who are from predominantly low-income families and face a multitude of obstacles to wellness, including struggles in school, violence in their neighborhoods, and barriers to health care access.

One of the issues we wanted to address was the problem of childhood and adolescent obesity in innercity populations. Studies have shown that overweight children and adolescents are at increased risk for adverse long-term health outcomes. Physical activity is a key component of obesity pre-

If we can truly understand their backstories. their needs, their aspirations, and the resources available in their communities, we can more effectively collaborate with young patients and families.

vention, but oftentimes inner-city youth have limited access to the kinds of quality after-school programs, teams, and parks that promote regular exercise and active play.

As medical students, it is important to understand the barriers to physical activity that many children and adolescents face. If we can truly understand their backstories, their needs, their aspirations, and the resources available in their communities, we can more effectively collaborate with young patients and families to help them engage in active lifestyles. Awareness is key, and there is no better way to understand where someone is coming from than to (literally) walk next to them on their journey toward

Learning to move

Twice a week, Janisa and her peers (affectionately called "Rookie Runners") can be found running through Jamaica Plain with BUSM-FHR volunteers by their side. Since outdoor running is weather-dependent, we tailor our exercise plans to ensure continued physical activity throughout the year. During the warmer months, practices last an hour and consist of stretching, warm-ups, and mapped runs around the Jamaica Plain area. In the winter, we run on the indoor track at Curtis Hall Community Center, where we do relays and play games that make track-running fun. On some days, the group plans indoor workouts involving creative exercises, such as Zumba, circuit training, and strengthening exercises. Volunteers recruited from the community, including certified personal trainers and professional dance instructors, lead these special workouts. To wrap up after practices, we distribute reusable water bottles and healthy snacks, thanks to generous funding from the BUSM Wellness Program. Our practices are high-energy, physically challenging, and always a lot of fun.

From runners to leaders

After 10 months as a Rookie Runner, one sunny Saturday morning in June, Janisa proudly steps up to a microphone in front of hun-



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Bringing Music Into Their Lives THE DOCTORS' NOTES

Singing in the BUSM a cappella group the Doctors' Notes is a wonderful way for second-year medical student Al Nadjarian and his fellow singers to have fun, relieve stress, and bring joy to others. "We all just love music and are excited to rehearse and perform," says group co-chair Nadjarian. "We want people to know that med school is not just studying all the time. We can take our heads out of our books and get together to sing."

Co-chaired by David Park, Anne-Sophie Touret, and Aliyah Sanders, the student-run and directed group performs a cappella (i.e., without instruments) music ranging from 1940s standards to current day hits; no formal experience is required to join. They sing in hospital wards and at school functions, including the Admissions Office open

house for accepted students, the Chester S. Keefer Society Dinner, the Creative Arts Society Art Days, open mic nights, and the annual Kick Back Kafe. Their mission is "to share our passion for singing with whomever we can, whether they are our fellow students, hospital patients, or anyone whose day can be brightened by voices in harmony." The group finds their hospital performances especially gratifying, particularly in the pediatric units.

Members regard their weekly rehearsal as entertainment rather than commitment. "While the performances are appreciated by others, we also do it for ourselves," Nadjarian explains. "Med school gets stressful, and knowing that we have that hour each week with people enjoying themselves and sharing their love of music is great." Not to mention that performing as a group requires knowing how to work as a team, a valuable skill for future health care practitioners.



dreds of community members to greet them at the start of the Hyde Square Task Force Neighborhood 5K Run/Walk. The Rookie Runners have trained for months for the run, and today, Janisa encourages the community to be a part of their success.

Beyond active living, BUSM-FHR supports teens in becoming leaders and role models. Each year, we welcome a new group of 30 to 40 high school freshmen to the program and complete a "Couch to 5K" training program in preparation for this springtime Neighborhood 5K Run/Walk. As part of the program's initiative to build leadership skills, the teens help plan the event, which gives them a unique project-based context in which to practice their skills in literacy, math, and communication. In taking on this challenge, the Rookie Runners not only improve themselves, they also set a positive example for their peers and invite the whole community to join them in becoming more active.

In spring 2013, more than 300 community members took part in the Hyde Square Task Force Neighborhood 5K Run/Walk. Notably, participants included a large group of BUSM medical students and a team of physicians from Martha Eliot Health Center (MEHC), a Boston Children's Primary Care health center that stands just a couple of blocks away from HSTF. MEHC funded the event, and the New Balance Foundation provided running shoes for the Rookie Runners. The event raised thousands of dollars to support HSTF programming.

In welcoming the 5K participants, Janisa described her experience training: "Before I started with this group, I was a couch potato and not a fan of doing my homework. Then I came here, and running was hard. But we encouraged each other, and the Forest Hills Runners all encouraged us. I began to see that overcoming a run was like overcoming my schoolwork. I got a tutor and now I am doing much better in school."

What began as a simple concept for a youth exercise program has become so much more. It is a safe, supportive environment for the Rookie Runners to explore their potential and a way for medical students to reach out and invest in building relationships in the community. With this unique experience, our volunteers will be better prepared as physicians to work empathically and collaboratively with patients to help them achieve more active, healthy, and well-rounded lives. Through this program, we hope to educate young people about the benefits of physical activity and to promote positive self-image, leadership, and teamwork skills. We aim to inspire these adolescents to set and strive for goals not only in terms of exercise, but in all aspects of their lives. The success of this new program has been encouraging, fueled by the enthusiasm of BUSM student volunteers, HSTF administration, and the fantastic Rookie Runners. Together, we are moving forward, and we are continuing to learn and improve with every step.

*Name changed to protect privacy

Research

■ Anti-Seizure Drug May Reduce Alcohol Consumptionn

BUSM researchers have discovered that the anti-seizure drug ezogabine reduced alcohol consumption in an experimental model. The findings, reported in the *American Journal of Drug and Alcohol Abuse*, may lead to more effective treatments for alcoholism.

According to the researchers, this study provides the first evidence that alcoholism can be treated by this newly discovered mechanism that helps to regulate brain activity known as Kv7 channel modulation. "This finding is of importance because ezogabine acts by opening a particular type of potassium channel in the brain, called the Kv7 channel, which regulates activity in areas of the brain that are believed to regulate the rewarding effects of alcohol," explained lead author Clifford Knapp, PhD, BUSM associate professor of psychiatry.

Senior author Domenic A. Ciraulo, MD, BUSM professor and chair of psychiatry, was supported in this work by the NIH and by funds received from the Gennaro Acampora Charitable Trust Fund.

■ First Guidelines for Patients with Pulmonary Hypertension in Sickle Cell Disease

The first set of clinical guidelines for treating patients with pulmonary hypertension in sickle cell disease has been created by BUSM and BMC physicians. Elizabeth Klings, MD, BUSM associate professor of medicine and BMC director of the pulmonary hypertension inpatient and education program, spearheaded the development of these guidelines, which are published in the *American Journal of Respiratory and Critical Care Medicine*.

A group of 24 national physician leaders in pediatric and adult hematology, pulmonology, and cardiology convened to develop guidelines specific to these patients. Funded by the American Thoracic Society and endorsed by the Pulmonary Hypertension Association and the American College of Chest Physicians, the guidelines represent the most comprehensive pulmonary recommendations thus far.

■ Reproduction Later in Life Is a Marker for Longevity in Women

Women who are able to naturally have children later in life tend to live longer and the genetic variants that allow them to do so might also facilitate exceptionally long life spans. The BUSM study published in *Menopause: The Journal of the North American Menopause Society,* says women who are able to have children after the age of 33 have a greater chance of living longer than women who had their last child before the age of 30. The findings also

Women may be the driving force behind the evolution of genetic variants that slow aging and decrease risk for age-related

genes.

A group of 24 national physician leaders in pediatric and adult hematology, pulmonology, and cardiology convened to develop guidelines specific to these patients.

indicate that women may be the driving force behind the evolution of genetic variants that slow aging and decrease risk for age-related genes, which help people live to extreme old age.

"Of course this does not mean women should wait to have children at older ages in order to improve their own chances of living longer," explained corresponding author Thomas Perls, MD, MPH, director of the New England Centenarian Study (NECS), a principal investigator of the Long Life Family Study (LLFS) and BUSM professor of medicine. "The age at last childbirth can be a rate of aging indicator. The natural ability to have a child at an older age likely indicates that a woman's reproductive system is aging slowly, and therefore so is the rest of her body." Also contributing to this study were researchers from Boston University School of Public Health, Mailman School of Public Health at Columbia University and the University of Pennsylvania.

The Long Life Family Study is funded by the National Institute on Aging.

■ High-Protein Diets Lead to Lower Blood Pressure

Adults who consume a high-protein diet may be at a lower risk for developing high blood pressure (HBP). The BUSM study, published in the *American Journal of Hypertension*, found participants consuming the highest amount of protein (an average of 100 g protein/day) had a 40 percent lower risk of having high blood pressure compared to the lowest intake level.

"These results provide no evidence to suggest that individuals concerned about the development of HBP should avoid dietary protein. Rather, protein intake may play a role in the long-term prevention of HBP," explained corresponding author Lynn Moore, MD, BUSM associate professor of medicine. "This growing body of research on the vascular benefits of protein, including this study, suggests we need to revisit optimal protein intake for optimal heart health."

This work was supported by the National Heart, Lung, and Blood Institute's Framingham Heart Study, Boston University School of Medicine, and a grant from the American Egg Board/US Department of Agriculture.

■ Mechanism that Stops Progression of Abnormal Cells into Cancer Identified

BUSM researchers report that a tumor suppressor pathway called the "Hippo" pathway is responsible for sensing abnormal chromosome numbers in cells and triggering cell cycle arrest, thus preventing progression into cancer. Although the link between abnormal cells and tumor

ON TOUGHT OFFICE OFFICE

suppressor pathways—like that mediated by the wellknown p53 gene—has been firmly established, the critical steps in between are not well understood. According to the authors, whose work appears in Cell, this work completes at least one of the missing links.

At the end of a normal cell division cycle, chromosomes evenly divide to produce two identical cells with 23 pairs of chromosomes each. However, errors sometimes occur during division, resulting in giant cells with double the number of chromosomes, known as tetraploid cells. Normally, p53 dependent pathways stop tetraploid cells from proliferating. This response is critical because those tetraploid cells that escape detection can facilitate cancer development.

Using a technique known as genome-wide screening, the researchers found that when one specific gene, LATS2, was eliminated, the arrested tetraploid cells resumed proliferation, thus demonstrating that LATS2 was an upstream gene responsible for halting abnormal cell division. The *LATS2* gene is known to activate the Hippo tumor suppressor pathway, which is the same pathway our bodies use to ensure our vital organs don't grow out of control. The authors demonstrate that the Hippo pathway also represents the underlying pathway that prevents tetraploid cells from proliferating and causing tumors. "Although more studies are needed to further clarify this critical pathway, this work may help guide the development of new therapies that specifically target tumor cells with abnormal numbers of chromosomes, while sparing the normal healthy cells from which they originated," explained corresponding author Neil J. Ganem, PhD, assistant professor of pharmacology and medicine in the BUSM Shamim and Ashraf Dahod Breast Cancer Research Center.

Funding for this study was provided in part by the National Cancer Institute.

■ Gene May Increase Alzheimer's Disease Risk in African Americans

Researchers from BUSM report that two rare variants in the AKAP9 gene significantly increase the risk of Alzheimer's disease (AD) in African Americans. This previously unknown association furthers the understanding of the role of genetic factors in the development of AD.

According to the researchers, whose findings appear in Alzheimer's & Dementia, AKAP9 encodes a protein with multiple forms. One of these, AKAP450, is expressed in the brain and responsible for microtubule anchoring and organization. Another protein, tau, which is responsible for microtubule functioning, is well known to be the key constituent of neurofibrillary tangles that accumulate in AD brains.

"While further work is needed to clarify the causal link between these AKAP9 variants and AD, "this study indicates a new potential disease mechanism in the quest for a better understanding of AD, particularly in African Americans," said senior author Lindsay Farrer, PhD, chief

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ploid cells from

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"Our results show that we can have a marked impact on a patient's addiction by addressing it during their hospitalization."

of Biomedical Genetics and BUSM professor of medicine, neurology, ophthalmology, epidemiology, and biostatistics. "Moreover, this is the first authentic example of rare genetic variants conferring a high risk of AD in African Americans."

Funding for this study was provided by the National Institute on Aging.

■ Study Finds Increasing Health Coverage Does Not **Improve Readmission Rates**

In a first-of-its-kind retrospective study, BUSM researchers have found that providing health insurance coverage to previously uninsured people does not result in reducing 30-day readmission rates. The study, which appears in the British Medical Journal, used data on actual versus selfreported use of care and found no change in racial/ethnic disparities in this outcome, despite a markedly higher baseline of un-insurance among African Americans and Hispanics in Massachusetts.

"Among African Americans and Hispanics, we found the odds of readmission did not decrease in Massachusetts relative to control states, and there was no change in the magnitude of the white-black and white-Hispanic difference in readmission rates," explained lead author Karen Lasser, MD, MPH, BUSM associate professor of medicine. The researchers believe that in order to reduce readmissions and disparities in readmissions, states like Massachusetts need to go beyond simply expanding insurance coverage.

Funding for this study was provided by the US National Institutes of Health grants and a grant from the Rx Foundation.

■ Treat Patients with Addiction During and After Hospitalization

The results of a study demonstrate that starting hospitalized patients who have an opioid (heroin) addiction on buprenorphine treatment in the hospital and seamlessly connecting them with an outpatient, office-based treatment program can greatly reduce relapse rates after they are discharged. The study shows the important role that providers play in offering these patients addiction treatment both while in the hospital and after, even if their primary reason for being in the hospital is for something other than their addiction.

"Unfortunately, referral to substance abuse treatment after discharge is often a secondary concern of physicians caring for hospitalized patients," said corresponding author Jane Liebschutz, MD, MPH, BUSM associate professor of medicine and an internist at Boston Medical Center. "However, our results show that we can have a marked impact on a patient's addiction by addressing it during their hospitalization."

The study, published in JAMA Internal Medicine, was conducted in collaboration with Butler Hospital in Rhode Island. Funding was provided in part by the National Institute on Drug Abuse. ■

RESEARCH AWARDS

■ Boston University Receives NIH BEST Grant to Promote **Biomedical Careers Beyond Academic Research**

BU is one of seven institutions to receive the prestigious Broadening Experience in Scientific Training (BEST) award by the National Institutes of Health (NIH). The five-year, \$1.8 million award will provide biomedical research trainees from across the University with enhanced training to help PhD students and postdoctoral trainees

"Our goal is to re-engineer the training pipeline."

prepare for careers beyond conventional academic research.

BU's BEST program will involve trainees throughout the University's schools and colleges engaged in biomedical research, including the School of Medicine (BUSM), the School of Public Health, and the Henry M. Goldman School of Dental

Medicine. BUSM's Division of Graduate Medical Sciences (GMS) is home to more than 850 students and approximately 400 postdoctoral trainees who will benefit from the BEST program.

"In order to maintain the nation's scientific competitiveness, it is critical to attract, prepare, and engage a well-trained workforce. Our goal is to re-engineer the training pipeline," explained Linda Hyman, PhD, associate provost for the Division of GMS at BUSM and one of the principal investigators of BU's BEST program. "Using analysis of the job market as the driver of professional development programming, BU's BEST will enable trainees to fulfill the needs not only of the current market, but also the future biomedical workforce."

■ \$5 Million NIDA Grant Awarded to Jeffrey Samet, MD

Jeffrey Samet, MD, MA, MPH, professor of medicine and community health sciences, was awarded a five-year, \$5 million grant from the National Institute of Drug Abuse (NIDA) along with Dr. Carlos Del Rio from Emory University for their project, "Improving Physician Opioid Prescribing for Chronic Pain in HIV-infected Persons."

After marijuana, prescription opioids are the second-most commonly abused substances in the US, and overdose deaths related to prescription opioids now exceed deaths from motor vehicle crashes. Prescription opioid abuse appears to be even more common among HIV-infected patients, presumably a consequence of the known comorbidity between HIV and substance use.

The grant will fund the "Targeting Effective Analgesia in Clinics for HIV" (TEACH) Study. TEACH will test the effectiveness of a collaborative care intervention to improve the management of chronic opioid therapy and reduce the misuse of prescription opioids among HIV-infected persons.

"This is a novel randomized controlled trial of a chronic disease management intervention to improve the delivery of chronic opioid therapy and reduce prescription opioid misuse among HIV-infected persons. If demonstrated to be effective, this model could be adopted by clinics nationwide, may improve physician satisfaction and confidence in this challenging aspect of patient care, and has the potential to improve the health and well-being of persons with HIV," explained Samet, principal investigator of the grant. The study will be conducted within the BMC HIV clinic (CID), with Dr. Meg Sullivan as a co-investigator.

■ BUSM Receives \$3 Million from NIH for Genetic Research in Alzheimer's Disease

BUSM received major funding from the National Institute on Aging (NIA) as part of a national effort to identify rare genetic variants that may protect against and contribute to Alzheimer's disease risk. The four-year, \$3 million grant, "Identifying Risk and Protective Variants for AD Exploring their Significance and Biology," is led by Sudha Seshadri, MD, professor of neurology and a senior investigator at the Framingham Heart Study and for the Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) consortium. This project is linked to CHARGE projects at two other universities; all together grants total more than \$10 million. Other BU investigators who are part of the CHARGE project are Anita DeStefano, PhD; Adrienne Cupples, PhD; and Josee Dupuis, PhD, who are professors of biostatistics; and Honghuang Lin, PhD, assistant professor of medicine.

■ NIA \$12.6 Million Grant to Identify Genetic Variants Related to Alzheimer's Disease

Researchers from the BUSM Biomedical Genetics division are part of a five-university collaboration receiving a \$12.6 million, four-year grant from the National Institute on Aging (NIA) to identify rare genetic variants that may either protect against, or contribute to Alzheimer's dis-

At BUSM, the Consortium for Alzheimer's Sequence Analysis (CASA) is led by Lindsay A. Farrer, PhD, chief of biomedical genetics and professor of medicine, neurology, ophthalmology, epidemiology, and biostatistics, who is the principal investigator. Other Boston University investigators include Kathryn Lunetta, PhD, professor of biostatistics; Gyungah Jun, PhD, assistant professor of medicine, ophthal-

They will analyze data from 6.000 volunteers with Alzheimer's disease and 5.000 older individuals who do not have the disease.

mology and biostatistics; and Richard Sherva, PhD, research assistant professor of medicine.

CASA investigators will analyze whole exome and whole genome sequence data generated during the first phase of the National Institutes of Health (NIH) Alzheimer's Disease Sequencing Program, an innovative collaboration that began in 2012 between NIA and the National Human Genome Research Institute, also part of NIH. They will analyze data from 6,000 volunteers with Alzheimer's disease and 5,000 older individuals who do not have the disease. In addition, they will study genomic data from 111 large families with multiple members who have Alzheimer's disease, mostly of Caucasian and Caribbean Hispanic descent to identify rare genetic variants.

"This is an exciting opportunity to apply new genomic technologies and computational methods to improve our understanding of the biological pathways underlying this disease," said Farrer. "The genes and pathways we identify as integral to the Alzheimer process may become novel therapeutic targets." ■

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\$1.3 million alumnus bequest for scholarships

It's not every day that Holly Lindner, director of development and alumni relations for the BUSM Alumni Association, gets a call like the one she received last year.

Lindner was informed that a bequest from Class of 1959 alumnus Frank Gazzaniga, MD, who died in 2012, soon would be coming to BU. She learned that the beguest, which became effective on the passing of Dr. Gazzaniga's wife Florence, was for \$1.3 million to fund a scholarship in memory of Dr. Gazzaniga's parents, Charles C. and Anne Dineen Gazzaniga. This was a very pleasant and rewarding surprise, as the Alumni Association regularly communicates to alumni regarding the need for scholarship funds for medical students.

"The financial indebtedness of our medical students is a significant challenge and a major focus of our efforts at the School of Medicine," said Dean Karen Antman, MD. "A gift of this magnitude will provide major financial support for them. We cannot thank Dr. and Mrs. Gazzaniga personally for their

thoughtful generosity. The training of future generations of accomplished physicians that their gift will support is their legacy. We are deeply grateful."

Dr. Gazzaniga's decision to include BUSM as a major beneficiary of his estate stemmed from his having his medical education paid for through the GI Bill; he wanted to give back in gratitude for the opportunities his education had afforded him. When asked at his 50th BUSM reunion what his most memorable experience was during medical school, Dr. Gazzaniga replied, "Training for experiencing the greatest profession there is."

An internist with Kaiser Permanente in Sacramento, California, for many years, Dr. Gazzaniga specialized in nephrology. He completed residencies at the Philadelphia VA Hospital and Boston City Hospital and served as a clinical faculty member at the University of California Davis School of Medicine. He was a fellow of the American College of Physicians and a diplomate of

the American Board of Internal Medicine. His wife, whom he met while a student at BUSM, was a retired registered nurse who also worked in real estate sales.

"Our medical students are amazing in terms of their intellectual capabilities and diverse interests as well as their strong commitment to community health and caring for the underserved," said Jean Ramsey, MD (MED'90, SPH'08), BUSM associate dean for alumni affairs. "It is so gratifying to know that an alumnus like Dr. Gazzaniga believed in the importance of providing scholarship support for these dedicated and passionate students."

Bequests and other forms of estate gifts are important vehicles for supporting scholarship funds at BUSM. To learn more about how you can help students achieve their goals as part of your estate planning. please contact Kate DeForest in the BUSM Development Office at 617-638-4570 or busmdev@bu.edu.

www.bu.edu/supportingbusm

Impact: The Campaign for BU and the School of Medicine

You can make an impact on BUSM students and faculty. With your support, the next generation of clinicians, medical leaders, researchers, and entrepreneurs can join us in turning possibilities into reality. You can help students receive a cuttingedge education that prepares them for rewarding careers and gives them the tools and resources necessary to be trailblazers in their chosen fields. You can help us support our faculty who conduct pioneering research and are committed to creative and relevant teaching and learning strategies. No matter your contribution, you can advance medical education and research.

More information on our campaign is available at www.bu.edu/supportingbusm. See how you can make a difference!

Spotlight on Gifts

Edward Parsons, MD (MED'65), a pulmonologist specializing in tuberculosis, understands the need for more research in this area. Combining a cash gift with a bequest in his will, he recently committed \$100,000 to support BUSM's Pulmonary Research Center. Of his gift, \$50,000 was matched by another anonymous donor who shares his interest in advancing pulmonary medicine.

Neil Ganem, PhD, assistant professor of pharmacology and medicine, was recently named one of five New England recipients of a three-year, \$300,000 Smith Family Award for Excellence in Biomedical Research. This extremely selective award supports the careers of newly independent biomedical researchers, who must be full-time faculty at academic, medical, or research institutions in Massachusetts, Brown University, or Yale University, with the ultimate goal of achieving medical breakthroughs.

A friend of the School of Medicine who believes in the need for more pulmonary bench science recently used a Charitable Gift Annuity to make a \$100,000 contribution in support of BUSM's Pulmonary Center.

Generous support from alumni, parents, and friends will have a vital and enduring impact on the experience of students, faculty, and researchers at the School of Medicine. Learn more about making your own impact at www.bu.edu/supportingbusm, or contact the BUSM Development Office at 617-638-4570 or busmdev@bu.edu.

Impact by the Numbers

An update on the progress of the sevenyear, \$200 million campaign for BUSM:

\$127.4M Raised

\$110.3M Permanently Restricted

\$17.1M Current Use

30 months remaining

More than **\$13.4M** Raised for Student

\$3.1M Annual Fund

1,957 Alumni Participating in Campaign

\$83.5M Corporations and Foundations

Figures are as of January 13, 2014. Campaign concludes July 1, 2017.

Dean's Club Dinner 2014 Marks 40 Years of Celebrating BUSM **Leadership Donors**

First held in 1974 to recognize leadership donors of the BUSM Alumni Association's newly inaugurated Dean's Club Giving Society, the annual Dean's Club Dinner offers BUSM deans the opportunity to personally thank the many alumni, faculty, and friends of BUSM. This year, members gathered at the Taj Boston on October 25. "Dean's Club members constitute a core group who understand that philanthropy to the School of Medicine is essential to supporting our institutional mission," said Dean Karen Antman, MD. "We are deeply grateful to them for their ongoing generosity."

Above right: From left: Richard Babayan, MD, BUSM professor and chair of urology and his wife Sonya Nersessian, Esq.; Mary Moore and Thomas Moore, MD, BUMC associate provost and director of clinical research.

Right: Enjoying the evening are (standing) Alexander Norbash, MD, BUSM professor and chair of radiology; Eric Sax, MD (MED'89) and his wife, Julia; and (seated) Sepi Norbash, Sophia Catrambone, and Richard Catrambone, MD (MED'92).

Below left: BUSM students (from left) David Park (MED'17), Al Nadjarian (MED'17), Bobby Carey (MED'13, '17), and Alexandra Wink (MED'11, '18) entertain Dean's Club members.

Below right: Dean's Club members (left) Donald Kaplan, MD (MED'73) and (third from left) Gail Kaplan Kraft, MD (MED'70) with their spouses Edna Kaplan and Arnold Kraft.









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alumbusm@bu.edu



CONTACT US

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BUSM Alumni

If you have news, announcements,

with your fellow alumni, please

write to the BUSM Alumni Asso-

ciation at 72 E. Concord Street.

L120, Boston, MA 02118 or email

Association on Facebook

or creative works you'd like to share

DEAR FRIENDS,

Our alumni are among our greatest assets. We want you to stay connected to BUSM. Come visit the beautifully transformed campus, attend an event, or make a giftwhether of your time as a mentor to students; as a guest speaker; or by donating to scholarship or annual funds. Share your story! Where has your career taken you? What path did you choose? Which faculty and/or administrator had an impact on your medical education?

While you are busy taking care of patients and making a difference in the world's health care delivery, BUSM remains a part of your history and you, a part of the School's legacy. Former BUSM Alumni Association President and fellow Alumni Board Member Ken Simons, class of 1980. sums it up best: "Academic institutions last longer than any one leadership team, and I believe that what alumni give is their passion for the institution where they trained. Alumni carry on the institution's tradition. A good educational experience—and we had an outstanding one—makes you want to help keep that tradition going."

Also, please take the time to look at the incredible travel photography of our colleague, Paul Gitman (MED'66), featured in this issue. He has observed and captured some of the world's most amazingly beautiful spots. You can visit his website at www.flickr. com/people/pgitman.

Best wishes for a harvest of professional and personal success and happiness.

Jean E. Kamsey

Jean E. Ramsey, MED'90, MPH'08 Associate Dean for Alumni Affairs Associate Professor, Ophthalmology and Pediatrics

Vice Chair of Education and Program Director **BUSM** Department of Ophthalmology

Tringale Receives Volunteer Faculty Award of Excellence

During John McCahan Medical Campus Education Day (Med Ed Day), Stephen M. Tringale, MD (CAS/GRS'86, MED'90), medical director of performance improvement and research at DotWell Codman Square Health, was recognized for his years of service to BUSM students. Dr. Miriam Hoffman-Kleiner nominated Dr. Tringale on behalf of the BUSM Department of Family Medicine and presented him with the Academic Affairs Office Volunteer Faculty Award of Excellence.

Dr. Tringale has been the primary preceptor for thirdyear clerkship students at DotWell Codman Square Health Center for many years, where he also precepts and mentors family medicine residents and conducts his clinical practice.

A genuine concern for the students—and for patients they will serve in their future careers—is at the heart of Tringale's teaching. The model of a community-based family practitioner, he shows students what it means to practice in a community and community health center by offering a clerkship experience in which students learn clinical skills, how to interact with patients, and how central the bio-psychosocial model is to providing effective medical care.



Shown with Dr. Tringale (center right) are Ann Zumwalt, PhD, associate professor of anatomy & neurobiology; John McCahan, MD; and Miriam Hoffman-Kleiner, MD, chair of the BUSM Clerkship Curriculum Subcommittee and director of Medical Student Education in the Department of Family Medicine.

Alumni Association Hosts Reception for Recent Grads and Future Leaders

In October, the BUSM Alumni Association hosted a reception at the Taj Boston, overlooking the Boston skyline and Charles River. The event was a wonderful opportunity for BUSM alumni, faculty, staff, and students to mingle and for recent graduates to chat with current students about life after medical school.





who joined us for the recent Future Leaders celebration at the Tai Rooftop on Thursday evening, October 2.

Right: BUSM Associate Dean for Alumni Affairs Jean E. Ramsey (MED '90, MPH'08) with Rob Najarian (MED'05) and his wife Kristin Kludijan



Ahove: Dean Karen Antman, MD, is flanked by Leah Sax (MED'19), Mauro Caffarelli (MED'15) and Ali Sax (MED'15). Lea and Ali are daughters of Eric J. Sax (MED'89).

Right: Jaime Stull (MED'17), an officer with the Student Committee of Medical Student Affairs (SCOMSA) offers remarks from the perspective of a current

Below: From left: Basim M. Kahleifeh (MED'96), Joseph M. Fonte (MED'97), Kim Scola, Richard Romero (MED'98) and Lillian Moy-Lee (CAS'91, MED'97, SPH'97).





IN Memoriam

1950 Henry Schoenberger of

Laconia, New Hampshire, writes, "I'm alive and well, but suffering with some of the unwanted leisure time I have now, which was so desired when I was busy practicing."

1952 Alan S. Cohen of Dedham, Massachusetts, writes, "My three sons are moving along in their careers. All graduated from Harvard and the oldest, Evan, from Johns Hopkins Medical School; he is now practicing gastroenterology in Providence. He has three daughters in college, the oldest at Harvard Law School. My middle son graduated from U of Oregon Law School, where he was interested in environmental improvements; he's now working at the Massachusetts Department of Environmental Conservation. My youngest graduated from BU Law School and worked for Boston Mayor Tom Menino in inspectional services; he now lives in Arizona, where, after heading inspectional services in Scottsdale, he went into real estate. We have moved to an adult active living center in Dedham, Massachusetts, called NewBridge on the Charles, where I have taken up bridge and given up tennis (bad knees). Joan and I are approaching our 60th wedding anniversary. Looking forward to the next reunion."

1974 Richard J. Shemin of Los Angeles, California, is now chair of the American Board of Thoracic Surgery. Shemin is the Robert and Kelly Day Professor, chief of cardiac surgery, executive vice chair of surgery and co-director of the Cardiovascular Center, and director of cardiac quality at the Ronald Reagan UCLA Medical Center.

1984 David Sherer of Chevy Chase, Maryland, writes, "I released my second book, The House of Black and White: My Life with and Search for Louise Johnson Morris, in January of 2014 (see Alumni in Print and/ or visit www.thehouseofblackand whitebook.com). It is the true story of the rediscovery of my childhood caretaker 31 years after we were separated, when I was at BUSM and she left my parent's employ in Bethesda, Maryland in 1981. I recon-



1981 Melody McCloud.

MD, of Atlanta, Georgia, writes, "Former US Health & Human Services secretary Dr. Louis Sullivan (MED'58). and obstetrician-gynecologist and author Dr. Melody T. McCloud were panelists for the Atlanta Business Chronicle's Health Care Heroes Awards 2014 ceremony. The annual event honors gifted leaders and innovators in medicine. Sullivan won the Lifetime Achievement Award in 2001, and McCloud won Physician of the Year in 2012.

1986 Ziv Haskal of Charlottes-

ville, Virginia, writes, "At last

March's annual scientific meet-

ing of the Society of Interventional

Radiology, I was awarded the Leader

in Innovation prize by its research

foundation. In addition, my scien-

tific abstract, a report of a two-year,

multicenter dialysis interventions

RCT, won Abstract of the Year (out

of more than 1,000) for the second

journal I edit, Journal of Vascular and

year in a row. Submissions to the

Interventional Radiology, exceeded

1,000 papers last year, an increase

of 40 percent in my term."

nected with her in her hometown of Macon, Georgia, during the Martin Luther King, Jr. weekend of 2012, a mere three months before she died at age 90. It was an incredible experience. I was also chief medical officer on a medical mission trip to Sakila, Tanzania, in July of 2014."

1985 I. Michael Leitman of New York, New York, writes, "Now part of the Mount Sinai Health System as associate dean for graduate medical education and professor of surgery at the Icahn School of Medicine at Mount Sinai in New York City. Best wishes to all of my classmates from BUSM 1985."

1988 Lloyd Paul Aiello, MD, PhD, received the prestigious Antonio Champalimaud Vision Award as part of a group that developed anti-angiogenic therapy for retinal disease. The award celebrates both the success of the scientific process and the

outcome, an effective therapy for the treatment of two of the leading causes of vision loss and blindness in the world: age-related macular degeneration and diabetic retinopathy. Aiello and other investigators who shared the prize demonstrated the important role VEGF (Vascular Endothelial Growth Factor) plays in ocular retinal disease and how anti-VEGF agents can block its effect.

Aiello, who received BUSM's Distinguished Alumnus Award this year, is a professor of ophthalmology at Harvard Medical School and vice president of ophthalmology, head of the Section on Eye Research and director of the Beetham Eye Institute at Joslin Diabetes Center. A third generation ophthalmologist, Aiello is committed to eliminating vision loss due to diabetic retinopathy and associated conditions. He has served on national and international committees and received at least 45 awards for his research. He also has been part of numerous editorial and review boards and authored more than 240 publications.

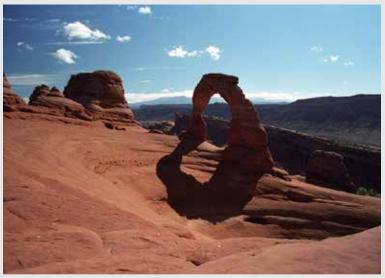
1948 • Raymond Seltser of Chevy Chase, Maryland, on February 16, 2014, at the age of 90. A professor and associate dean at Johns Hopkins University's School of Public Health, he was deputy director of the university's oncology center from 1977 to 1981. He served as dean of the University of Pittsburgh's Graduate School of Public Health from 1981 to 1988, when he came to Washington as associate director of the Centers for Disease Control. He was a senior adviser to the Agency for Health Care Research and Quality from 1990 to 1998. A native of Boston, he received a master's degree in public health from Johns Hopkins in 1957. He served as an army medical officer during the Korean War and was awarded the Bronze Star. He wrote scholarly articles on smoking, radiation, and other public health matters and later consulted on disability issues. He is survived by his wife and

1950 • G. Robert Baler of Boston. Massachusetts, on April 18, 2014. He served as chief of dermatology at Brockton Hospital and was a long-standing faculty member of the Department of Dermatology at Boston University School of Medicine. A Phi Beta Kappa graduate of Boston University, he completed his residency in dermatology at BUSM and since 1956 served as a faculty member. He was appointed as a clinical professor of dermatology in 1988 and as professor emeritus in 2001. In 2010, BUSM named an endowed lecture series in his honor. He continued to teach residents and see patients in the **BUSM Department of Dermatology** until 2013. He served in numerous leadership roles within the medical community including resident of the New England Dermatological Society; member of the Board of Trustees of the Noah Worcester Dermatological Society; member of the Board of Trustees at the Boston Medical Library; member of the Executive Committee of the Advisory Council, American Academy of Dermatology; and House of Delegates for the Massachusetts Medical Society. He is survived by his wife and four children. Continued on inside back cover

"Whatever I can see, and I want to see it all."

Paul Gitman, MD (MED'66), starting taking photos when he was about 11 years old. "It's an interest that my dad, who was also a physician, enjoyed," recalls Gitman. "I now look at his photos and realize that we have the same eye. What pleases me is clearly what pleased him." Retired from an internal medicine practice in New Hyde Park, New York, Gitman travels the world over seeking out cultures, people, wildlife, and scenery to photograph. He especially loves large animals, waterfalls, ice, and sunrises and sunsets. Most often he travels with groups interested in nature and photographs: "Whatever I can see, and I want to see it all."

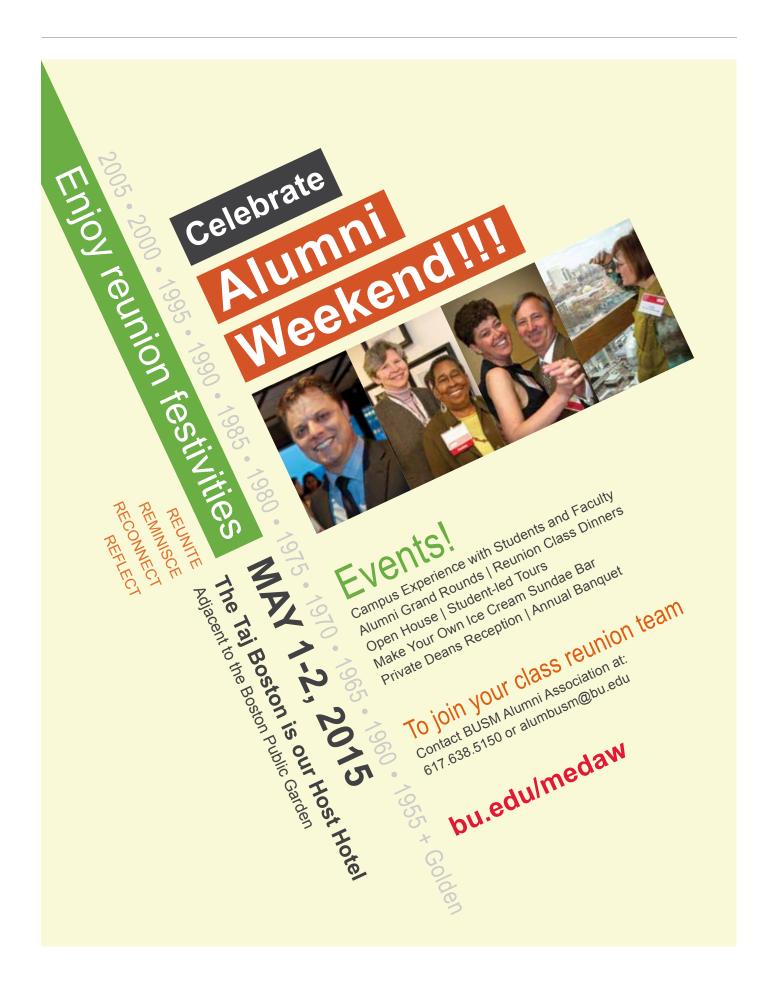
You can enjoy more of Dr. Gitman's photography at www.flickr.com/people/pgitman.











In Memoriam, continued from page 34 1960 • Captain Robert C. Cochran of Charleston, West Virginia, on September 2, 2013, at the age of 80. Retired from the US Naval Medical Corps, he joined the navy at the end of his second year of medical school. During his naval career he served in Norfolk, Virginia; Vietnam (USS Repose); New York City; and for the last 15 years of his 26-year career, as chief of surgery and the Surgical Residents Training Program at the Bethesda Naval Medical Center. While there, he served as physician to Presidents Ford, Carter, and Reagan. After he retired from the navy in 1983, he moved to Charleston, West Virginia, to work with the HYGEIA Medical Corporation. In 1985, he was appointed professor of surgery at West Virginia University School of Medicine, Charleston Division, where he twice received the Vincent Von Kern Award as the surgeon who made the greatest contribution to resident education. In 2011, he was the first recipient of the James P. Boland, MD Award for the greatest contribution to medical education at the school. He is survived by his wife and three children.

1960 • Gabriel Fernandes de

Freitas of Paradise Valley, Arizona, on March 26, 2014, at the age of 79. He completed his surgical residency at BUMC and a fellowship in surgical oncology at Memorial Sloan-Kettering Cancer Center in New York City. He practiced surgical oncology in Phoenix, Arizona, until he retired in 2000. He was a Fellow of the American College of Surgeons and a member of the Society of Surgical Oncology; Society of Head and Neck Surgeons; American Radium Society; American Society of Clinical Oncology; Society for the Study of Breast Disease; and the American Society of Breast Surgeons. He presented "The Final Illness of Enrico Caruso" at a meeting of the Collegium Medicorum Theatri in Vienna, Austria, in 1978. He is survived by his wife and two daughters.

1964 • Putnam P. Breed of Hampton Falls, New Hampshire, on September 18, 2013, at the age of 75. A general surgeon, he completed his residency at Boston City Hospital.

He served in the US Army Medical Corps in Vietnam from 1966 to 1968. He received the Bronze Star, Combat Medics Badge, and the Vietnam Service Award, First Cavalry Division, Vietnam 15th Medical Battalion. In 1971, he joined the staff of Anna Jaques Hospital in Newburyport, Massachusetts, and Amesbury Hospital. He was a district medical examiner for the Commonwealth of Massachusetts as well as an Aviation Medical Examiner. He is survived by his wife and four children.

1977 • Irma Miller Lessell of

Lexington, Massachusetts, August, 2014 at the age 79. A homemaker and mother for 20 years, at age 38 she fulfilled her dream of becoming a physician. As a student, she excelled at every level and was only the third person ever to graduate summa cum laude from BUSM. After completing her training in neurology, she joined the staff of the Lahey Clinic, where for 19 years she specialized in neuroophthalmology and pediatric neurology. In retirement, she returned to her alma mater, Wellesley College, and audited many courses in subjects she had not studied during her undergraduate years. She is survived by her husband and three sons. A fourth son passed away in 1977.

1977 • Jeanne H. Benjamin of Brookline, Massachusetts, on July 3, 2011, at the age of 60. She is survived by her husband and three children.

1984 • Kathleen M. Bennett

of Boston, Massachusetts, on November 23, 2013, at the age of 56, from metastatic breast cancer. She completed her internship in family medicine at Cook County Hospital in Chicago, followed by three years of internal medicine at Boston City Hospital, plus a year as chief resident. After finishing her training, Bennett served as a residency program director and community health physician and later as a leader in health care administration at Neighborhood Health Plan and Boston Medical Center HealthNet Plan. Most recently, she was chief medical officer at Senior Whole Health. ■

Boston University Planned Giving

66 Thanks to you, money didn't make this choice for me.??



iania Torres-Sanchez and her scholarship donor, Sarkis Kechejian (IVIED 63,

Your gift opens doors at BUSM

Take Tania Torres-Sanchez (MED'16), who fell in love with BU during her interview visit. "I knew that I wanted to be here, and work with this patient population," she says. But she also knew that her med school choice might be driven by financial aid, not fit. Thanks to a donor-funded scholarship, "I could come to BU, where I wanted to come," she says. "When I got my BU financial aid packet, I thought 'Oh, good. I don't have to choose between what I want and what I can afford.' That's a great feeling."

To learn more about how you can support BUSM and its students, contact the BUSM Development Office at busmdev@bu.edu or 617-638-4570, or visit bu.edu/supportingbusm



Boston University School of Medicine

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APRIL 30

Annual Keefer Society Dinner with Dean's Advisory Board

Boston • Thursday, April 30, 2015

MAY1&2

BU School of Medicine Alumni Weekend

BUSM, Boston • Friday & Saturday, May 1 & 2, 2015

MAY 15

GMS/MMS Commencement

Metcalf Hall, George Sherman Union • Friday, May 15, 2015

MAY 16

MD/PhD Commencement

Agganis Arena • Saturday, May 16, 2015

MAY 17

All-University Commencement

Nickerson Field • Sunday, May 17, 2015