Brainiacs

MEET THE SEVEN NEUROSCIENCE RESEARCHERS CHOSEN AS SPIVACK SCHOLARS
Dear Alumni, Friends, and Colleagues,

Boston had an incredibly cold and snowy winter but as the glacier around the Medical Campus receded, academic signs of spring were unmistakable.

On the morning of Match Day (see page 2), faculty announced prizes and honors earned by our senior class members and then further distracted them with their class picture. With the countdown to the noon distribution of match envelopes, we effectively launched our senior class. They did exceptionally well, matching in competitive residencies from Boston to California and Michigan to Texas. As physicians, these graduates are the future of health care delivery and health systems leadership.

Our PhD graduates have already enriched biomedical discovery that may contribute to more effective treatments. Our master's degree graduates leave with a firm scientific knowledge base and commitment to the various medical professions they pursue.

In this issue we highlight the work of one senior and six junior faculty members recently appointed Spivack Scholars. Established though the generosity of Jack Spivack, the School of Medicine’s Spivack Center for Neuroscience facilitates the work of a multidisciplinary group of neuroscience faculty members whose work addresses some of the most challenging and destructive neurological disorders. Alumni celebrating five-year reunions also gather on the Medical Campus each spring. It is truly a pleasure to meet so many who are part of the School’s impressive legacy and to learn from them of the rich history we all share. We celebrate the accomplishments of Dr. Sophia Dyer, this year’s Distinguished Alumna Award recipient. Dr. Dyer is the medical director of Boston Emergency Medical Services and played an integral part in the medical emergency response to the Boston Marathon bombings.

We are pleased to profile alumna Ann Cea (MED’67), who has established a $100,000 endowment for scholarship support. Dr. Cea is the daughter and mother of BUSM graduates and a highly valued member of the Dean’s Advisory Board. She has been a consistent student advocate and shares some of her reasons for her commitment to supporting enhancements to BUSM’s academic and community environment.

The Dean’s Advisory Board meets in the spring each year to discuss the School’s priorities and needs. This dedicated and supportive group of highly accomplished professionals provides the School’s leadership with wise counsel and vision, and I am deeply grateful for their time, expertise, and invaluable support.

Warmest regards,

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

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All smiles: Members of the Class of 2015 gather before Commencement.

BRAINIACS

Seven BUSM faculty members named 2015 Spivack Scholars

On the cover: Third-year medical student Tripp Leavitt, course manager for the Visual Education in Medicine elective. Photo by Michael D. Spencer
On March 20, Class of 2015 members, their families and friends, and BUSM faculty and staff joined together to celebrate Match Day, the nationwide annual rite of passage for graduating medical students.

BUSM fourth-year students and their peers across the nation counted the minutes until noon, when they opened envelopes to learn where they will complete their residencies. “This is really much more exciting than graduation,” said John Polk, MD (MED’74), assistant dean for student affairs. “You know you’re going to graduate, but you don’t know where you’re going to spend the next four, five, six years of your life.”

BUSM students matched in residencies across the country, with the majority concentrated in five states: Massachusetts (44); California (32); New York (24); Illinois (6—primarily Chicago); and Rhode Island (6—primarily Brown). They marked their new locations on a map of the country to illustrate geographic diversity.

The Class of 2015 matched in a range of programs: internal medicine (23); pediatrics (12); emergency medicine (10—an unusually high number); family medicine (8); and general surgery (8). Twenty members of the class will remain on the Medical Campus at Boston Medical Center (BMC) and three will train at BMC and Boston Children’s Hospital in the Boston Combined Residency Program in Pediatrics.

“They worked so very hard to get here, and we are so proud of them,” said Angela Jackson, MD, associate dean for student affairs. “They are going to be wonderful physicians.”

For more photos, visit BUSM on Facebook at Facebook.com/BUMedicine.
Members of the Class of 2015 process into Agganis Arena for the start of Commencement exercises.

BU Medical Campus Provost and BUSM Dean Karen Antman, MD, reminded graduates and their families, “Commencement is the end of the beginning of your education. The diploma you get today is really a license to learn. It is a credential that grants you entry to the next stage of your education. We really hope you have acquired the most important tool of all—the capacity for continued, disciplined inquiry and lifelong learning.”

Speaking for her fellow doctoral students, Elizabeth Stanford said, “All of us started this journey because of an end goal; we wanted to improve the quality of lives of others by learning more about the academic journey for 144 members of the Class of 2015 receiving the MD; six the MD/PhD; four the MD/MBA; and 27 the PhD. “Physicians and scientists can influence many aspects of our daily lives, including the political process. Speak up, use your voice to effect change,” urged Bauchner, a BU professor of pediatrics and community health sciences. He also has served as the vice chairman of the department of pediatrics at BMC/BUSM and assistant dean, alumni affairs and continuing medical education at BUSM.

Bauchner reminded graduates to take time out of a busy day for a few unplanned, unscripted minutes with people important to them, to make note of good things that happen over the course of a day, and to always remember that “relationships will sustain you throughout your life, be they with a mentor, a colleague, a friend, a spouse, or a child. They must be nourished.”

Megan Janeway, who will be a sixth-generation physician, spoke on behalf of the medical students with a balance of light-hearted humor and sage advice. “It has truly been a privilege to learn with you and to learn from you. More than anything, it has been a privilege to laugh with you; it has carried us through the last four years. I know that you will push the envelope and challenge the hierarchy to better medicine for your patients.”

“No single profession other than health care can so impact the lives of individuals and their families,” Bauchner said. “Medicine is an extraordinary profession, filled with challenges, disappointments, and anxieties, but the one constant is the ability to influence the lives of individuals every day.”

The Journal of the American Medical Association editor-in-chief Howard Bauchner, MD (MED’79) gave the Commencement address. “Medicine is a sacred trust; an extraordinary and rewarding profession. You have an ethical obligation to serve the interest of your patients first and always—always—practice it to the best of your ability.”

2015 FACULTY AWARDS
Commencement ceremonies included the presentation of faculty awards. This year’s honorees:

Stanley L. Robbins Award for Excellence in Teaching
Lorraine Stanfield, MD
Assistant Professor of Medicine

Leonard T. Her Humanitarianism in Medicine Award
Tracy A. Deichert, MD
Assistant Professor of Surgery

Committee on Faculty Affairs
Educator of the Year Awards
Educator of the Year in Preclinical Sciences
Judith D. Sable, PhD
Associate Professor of Physiology & Biophysics

Educator of the Year in Clinical Sciences
Jane E. Mendez, MD
Associate Professor of Surgery

Educator of the Year in Graduate Medical Sciences, Master’s Degree Programs
Maryann MacNeil, MA
Instructor of Anatomy & Neurobiology

Educator of the Year in Graduate Medical Sciences, Doctoral Degree Programs
C. James MKnight, PhD
Associate Professor of Physiology & Biophysics

BUSM Graduates: Influencing Lives Every Day

“T here will be few days in your lives as exciting and momentous as this one,” said Howard Bauchner, MD (MED’79), editor-in-chief of the Journal of the American Medical Association, who delivered the address at the 168th Boston University School of Medicine Commencement ceremony on Saturday, May 16. Friends and family shouted, cheered, and applauded from the stands of Agganis Arena as newly minted graduates were hooded and received their diplomas.

BU Medical Campus Provost and BUSM Dean Karen Antman, MD, reminded graduates and their families, “Commencement is the end of the beginning of your education. The diploma you get today is really a license to learn. It is a credential that grants you entry to the next stage of your education. We really hope you have acquired the most important tool of all—the capacity for continued, disciplined inquiry and lifelong learning.”
A Special Day for GMS Graduates

If you want to make a difference, think boldly, out of the box and take a chance. If we learn from our mistakes, they aren’t mistakes, they are learning experiences. Over the past two years, our job has been to prepare you for professional success. Until now, your job has been to answer our questions correctly. Now, it’s time for you to start asking the right questions.” Associate Provost for Graduate Medical Sciences (GMS) Linda Hyman, PhD, told graduates at the GMS Commencement on Friday, May 15, at Metcalf Hall in BU’s George Sherman Union.

Joining 341 master’s degree candidates, faculty members wearing colorful regalia lined the staircase and filed into their seats. “Today is a day of traditions: the organ, the processional, the gathering of your mentors, friends, and family. Today is a very special day. The traditions of today are important. They help us connect the dots, punctuating milestones in our lives.”

Three student speakers offered perspective on their GMS experiences and their hopes for their classmates.

According to Peter Foster, who earned a master’s in Medical Sciences, “We are all about to embark into a rapidly changing landscape of health care and health policy. Whether you go into research, business and management, or teaching, the key is innovation. ‘Innovation flourishes…it is when we open our work to those not in our field that we gain perspective and create the greatest impact.”

Michael Hendrickson, a Master of Arts in Mental Health Counseling and Behavioral Medicine candidate, asked, “But what do this diploma and our hoods really represent? To me—and my hope is that this extends to every graduate who crosses the stage today—our diplomas represent not only professional, but personal growth. My hope is that we will each continue to encounter those challenges that make us question everything. For that is when we can grow as clinicians and as individuals.”

Visit the BUSM Facebook album for more of the day’s photos at facebook.com/BUMedicine.

NEJM Editor Delivers Annual Kirshenbaum Lecture


“The current West Africa Ebola outbreak has been more extensive than cases in Central Africa for a number of reasons,” said Drazen, also a pulmonologist at Brigham and Women’s Hospital; Distinguished Parker B. Francis Professor of Medicine at Harvard Medical School; professor of physiology at Harvard School of Public Health; and adjunct professor of medicine at BUSM. “Having no previous experience with Ebola, the health care systems in Sierra Leone, Guinea, and Liberia do not have the know-how or capacity to effectively deal with and contain the disease.”

Drazen, who referenced several recent NEJM articles on the Ebola outbreak, noted the differences between the two regions; the Ebola virus variant or strain evident in East Africa differs from that of the Central African region. He also noted that some of the cultural and behavioral customs in Central African countries with outbreaks—exclusive of burial rites—carry a lower risk of infection. The West African outbreaks occurred in more densely populated areas with more extensive road networks, making transmission of the virus more likely. Drazen concluded his remarks by encouraging health care workers to volunteer to care for patients in West Africa.

Eaine Kirshenbaum, BU Board of Overseers and BUSM Dean’s Advisory Board member, established the lecture in honor of her late husband, the prominent cardiologist Howard Kirshenbaum. “My husband was an exceptional physician and it is an honor to support this lecture in his memory,” said Kirshenbaum. “I am honored that Jeff Drazen is this year’s lecturer and I am grateful to BU, which has been here for me.”
Communication Workshop
BU Scientists Get a Lesson in Telling Their Stories

Actor Alan Alda, most famous for his roles in M*A*S*H and, more recently, PBS’s Scientific American Frontiers, made a “guest appearance” on the Medical Campus via video recording. The School of Medicine welcomed faculty from the Alan Alda Center for Communicating Science to a one-day workshop to help BU scientists communicate their work more effectively to their colleagues, the public, policymakers, and funders.

The exercises challenged them, through both discussion and practice, to pay close attention to others and be aware of the two-way nature of communication. BUMS is proud to be the first medical school in the country to host the program. Forty-one scientists from the Medical and Charles River Campuses learned how to communicate their work, connect with their audience, and speak clearly and conversationally about why their work matters by attending two 3-hour workshops on improvisation and message delivery.

Assistant Dean for Academic Affairs Suzanne Sarfaty, MD, had previously attended a workshop at the Alda Center at Stony Brook University in New York and was eager to bring it to the Medical Campus. “I was so impressed with the thinking behind it and the power of the program,” she said. “I knew it would be a valuable experience for our scientists and would enrich the BU community.” During the “Distilling Your Message” workshop, participants explained their research as though they were pitching their story to a non-scientist TV show producer. The scientists practiced finding common ground with an audience, speaking at different levels of complexity for different listeners, and answering questions about their work. Later, “Improvisation for Scientists” used improv theater techniques to help participants speak more spontaneously and responsively.

Isabel Dominguez, PhD, assistant professor of hematology and medical oncology, said she was excited to share the ideas and techniques she learned with her lab colleagues and trainees: “This was a very valuable workshop. It will make me better at explaining my work and training others in my lab to be more effective in telling their stories as well.”

While March has run a faculty development program at MED for the past decade, she came to realize that she wasn’t reaching everyone, particularly busy health care providers who had dedicated their professional lives to caring for patients and suddenly found themselves asked to teach. This led her to propose and create the BUMS+ Medical Education Badge Program through a Digital Learning Initiative (DLI) seed grant for online innovation in learning because there have been so many ideas in medical teaching that are ripe for advancement but lack the requisite background.

March has already heard from interested health care professionals from as far away as India, Armenia, and Russia. She stresses that the program is designed to be useful to fellows, residents, medical students, physicians, nurses, physical therapists, and many other health care professionals—especially considering that the sessions count toward required continuing medical education credits.

She also plans to launch three more courses—Curriculum Design, Academic Leadership, and Medical Education—covering skills that medical students and professionals want to learn, but often don’t have time to pursue in traditional classes. Visit busmplus@bu.edu for more information on the BUMS+ Medical Education Badge Program. Institutions and schools outside of Boston University registering more than 10 people can email busmplus@bu.edu for discounts. This article appeared in BU Today.
Dean’s Advisory Board Meeting

The School of Medicine’s Dean’s Advisory Board held its annual spring meeting on April 30. Dean Karen Antman, MD, opened with an update on the School’s new educational initiatives. Director of the Behavioral Science Division of the National Center for Post-Traumatic Stress Disorder (PTSD) and Assistant Dean for Research Dr. Terry Keane delivered a presentation on the pioneering research studies and treatments for PTSD. The Board also heard from Dr. Vasan Ramachandran, chief of the Section of Preventative Medicine & Epidemiology and principal investigator of the Framingham Heart Study, who gave an update on the current state of the study and his vision for the future. The meeting closed with a presentation and tour of the School’s “History Hall” led by Associate Dean for Academic Affairs Dr. Doug Hughes.

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Keefer Society Dinner

Members of Boston University School of Medicine’s Dean’s Advisory Board and the Chester S. Keefer, MD Society gathered at the Four Seasons Hotel for the Society’s 22nd annual dinner on April 30. Guests met current students in the medical degree, physician’s assistant, and combined MD/PhD programs and enjoyed a performance by the student a cappella group The Doctors’ Notes. The Keefer Society recognizes donors who have supported the School of Medicine with lifetime gifts totaling $50,000 or more. Dean Karen Antman, MD, recognized eleven new inductees and welcomed them into the Society.

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APPOINTMENTS

Scott Duncan, MD, MPH, MBA, was appointed chair of the BUSM Department of Orthopaedic Surgery and chief of orthopaedic surgery at BMC effective January 1. Duncan comes to campus from Orthner OsteoCare in Health System, where he served as system chief of orthopaedic surgery and section head of hand and upper extremity surgery.

Duncan is a globally recognized expert and thought leader in the areas of upper extremity trauma; revision carpal tunnel surgery; small joint arthroscopy; and reconstructive surgery of the wrist, forearm, elbow, and shoulder. He frequently presents at medical schools and conferences around the world on topics such as shoulder arthroscopy for trauma, thumb injuries, and utilizing iPads and iPhones in an orthopaedic surgery practice. He has served as an international visiting professor of orthopaedic surgery and section head of hand and upper extremity surgery.

In Business Administration, Health Care Public Health. He also received his Master of Business Administration, Health Care Management, at the University of Miami School of Medicine.

Honors

White House Drug Control Policy Director Michael Botticelli has awarded BUSM’s Safe and Competent Opioid Prescribing Education (SCOPE) of Pain program a 2014 National High Intensity Drug Trafficing Area (HIDTA) Award for Outstanding Prevention Effort. Boston Magazine’s annual Top Docs issue included 62 BUSM faculty and BMC physicians. Nahid Bhatia, MD, assistant professor of medicine in the section of infectious diseases, is pictured on the magazine’s cover; her work caring for Ebola patients in Sierra Leone is featured.

Dani Carmela Abraham, PhD, professor of biochemistry and pharmacology, was one of six to receive the Massachusetts Neuroscience Consortium Award. Abraham was recognized for her work on multiple sclerosis and the role of the life extension protein Klotho in the limited repair of white matter in the disease. The consortium awards translational research in neurodegenerative and neuroinflammatory diseases such as Amyotrophic Lateral Sclerosis, Alzheimer’s disease, Huntington’s disease, multiple sclerosis, Parkinson’s disease, neuropathic pain, and treatment-resistant depression.

David Alford, MD, MPH, associate dean of the Office of Continuing Medical Education and associate professor of medicine and director of the Clinical Addiction Research and Education Unit at BMC, received the American Medical Association (AMA) Foundation Award for Health Education, established to recognize professional educational activities by practicing physicians and to encourage health education, particularly regarding drug and alcohol abuse.

Emelia Benjamin, MD, received the 2015 Paul Dudley White Award from the American Heart Association (AHA). Named in honor of one of Boston’s most revered cardiologists and (a founding father of the AHA), Dr. Paul Dudley White, the annual award honors a Massachusetts physician who has made a distinguished contribution to the Association’s mission of building healthier lives free of cardiovascular disease and stroke.

Robert A. Brown, PhD, Boston University president, was named a fellow of the National Academy of Inventors (NAI). Brown has one of 170 new NAI fellows and one of 414 currently representing more than 150 research universities and governmental and nonprofit research institutions.

Alan Farwell, MD, received the American Thyroid Association’s (ATA) 2014 John B. Starnes Pathophysiology Medal and Distinguished Service Award. A BUSM associate professor of medicine and director of the Endocrine Clinics at BMC, Farwell has served two terms on the ATA Board of Directors, the founding and current chair of the ATA Alliance for Patient Education, and is editor-in-chief of Clinical Thyroidology for the Public.

James Feldman, MD, MPH, BUSM professor of emergency medicine and a physician at Boston Medical Center, has been honored by the Massachusetts Medical Society with its Committee Chair Service Award, which recognizes exceptional leadership and service to the Society, the statewide professional association of physicians.

Thoa James, MD, associate professor of emergency medicine and an attending physician at BMC, was named the recipient of the 2014 Schwartz Center Compassionate Caregiver Award from the Schwartz Center for Compassionate Health Care, a patient-founded, nonprofit dedicated to nurturing patient and caregiver relationships to strengthen the human connection at the heart of health care. James co-founded the Violence Intervention Advocacy Program (VIAP) at BMC as well as Unified for Global Healing, a foundation aimed at improving health outcomes across the globe. James also received the Pinard Award from the Greater Boston Chamber of Commerce, which recognizes businesses and individuals who have demonstrated excellence in entrepreneurship, management, and lifetime achievement.

Michael Klein, MD, professor of medicine and director of the BMC Electrocardiology Laboratory, received the 2015 Jerome Klein Award for Physician Excellence. Established in 2010 to commemorate Jerome Klein’s 50 years of service to BMC/Busm, the award is presented annually to a physician who mirrors Jerome Klein’s commitment and service as a mentor, leader, teacher, researcher, and clinician.

Ronald Corley, PhD, professor of microbiology and director at the National Emerging Infectious Diseases Laboratories, was elected as a fellow under the Section on Medical Microbiology and Immunology, particularly in elucidating innate functions of antibodies and B cells and their roles in activating adaptive immunity.

Jesse Dupuis, PhD, professor and associate chair of Biostatistics, was elected as a fellow under the Section on Biological Sciences for her contributions to the field of statistical genetics, leading to the discovery and improved understanding of the genetic basis for common diseases.

Katya Ravid, Dsc, PhD, professor of medicine and biochemistry and founding director of the Evans Center for Interdisciplinary Biomedical Research, was elected as a fellow under the Section on Medical Sciences for pursuing interdisciplinary research. Ravid outstandingly combined the fields of human and vascular biology, leading to the discovery of transcriptional and cell cycle signatures that govern polydysplasia megakaryocyte/platlet development.

Five BUMC Faculty Members Elected AAAS Fellows

The American Association for the Advancement of Science (AAAS), the world’s largest general scientific society and publisher of the journals Science, Science Translational Medicine, and Science Signaling, has named five members of the Boston University Medical Campus (BUMC) community AAAS Fellows:

David Center, MD, associate provost for Translational Research, director of BUMC Translational Research Institute, and chief of Pulmonary, Allergy & Critical Care Medicine at Boston Medical Center (BMC), was elected as a fellow under the Section on Medical Sciences for his contributions to the field of immunology, particularly in elucidating innate functions of antibodies and B cells and their roles in accelerating adaptive immunity.

Jean E. Ramsey, MD, MPH, professor of medicine and principal investigator of the Framingham Heart Study, was awarded a 2014 Population Research Prize by the American Heart Association (AHA). Ramachandran, also chief of the Section of Preventive Medicine and Epidemiology in the Department of Medicine, was recognized “for brilliantly seizing upon opportunities to translate cutting-edge research into an epidemiological context, thereby making fundamental contributions to identifying systemic markers for cardiovascular risk, both here and in developing countries.”

Barry S. Zuckerman, MD, BUSM professor and chair emeritus of pediatrics and BUSH professor of public health, received the Federation of Pediatric Organizations’ Joseph W. St. Gens, Jr. Leadership Award, created to recognize a pediatrician who is a role model as a clinician, educator, and/or investigator. Recognized for his lifetime of contributions and sustained contributions to pediatrics that have or will have a major impact on child health.

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Fil from the Start: How to Prevent Childhood Obesity in Infancy (Shays Up America, 2014)
Alvin N. Eden, MD (MED’52)
cowriter with Barbara Moore and Adrienne Forman
This book offers critical information on preventing obesity in infancy, including how to avoid overfeeding (with breast and bottles), how to spot excess weight gain and what to do about it, why sleep matters, how to establish healthy sleep patterns, and food and when to introduce solid foods.
Dr. Eden has more than 40 years of experience as a practicing pediatrician and is a clinical professor of pediatrics at Weill Cornell Medical College in New York City. He has authored six child care books, including Growing Up Thin, which focuses on treating overweight and obese children.

On the Brink: Israel and Palestine on the Eve of the 2014 Gaza Invasion (Just World Books, 2014)
Alice Rothchild, MD (MED’74)
A collection of stories about his patients’ struggles with how to live a meaningful life and cope with its end. Creatures of a Day is funny, warthly, and often shocking: it is a radically honest statement about the difficulties of human life but also a celebration of some of the finest moments—love, family, friendship—that life can bear. We are all creatures of a day. With Yalom as our guide, we can find in this book the means not just to make our own day bearable, but meaningful, and perhaps even joyful.
Dr. Yalom is an emeritus professor of psychiatry at Stanford University and a psychiatrist in private practice in San Francisco. He has authored many books, including Love’s Executioner, Theory and Practice of Group Psychotherapy, and When Nietzsche Wrote.

Creatures of a Day: And Other Tales of Psychotherapy
Irvin Yalom, MD (MED’56)
This book offers critical information on preventing obesity in infancy, including how to avoid overfeeding (with breast and bottles), how to spot excess weight gain and what to do about it, why sleep matters, how to establish healthy sleep patterns, and food and when to introduce solid foods.

First-Year Medical Students Receive Stethoscopes Compliments of BUSM Alumni

Members of the class of 2018 each received a stethoscope—that symbol of medical practice every physician must possess—on Tuesday, Oct. 28, thanks to the Stethoscopes for Students program coordinated by the BUSM Alumni Association and funded through the generosity of BUSM alumni donors. “This is a special day for our first-year medical students, as they receive their medical equipment that will serve as their clinical tools for years,” said Nanette Harvey, MD, BUMC course director for Introduction to Clinical Medicine and a son.
Along with the stethoscope, the distributed medical equipment included a blood pressure cuff, ophthalmoscope, otoscope, reflex hammer, tuning fork, and a CD of physical examination tips.

Joseph A. Vita, MD, on November 2 at the age of 58. Director of clinical research at the Whitaker Cardiovascular Institute, he served as BUMC professor of medicine and senior staff cardiologist in the Section of Cardiovascular Medicine at BUMC.
Dr. Vita devoted his career to clinical and translational research in vascular biology with a focus on mechanisms and clinical consequences of endothelial dysfunction. He created vascular testing spaces within the Whitaker Institute as well as at the Framingham Heart Study, where he and his team studied vascular physiology in patients. He was also the principal investigator of a Specialized Center of Clinically Oriented Research (SCCOR) Grant on Vascular Injury, Remodeling, and Repair titled, “Vascular Consequences of Insulin Resistance and Obesity.”
His clinical activities included consultative cardiology and rotations as an attending physician in the BMC coronary care unit. In addition to his own research activities, he devoted a large portion of his time to training physicians and post-doctoral fellows in the conduct of clinical and translational research.
He is survived by his wife Gina Marie (Fantasia) Vita, a daughter, and a son.
To make a donation in memory of Dr. Vita, please contact the BUMC Development Office at 617-638-4570 or busmeddev@bu.edu.

In Memoriam
Joseph A. Vita, MD
CAMPUS NEWS

CAMPUS VIEWS

The Medical Campus Grows

From its earliest days when the Medical Campus included the New England Female Medical College (which became Boston University School of Medicine in 1873), and the Massachusetts Homoeopathic Hospital (now the School of Public Health) to the present day, the Medical Campus has maintained its presence in the South End of Boston. Still centered on Talbot Green, the Schools of Medicine, Public Health, Dental Medicine, and Division of Graduate Medical Sciences have expanded and flourished to encompass 80 acres.

The Hospital Grows

Boston City Hospital, now Boston Medical Center (BMC), was founded in 1855 and “intended for the use and comfort of poor patients, to whom medical care will be provided at the expense of the city, and … to provide accommodations and medical treatment to others, who do not wish to be regarded as dependent on public charity.” BMC, now a 482-bed facility and New England’s largest safety net hospital, “is devoted to the proposition that every person, regardless of his or her social or economic circumstances, deserves the best health care.”

Early 1860s Original Design

Late 1860s Boston City Hospital

Late 1890s Boston City Hospital

2014 Boston Medical Center
T HE NERVOUS SYSTEM—the brain, the spinal cord, and the sensory organs and the nerves that connect them together and to other parts of the body—is the human body’s communication “super highway.” Nervous system or neurological disorders can result from genetic defects, physical damage due to trauma or toxicity, infection, or simply aging.

Understanding the structure, function, and factors that affect the nervous system—the basis of neuroscience—is crucial to both preventing and treating neurological disorders. At BUSM, the Jack Spivack Excellence in Neurosciences Awards help fund the research of outstanding BUSM faculty members conducting either clinical or basic research in neurological disorders including Parkinson’s disease (PD), Alzheimer’s disease (AD), and Chronic Traumatic Encephalopathy (CTE).
According to the World Health Organization, neurological disorders affect up to one billion people worldwide and kill an estimated 6.8 million people every year. In the United States, approximately 50,000 new cases of Parkinson’s disease are diagnosed each year. The Alzheimer’s Association (AA) reports that 5.4 million Americans suffer from Alzheimer’s disease; by 2050, they believe that number will jump to between 11 and 16 million. In addition to the $7 million bequest he made to support The Spivack Center for Clinical & Translational Neuroscience, business man Jack Spivack established the neuroscience awards in 2013 to recognize and bring needed resources to faculty across multiple disciplines. A founding member of the BUSM Dean’s Advisory Board, Spivack has long been interested in behavior and brain disorders that profoundly affect human health and well-being from the newborn to the aged.

Several BU School of Medicine (SUM) faculty members named 2015 Spivack Scholars represent a group of basic science and clinical investigators who work in the context of the causes and treatment of human neurologic, psychiatric, and developmental brain disorders.

Medical geneticist Lindsay Farrer, PhD, is the 2015 Senior Spivack Scholar. A professor of medicine, neurology, and psychiatry, he is chief of the Biomedical Genetics Section of the BUSM Department of Medicine. He also is a professor of epidemiology and biostatistics at BU School of Public Health and serves as director of the BU Translational Training Program in Addiction Science. He directs analysis for the Alzheimer Disease Genetics Consortium, which he co-founded in 2000, and serves on the executive committee of the Alzheimer Disease Sequencing Project. With more than 350 publications on genetic risk factors for neurodegenerative and other chronic diseases, he and his group also have localized genes causing Wilson disease, Machado-Joseph disease, Waardenburg syndrome, hypertension, sensorineural deafness, and osteoarthritis.

“Boston University is home to many highly accomplished and internationally recognized neuroscientists,” notes Farrer. “My scientific achievements are the result of joint efforts with many researchers at BU and elsewhere, testifying to the value and importance of collaborative science.”

The seven BUSM faculty members named 2015 Spivack Scholars study both genetic and environmental factors involved in neurodegenerative disorders. Cameron Bryant, PhD, assistant professor of pharmacology & experimental therapeutics and psychiatry and director of the BUSM Laboratory of Addiction Genetics, uses animal models to determine the genetic basis of behavioral and molecular traits related to substance dependence. Through this research, he aims to improve the understanding of the neurobiological mechanisms of addiction and to translate the findings into treatment and prevention strategies in humans.

Bryant is currently examining the genetic and neurobiological factors that influence the addiction liability of opioids and other substances of abuse using statistical genetics and analysis of gene expression in the brain to reveal the molecular mechanisms.

“Substance abuse disorders are heritable psychiatric conditions whose genetic basis remains largely unknown,” explains Bryant. “His efforts have produced a number of vital findings with direct translational impact on treatments for neurological disorders, including the discovery of a beneficial role of caspase protein inhibitors in the treatment of spinal cord injury and neurological diseases.”

His work employs a diverse and powerful combination of experimental techniques to study the basic biology of nerve damage and regeneration,” says David Atkinson, PhD, professor and chair of physiology & biophysics and research professor of biochemistry. “Dr. Gabel has developed a uniquely flexible and powerful experimental system by combining an array of advanced biophotonic techniques with the unique genetic capabilities of the nematode worm C. elegans, a powerful model animal with a long history of translational research.”

Using a femtosecond laser, Gabel can dissect individual nerve fibers within intact adult C. elegans and measure the subsequent nerve regeneration. “For our part, we are interested in understanding the molecular mechanisms of axonal regeneration and the ability to enhance regeneration with optical stimulation,” said Atkinson. “His research employs a diverse and powerful combination of experimental techniques to study the basic biology of nerve damage and regeneration.”

Lindsay Farrer, PhD

“My scientific achievements resulted from joint efforts with many researchers at BU and elsewhere, testifying to the value and importance of collaborative science.”

The Spivack Center facilitates interactive, multidisciplinary, and collaborative research that crosses classic institutional boundaries.
Kasthuri as a postdoctoral fellow in the Lichtman Laboratory at Harvard developed and collaborated on much of the connectomics technology currently in use. The data set he is presently developing could be larger than any collected to date.

In addition to his work being featured on National Public Radio, Kasthuri has lectured on connectomics at MIT, the Max Planck Institutes in Germany, and the Nieman Fellowship for Journalism at Harvard.

“The Spivack Award is a great honor, and means that the University is willing to support a broad vision of the next generation of brain discovery science and invest in young scientists,” says Kasthuri. “I hope to use the collaborative nature of the Spivack Center to both push the boundaries of what is known about brains in health and diseases, and to bridge the scales over which we study brains from cognition to synapses.”

・ A behavioral neurologist who cares for patients with memory and other cognitive and behavioral disorders at the Boston Center for Memory, Jesse Mez, MD, is an assistant professor of neurology and associate director of the BU Alzheimer’s Disease Center (ADC) Clinical Core. In this capacity, he helps make clinical consensus diagnoses for ADC participants and provides clinical evaluations for ADC clinical trials. His research applies statistical genetics and the role of genetic factors in families and populations—as well as interaction with environmental factors—into various forms of dementia. He particularly studies the role of genetic and non-genetic factors in atypical clinical presentations of Alzheimer’s disease, and how genetic factors interacting with trauma influence dementia risk.

Mez heads the clinical arm of the NIH-funded UNITE study, which examines the clinical and pathologic correlation of Chronic Traumatic Encephalopathy; Ann McKee, MD, BUSM professor of neurology and pathology, neuropathologist, and director of the BU Chronic Traumatic Encephalopathy Center, is the study’s principal investigator; her work has highlighted the link between brain injury and the neurologists and neuropathologists who are CTE most prominently diagnosed in deceased football players. Mez interviews family members and other caregivers of these deceased athletes as well as military veterans.

“As a neurologist with clinical training in aging and dementia and research training in genetics, I try to make connections between genotype, pathophysiology, and clinical presentation,” says Mez. “The research projects we will be conducting over the next year will include questions such as, ‘What are the genetic markers that account for variation in an AD patient’s neuropathologic profile?’ ‘Can including known non-genetic risk factors for AD in disease modeling help us hone in on new genetic markers for AD in African Americans?’ ‘Are there genetic markers that explain why only a subset of individuals with mild repetitive brain trauma go on to develop CTE?’ And, ‘What are the clinical signs and symptoms that best predict CTE pathology?’”

・ While exercise is necessary to a healthy lifestyle for all ages, it is especially key for aging populations in order to help mitigate the cognitive and neurological declines associated with the progressively aging brain.

“The problems of mTBI, CTE, and PTSD are paramount to the nation at this time, and Dr. Spielberg’s work promises to make outstanding contributions to new knowledge to help us understand how to best provide care to returning Operation Iraqi Freedom and Operation Enduring Freedom veterans.”

The seven BUSM faculty members named 2015 Spivack Scholars work in the context of the causes and treatment of human neurologic, psychiatric, and developmental brain disorders.

A 2005 graduate of BU’s doctoral Brain, Behavior & Cognition program at the Department of Psychological & Brain Sciences, Schoon completed her post-doctoral training at BC in cognitive neuroscience and exercise physiology. “This award will allow me to complete my ongoing research project examining the effects of aerobic exercise and fitness on cognitive brain aging using state-of-the-art neuroimaging techniques,” says Schoon. “As a Spivack Scholar and junior member of the faculty, I will accomplish broadening my network of colleagues and collaborators and more clearly define my scientific niche as a clinical and translational cognitive neuroscientist both at BUSM and in the broader clinical and translational neuroscience community. I especially appreciate that my scholarly work is being recognized early in my academic career. It tells me, simply put, that my work matters.”

・ It’s well recognized that exposure to trauma can lead to the development of psychiatric symptoms, which may become long-lasting and disabling; it also has been determined that exposure to trauma changes brain physiology.

Jeffrey Spielberg, PhD, associate professor of psychiatry, studies how brain networks become disturbed in individuals who are exposed to traumatic events and develop pathology as a result, including Post-traumatic Stress Disorder (PTSD) and mild Traumatic Brain Injury (mTBI). Associate director of neuroimaging analyses development in the Neuroimaging Research for Veterans (NeRVe) Center and principal investigator of the Motivation & Executive Function in Trauma & Anxiety lab—both located at VA Boston Healthcare System—Spielberg was recruited to BUSM and VA Boston in 2013 from his post-doctoral fellowship at University of California Berkeley, where he worked with a distinguished neuroimaging research group. His earned his doctorate from the Beckman Institute.

“I hope to contribute to the important mission of the Spivack Center, which is to shed light on neural circuitry and its contribution to brain-based disorders,” says Spielberg. “As a Spivack Scholar for 2015, I plan to study the way in which neural white matter pathways become disrupted in mTBI and PTSD, specifically in male and female veterans of the current wars. I also will collaborate with others at VA Boston in efforts to understand the genetic basis of individual variation in brain networks as they pertain to mTBI and PTSD.”

“With the support of Jack Spivack, these outstanding researchers can continue discovering and making contributions to the understanding of the human nervous system,” says Dean Karen Antman, MD. “Their work is expanding the horizons of neuroscience research and creating avenues for developing treatments for neurological disorders.”
New Light Shed on Genetics of Memory Performance

In the largest study of the genetics of memory ever undertaken, an international research team including BUSM scientists has discovered two common genetic variants that are believed to be associated with memory performance. Published in the journal Age, the findings are a significant step towards better understanding how memory loss is inherited.

The study involved 11,400 participants, a group called the CHARGE (Child Health and Development) consortium, and was designed to test whether genetics play a role in memory performance. The research team also assessed for genes, called epigenetic marks, which may influence the expression of genes associated with memory performance. They found two genes, one in the Apolipoprotein E (APOE) region and another in the 16p11.2 region. These genes had been previously linked to memory performance and Alzheimer's disease, respectively.

According to the researchers, these findings support the idea that genetics play a role in memory performance. They also suggest that future studies should focus on understanding how these genetic variants influence brain function and behavior.

Mothers with the highest mobile device use were significantly less encouraging toward their children.

BUSM researchers found mothers who used their mobile device the most had significantly fewer verbal and nonverbal interactions with their children than mothers who had no or negligible use while eating. Maternal use of mobile devices was associated with 20 percent fewer verbal and 39 percent fewer nonverbal interactions. Mothers with the highest mobile device use had significantly fewer encouragements toward their children.

“Our data add new evidence to the growing body of literature on the potential negative effects of mobile device use during mealtime,” said corresponding author Jenny Radesky, MD, BUSM clinical instructor in development-behavioral pediatrics and a former fellow in pediatrics at BMC.

Clinical assessments and research indicate that individuals with alcohol use disorders frequently suffer from severely disrupted sleep. This can occur when people are actively drinking, when they are going through withdrawal, or when they are in the early stages of recovery.

“Sleep-wake disturbances can last for months or even years after someone stops drinking, which indicates that chronic alcohol abuse could cause long-term negative effects on sleep,” said lead author Datta, PhD, professor of psychiatry and neurology, who served as the article’s senior author.

The researchers hypothesized that chronic alcohol use leads to dysfunction of cholinergic cells (cells that synthesize neurotransmitter acetylcholine) in an area of the brain called the pedunculopontine tegmentum, which is involved in regulating many aspects of sleep. As a result of the prolonged alcohol exposure, the activity of chemicals that excite neurons in the brain increases while simultaneously decreasing the activity of a chemical that inhibits this neuron activity. This results in the overactivity of chemicals in the brain and causes a disruption in the normal sleep cycle.

“Identifying the specific mechanisms that lead to changes in brain activity will allow us to develop targeted medications, which could help treat people suffering from sleep issues related to alcohol use disorders,” Datta said.

Now, the authors have demonstrated that the Hippo pathway also represents the underlying pathway that prevents tetraploid cells from proliferating and causing tumors.

BUSM researchers report that a tumor suppressor pathway—called the Hippo pathway—is responsible for halting abnormal cell division. The LATS2 gene, an upstream gene responsible for halting abnormal cell division, was an upstream gene in the lineage of abnormal cells and tumor suppressor pathways, like that mediated by the well-known 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.

Normal human cells contain 23 pairs of chromosomes; the number doubles to 46 as cells prepare to divide. At the end of a normal cell division cycle, these chromosomes produce two identical cells with 23 pairs of chromosomes each. Sometimes, however, errors occur during division and cells fail to divide properly, resulting in giant cells with double the number of chromosomes known as tetraploid cells. Normally, p53-dependent pathways stop these tetraploid cells from proliferating; this response is critical because tetraploid cells that escape detection can facilitate cancer development. Recent studies suggest that as many as 40 percent of all solid tumors have passed through a tetraploid stage at some point during their development, thus, there has been great interest in understanding how a cell “knows” it has a tetraploid complement of chromosomes and is in need of tumor suppression.

Using a technique known as genome-wide screening, the scientists systematically depleted every human gene from tetraploid cells in order to discover which ones were important to prevent proliferation. They found that when only 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 activates the Hippo tumor suppressor pathway, the same pathway our bodies use to ensure our vital organs don’t grow out of control. Now, the authors have demonstrated 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 Shamim and Ashraf Dabholkar Brain Cancer Research Laboratories at BUSM.

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

Study Finds Cardiorespiratory Fitness Improves Memory in Older Adults

Older adults who have greater heart and lung health also have better memory recall and cognitive capabilities. The study, which appears online in the Journal of Research

Mobile Device Use Leads to Fewer Interactions between Mother and Child during Mealtime

Mothers who use mobile devices while eating with their young children are less likely to have verbal, nonverbal, and encouraging interactions with them. These findings, which appear online in Academic Pediatrics, may have important implications about how parents balance attention between their devices and their children during everyday life.
Atherosclerosis is a common human disease associated with heart attack and stroke. Certain bacteria as well as high-fat diet are associated with an increased risk for atherosclerosis. One of which, Porphyromonas gingivalis, is found in the mouth of humans with periodontal disease; another, Chlamydia pneumoniae, causes pneumonia.

"Given the prevalence of diet-induced obesity and infection with Porphyromonas gingivalis and Chlamydia pneumoniae in the general population and the likelihood of co-morbidity of obesity with chronic or recurrent infection with these common pathogens, these findings suggest that the development of atherosclerosis in humans is likely more complex and multifactorial than previously appreciated," explained senior author Caroline Attaizo Genco, PhD, BUSM professor of medicine and microbiology. "These findings may explain how specific infections or a high-fat diet may cause atherosclerotic plaques to undergo changes which affect their size and stability and may ultimately lead to a heart attack."

This study was funded by Boston University.

**Study of Former National Football League Players Finds Tackle Football before Age 12 Increased Risk of Memory and Thinking Problems Later in Life**

According to a study published in the January 28, 2015, issue of Neurology, the medical journal of the American Academy of Neurology, former National Football League (NFL) players who participated in tackle football before the age of 12 were more likely to experience memory and thinking problems in adulthood.

"Memory is needed to explore the specific mechanism of how physical fitness enhances brain structure and function as well as to clarify the impact of specific exercise programs (strength, aerobic, or combined training) or dose of exercise (frequency, intensity, and duration) on a range of cognitive functions," he said. This work was supported by the Department of Veterans Affairs, Rehabilitation Research & Development Service, and Clinical Science Research & Development Service. Assistance with participant recruitment was provided by the Massachusetts Alzheimer’s Disease Research Center and Boston University’s Alzheimer’s Disease Center.

**Gene Expression Changes in Vascular Tissue Due to Infection and Diet Identified**

Findings may lead to individualized treatment for atherosclerosis. Although it has been shown that a diet high in fat and exposure to certain bacteria can cause atherosclerosis (the buildup of fats, cholesterol, and other substances on artery walls which can obstruct blood flow), the first-time researchers have identified distinct gene pathways that are altered by these different stimuli. These findings, which currently appear in BMC Genomics, suggest that future therapies for this disease may need to be individualized.

**For the first time researchers have identified distinct gene pathways that are altered by these different stimuli.**

**Review Article Offers Evidence on the Biological Nature of Gender Identity**

Stern also pointed out that because the study focused on NFL players, the results may not be applicable to the general public and more research is needed before policy changes are implemented. "There are tremendous benefits of participating in youth team sports. The goal is to make them safer."

Researchers found that older adults who had higher CRF at 65 or 75 years of age were more likely to perform better on executive function tests compared with younger adults. These findings demonstrate that the effect of CRF is not limited to executive function but also extends to long-term memory. "Our findings that CRF may mitigate age-related cognitive decline is appealing for a variety of reasons, including that aerobic activities to enhance CRF (walking, dancing, etc.) are inexpensive, accessible, and could potentially improve quality of life by delaying cognitive decline and prolonging independent function," explained corresponding author Scott Haynes, PhD, assistant professor of psychiatry at BUSM and associate director of the Neuroimaging Research for Veterans Center at the VA Boston Healthcare System.

"More research is needed to explore the specific mechanism of how physical fitness enhances brain structure and function as well as to clarify the impact of specific exercise programs (strength, aerobic, or combined training) or dose of exercise (frequency, intensity, and duration) on a range of cognitive functions," he said. This work was supported by the Department of Veterans Affairs, Rehabilitation Research & Development Service, and Clinical Science Research & Development Service. Assistance with participant recruitment was provided by the Massachusetts Alzheimer’s Disease Research Center and Boston University’s Alzheimer’s Disease Center.

**A group of researchers including Boston University School of Medicine analyzed genetic data and MRI scans collected from 30,717 individuals.**

"This paper represents the first comprehensive review of the scientific evidence that gender identity is a biological phenomenon," said corresponding author Joshua D. Safer, MD, BUSM associate professor of medicine and molecular medicine and director of the Endocrinology Fellowship Training Program. "As such, it provides one of the most convincing arguments to date for all medical providers to gain the transgender medicine skills necessary to provide good care for these individuals."

According to the researchers, the article has some limitations due to the small number of individuals studied, thus conclusions should be drawn with caution. Safer recommends that further research should focus on specific biologic mechanisms for gender identity.

**There is now increasing evidence of a biological basis for gender identity that may change the medical perspective on transgender medicine and improve health care for these patients.**

**Study Identifies New Genes and Pathways that Underlie Normal Brain Development**

The identification of genetic variants that influence the structure of the brain may provide insight into the causes of variations in human brain development. Published in the journal Nature, these findings may also help determine the genetic processes that underlie neuropsychiatric diseases.

Portions of the human brain known as the subcortical regions are involved in functions associated with movement, learning, memory, and motivation; alterations to the structure of these regions can lead to abnormal behavior and disease. To investigate how common genetic variants affect the structure of these brain regions, a group of researchers including Boston University School of Medicine analyzed genetic data and MRI scans collected from 30,717 individuals. They found a number of genetic variants that influence the volume of subcortical brain structures, many of which seem to exert their effects through known developmental processes. One genetic variant found to be linked to changes in the volume of the hippocampus, a key region involved in learning and memory, is also associated with schizophrenia.

The neurology working group of the Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE) consortium is led by Sudha Seshadri, MD, BUSM professor of neurology and senior investigator at the Framingham Heart Study. "This is another example of the wide range of new scientific discoveries that continue to emerge from the invaluable Framingham...
Researchers have demonstrated that binge eating, a neuropsychopharmacology, also found that the nucleus accumbens, a specific area in the brain responsible for addictive behaviors, facilitates the effects of memantine. "We found that memantine, which blocks glutamate NMDA receptors, blocks binge eating of junk food, blocks the strength of cues associated with junk food, and blocks the compulsivity associated with binge eating," said senior author Pietro Cottone, PhD, BUSM associate professor of pharmacology and psychiatry and co-director of the Laboratory of Addictive Disorders.

This work was supported by grants from the National Institute on Drug Abuse and the National Institute of Mental Health, the BU Peter Paul Career Development Professorship, the McManus Charitable Trust, and Boston University's Health, the BU Peter Paul Career Development Professorship, the Institute on Drug Abuse and the National Institute of Mental Health, especially since memantine is already approved for development of new methods or protocols to interpret forensic data. We are hoping to examine the degree of accuracy and reliability of methods used by forensic scientists in order to achieve a more complete understanding of the basis for interpretation," explained Grigoriadis. She believes that the continued development of these solutions is expected to benefit the forensic DNA discipline and will lead to the development of new methods or protocols to interpret forensic data from physical evidence.

BU/BMC Receives Grant to Create First Open Access Lung Stem Cell Repository
BU’s Center for Regenerative Medicine (CReM) and BMC have been awarded a federal grant to establish the first-of-its-kind stem cell repository that researchers across the country can access for free. The five-year, $2.7 million grant from the National Heart, Lung, and Blood Institute, the BU Petter and Elsa C. Kado Research Institute, received a $2.5 million award from the National Heart, Lung, and Blood Institute. The grant will allow CReM investigators to offer training courses on the different methodologies for the generation of human embryonic stem cells and induced pluripotent stem cells. The Repository, which will be housed at CReM’s new state-of-the-art laboratory on the Medical Campus, will provide access to iPSCs for patients with both normal and disease lungs. The cells will be expanded, frozen, and shipped to investigators who request them for use in their own laboratories. The grant also will allow CReM investigators to offer training courses on the different methodologies for the generation and maintenance of iPSCs and the proven techniques to differentiate them into adult lung cells.

"This grant will support the widest possible sharing of our cells with laboratories that manipulate human cells in different ways, and this will enhance innovation in our field," said Dr. Zang. "We are very excited to be able to create this resource and make it available to the scientific community.”

This project is expected to benefit the research community and provide the most rapid path for a national collaboration to develop new disease treatments using this state-of-the-art technology," said CReM Director Darrell Kotton, MD, who will serve as co-principal investigator of this project. "We feel strongly about the power of collaboration, and through our center’s ‘Open Source Biology’ philosophy, we can accelerate our efforts to heal the world. This grant will help us do just that.”

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BU Researcher Awarded Grant to Pilot Autism Intervention
A BU School of Public Health and School of Medicine researcher will lead a $3 million study aimed at addressing racial and economic disparities in the early identification and treatment of autism spectrum disorder (ASD) among young children. The five-year grant from the Autism Society of America and the National Institute of Mental Health (NIMH) will allow a team led by Emily Feinberg, PhD, RN, associate professor of community health sciences at BUSPH and associate professor of pediatrics at BUSM, to test an intervention at three urban primary care centers: Boston Medical Center, Children’s Hospital of Philadelphia, and Yale University. Emerging evidence shows that ASD can be reliably diagnosed diagagnostically, and that early screening and intervention can improve outcomes. However, service delivery changes that support early identification and linkage to services ‘have not kept pace with advances in diagnosis and treatment,” Feinberg said. “Barriers are heightened for low-income and minority children with ASD, and contribute to disparities in age of diagnosis, timeliness of service provision, and access to quality services. Feasible, culturally appropriate interventions are needed to reduce these disparities and improve the developmental outcomes of children with ASD.”

"There have been strides in reducing tuberculosis mortality rates worldwide, but it remains one of the most deadly diseases,” said Dr. Elnner and colleagues proposed to test high-risk cohorts of households with active cases of TB and the Massachusetts Institute of Technology, Seattle BioMedical Research Institute, Rutgers University, and the Nucleo de Doencas Infecciosas da Bahia in Brazil. “There have been strides in reducing tuberculosis mortality rates worldwide, but it remains one of the most deadly diseases.”

Individuals with binge eating disorder have a very poor quality of life and a decreased life span.

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An update on the progress of the seven-year, $200 million campaign for BUSM:

$135.3M Raised
$112.4M Permanently Restricted
$22.8M Current Use
26 Months Remain in the Campaign
More than $13.8M Raised for Student Scholarships
$3.18M in School of Medicine Annual Fund Support
1,991 Alumni Participating in Campaign
$91.6M Raised from Corporations and Foundations

Campaign Impact: The Campaign for BU and the School of Medicine

With your help, the next generation of clinicians, medical leaders, and researchers can join us in turning possibility into reality. There are so many ways to have an impact. You can help students receive a cutting-edge education that will prepare them for rewarding careers and give them the tools and resources they need to become trailblazers in their chosen fields. Or, you can help us support our dedicated faculty, who conduct groundbreaking research while bringing excitement to the classroom. No matter your contribution, you can have a hand in advancing medical education and research.

See the impact your fellow donors have made (right), or read more about our campaign at bu.edu/supportingbusm to learn how you can make a difference.

Impact by the Numbers

Ann Cea, MD (MED’67) interviewed for medical school (not her BUSM interview) and was told that the school only took four females a year, she knew she was facing a tough environment—but that didn’t stop her.

Her father, the late Nicholas Cea (MED’31), had always encouraged her to persevere. “The fellowship and mentoring I received during my training at BUSM helped me harness my innate abilities, inspired me, and gave me an education that cannot be learned from textbooks or lectures alone,” Cea reflects.

To recognize her BUSM education and honor her father and her daughter, Kristen Cea Lachance (MED’96), Dr. Cea established The Cea Scholarship in 2014 with a gift of $100,000 to be paid over five years. The scholarship will support one or more female students during their third and/or fourth year of medical school.

With three generations of the Cea family ties to the School of Medicine. “From the time I attended medical school until the present, I have considered myself privileged to have received an education at Boston University School of Medicine,” Cea wrote in her endowment letter to Dean Antman. “BU not only identifies those who are outstanding academically, but recognizes others, like myself, who possess characteristics that allow them to develop rapport with people, excel at patient care, and facilitate medical advancement through their leadership.”

By her own admission, Dr. Cea lacked assertiveness when she began medical school. With mentors like Dr. William McNary, then associate dean of students, and the late Dr. Elizabeth Moyers, professor of anatomy, she learned to better question situations, express herself, and share her strengths. “I believe students should assert themselves, display exceptional clinical skills, show compassion, and be team players,” she says. “Those are the kind of characteristics my father had and my daughter has, and I want whoever receives the Cea scholarship to have them, too.”

The scholarship is only the most recent demonstration of Dr. Cea’s generosity. A member of BUMS’s Chester F. Keefee, MD Society and a Lifetime Member of the Dean’s Club, she is a longtime benefactor of the William F. McNary Student Learning Center, the Aram Chobanian Distinguished Professorship and Scholarship Funds, and the Medical Student Residence. Dr. Cea also is a member of the Dean’s Advisory Board.

A radiation oncologist with expertise in mammography and general radiology, Dr. Cea co-founded Rye Radiology Associates in Rye Brook, New York and served as medical coordinator for the New York State Department of Health in the Office of Professional Medical Conduction. A president of the Westchester County, New York Medical Society, she was the first woman elected president of the Medical Society of the State of New York. She is a fellow of the American College of Radiology and the American College of Radiation Oncology and was named “Top Doctor” in the Tri-State Area and “Top Radiologist” by the Consumer Council of America.

“It is an honor to be able to help someone aspire to meet their goals, as my father fostered my education and I did my daughter’s,” Cea says.

A alumna of Boston University School of Medicine, Cea enjoys spending time with her family, who reside in her home town of Rye, New York. In addition to her professional and philantropic activities, she is a member of the New York State Medical Society and a Lifetime Member of the Medical Society of the State of New York. She is a fellow of the American College of Radiology and the American College of Radiation Oncology.

“Many people have contributed in some way to the success of my career,” Dr. Cea reflects. “I have been particularly grateful for these thoughtful and strategic gifts that enhance the living and learning environment for our students and faculty.”

Spotlight on Gifts

Since the start of the campaign, 16 individuals have named the School of Medicine a benefactor as part of their estate planning. Twenty Charitable Gift Annuities have been established to support scholarships and research funds, and donors have utilized IRA Charitable Rollovers 48 times to make a lasting impact at BUSM immediately. We are very grateful for these thoughtful and strategic gifts that enhance the living and learning environment for our students and faculty.
Alumni Weekend 2015: BUSM Alumni Reconnect, Reminisce

Alumni from around the country gathered for a weekend of events that included class reunions and the 140th Annual Meeting and Banquet. Among many highlights, Christine Hunter (MED’80), chief medical officer for the US Office of Personnel Management, spoke about the “Fourth Aim” in providing clinical service (i.e., the care team and the provider’s self-care are essential to consider in order to fulfill the demands of today’s basic patient care expectations), and James Brust (MED’68) gave his ever-popular lecture on the early history of BUSM.

Attendees also enjoyed student-led tours of the Student Residence and seeing firsthand all the exciting new developments that have taken place in the Instructional Building, such as the state-of-the-art testing center on the 11th floor and the Simulation Lab in the Department of Medicine, the Gross Anatomy Lab, the Alumni Medical Library, and the History Wall featuring significant individuals in the School’s extraordinary heritage.

We are grateful for your interest and your support. And as always, our door is open! Please come by and say hello.

Jean E. Ramsey
Associate Dean for Alumni Affairs
Associate Professor
Ophthalmology and Pediatrics
Vice Chair of Education and Program Director
BUSM and BMC Department of Ophthalmology
Barry Manuel Honored by the Massachusetts Medical Society

BARRY W. MANUEL, MD (CAS’54, MED’58), BUMS associate dean for Continuing Medical Education from 1980 to 2014 and professor of surgery from 1982 to 2014, was honored by the Massachusetts Medical Society with its 2015 Award for Distinguished Service to the Massachusetts Medical Society. The honor is given each year to a member of the Society who has made a leading contribution to the practice of medicine over a lifetime and who has made significant contributions to the goals of the Society.

Manuel was honored with the organization’s Lifetime Achievement Award in 2010.

A member of the Medical Society since 1962, Manuel has a long and distinguished record of service with the organization. The Society’s president in 1990–91, he has also been a member of its House of Delegates and Board of Trustees, and served on many of the organization’s committees, including the Committees on Administration and Management, Finance, Professional Liability, and Occupational Health, all of which he chaired at various times over the years.

His activity in organized medicine extended to the national level. He was a member of the Board of Governors of the American College of Surgeons from 1979 to 1985, chair of the Board of Governors Committee on Professional Liability; chairman of the Regents Committee on Patient Safety; and president of the College’s Massachusetts chapter in 1982–1983. For six years, he was also a member of the Massachusetts delegation to the American Medical Association.

While at BUSM, Manuel was executive director of the Alumni Association for more than 35 years and was faculty councilor to Alpha Omega Alpha, the National Honor Medical Society, for 23. Throughout his tenure, he has also served as a member or chairman of many medical school committees and as a member of the School’s Executive and Dean’s Committees.

Jean E. Ramsey Honored by the Massachusetts Medical Society and the Commonwealth of Massachusetts

JEAN E. RAMSEY, MD (BUSM) Associate Dean for Alumni Affairs Jean E. Ramsey, MD (MED’90, MPH’08), was honored by the Massachusetts Medical Society with its Committee Chair Service Award, which recognizes exceptional leadership and service to the Society, the statewide professional association of physicians.

Ramsey was chosen for her years of service on the MMS Committee on Inter-specialty, which facilitates communication, cooperation, and coordination among the medical specialty societies of Massachusetts, their members, and the Massachusetts Medical Society.

Ramsey also received the 2015 Dr. Allen Crocker Health Services Award from the Commonwealth of Massachusetts Executive Office of Health and Human Services, Department of Developmental Services, presented annually in recognition of an individual or organization that mirrors the life of Dr. Crocker and his respect for and value of individuals with a disability. Ramsey works in including individuals with disabilities in her clinical practice, increasing the cadre of people who joyfully and compassionately care for individuals with disability, focusing on individual capability rather than disability, and advocating for equity and social justice.

Ramsey is associate professor of ophthalmology and pediatrics, vice chair of education, and residency program director for the BMC Department of Ophthalmology, and a BMC physician. Board-certified in ophthalmology, she specializes in pediatric ophthalmology and the vision disorder of strabismus.

She served as vice president of the BUSM Medical Honor Society, Alpha Omega Alpha, and is a past president of the Massachusetts Society of Eye Physicians and Surgeons. Her previous honors include the American Academy of Ophthalmology Senior Achievement Award and the Advocacy Award in addition to being recognized by Prevent Blindness America with the Distinguished Service Award for her work in children’s vision.
Two BUSM Graduates Chosen for New England Journal of Medicine Editorial Fellowships

BUSM graduates MaryAnn Wilbur, MD, MPH, and James Yeh, MD, have been chosen for prestigious New England Journal of Medicine (NEJM) editorial fellowships. With more than 600,000 readers in 177 countries, NEJM is the most widely read and cited general medical journal in the world and has a rigorous peer-review and editing process. The yearlong program involves fellows in the day-to-day editorial activities of the journal, including working on journal articles and pursuing an independent project.

“The fellowships help us inject new ideas into the journal,” says Jeffrey Drazen, MD, NEJM’s editor-in-chief. “We are interested in hearing each fellow’s fresh perspective, and we hope their relationships with us continue well after their fellowships end.”

MaryAnn Wilbur, MD, MPH

Chief resident in obstetrics and gynecology at Johns Hopkins Hospital, MaryAnn Wilbur served as the case manager for the Grow Clinic at Boston Medical Center (BMC), BUSM’s primary teaching hospital, before being accepted to medical school. “For me, medicine is the perfect marriage of science and advocacy, and BUSM was the natural choice for my medical education,” she said. “I had been working on campus at BMC, which cares for the underserved populations of Boston and shares my personal mission.” As a co-founder of the BU Advocacy Training Program, Wilbur also completed a Master’s in Public Health, “because I recognized the importance of understanding the social determinants of health and wanted a framework on which to build when advocating for marginalized populations.”

Wilbur co-authored a number of published articles while a medical student and learned about the NEJM fellowship by fulfilling a BUSM elective at the journal. “NEJM is a prestigious, periodical, and I hope to learn more about how editors review medical literature, a key to success publishing in the future,” she says. “I also am very interested in the NEJM ‘Perspective’ articles, which strongly influence the politics of medicine and will help facilitate my career as a physician advocate.” After completing the fellowship, Wilbur plans to stay in Boston to focus on women’s health while caring for the city’s underinsured populations.

James Yeh, MD

James Yeh practices urgent care medicine at Brigham and Women’s Hospital in Boston and is a hospitalist on the inpatient medicine service. He completed his internal medicine residency at Cambridge Hospital and is a research fellow in general internal medicine through the Harvard Medical School faculty development program. He also is pursuing a Master’s in Public Health in Clinical Effectiveness at Harvard School of Public Health. He has authored and co-authored a number of research articles and book chapters and edited several books.

Yeh serves as deputy editor for the Harvard Public Health Review and as an ad hoc manuscript reviewer for the Journal of General Internal Medicine, as contributing editor to the DynaMed EBMM Journal, and was an abstract reviewer for the American College of Physicians Annual Meeting 2010–2013.

“I am interested in evidence-based medicine and knowledge translation, and I hope to gain insights in how a medical journal can help communicating medical research into clinical practice,” he says of his NEJM fellowship. He also is interested in understanding the effectiveness of the communication process about drug effectiveness and safety, and in the FDA’s regulatory policies and drug risk communication. He has received HMS awards for excellence in teaching and plans to continue in academic medicine and research along with patient care.

Your Gift Opens Doors at BUSM

Take Tania Torres-Sanchez, 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

In Memoriam

1949 • Maurice (Bios) Vanderpol of Needham, Massachusetts, on October 19, 2014, at the age of 92. Dr. Vanderpol was born in Amsterdam, Netherlands. A psychiatrist, he served on the staff of McLean Hospital for more than 30 years and on the board of the Boston Psychoanalytic Institute. He is survived by his wife and two children.

1951 • Bertram Chomick of Philadelphia, Pennsylvania, on December 9, 2014. A following medical school, he joined the navy as a lieutenant for the Battalion Surgeon 5th cavalry regiment and served in the Korean War, where he was wounded in action and received the Purple Heart. After his discharge from the Navy, he completed his residency training in internal medicine at Philadelphia General Hospital and was appointed chief of endocrinology at Temple University Medical School. He served terms as president of the Philadelphia Medical Society and Temple University’s Medical Faculty Senate and retired from Temple in 2012 as professor emeritus. He was preceded by his wife of 57 years, Beverly, and is survived by three sons and 10 grandchildren.

1954 • Dr. Robert J. Carey of Arlington, Massachusetts, on November 8, 2014, at the age of 85. Dr. Carey passed away at home with his family at his side. He was a devoted husband, brother, father, and grandfather, as well as a caring physician to the Arlington community for half a century. Dr. Carey and his wife travelled to Bolivia, Peru, and Ecuador to bring medical care and supplies to underserved populations in those countries for more than 30 years. He is survived by his wife of 60 years, Mary, five children, and 12 grandchildren.

BUSM Alumni | CLASS NOTES

1970

Lorraine Kea of Westlake, Ohio, writes, “After 39 years, I have retired from teaching at the Jack, Joseph, and Morton Mandel School of Applied Social Sciences, Case Western Reserve University in Cleveland. I will continue as the co-director of the Center for Evidence-Based Practices at Case, a joint program between the Mandel School and the Department of Psychiatry, School of Medicine at Case.”

1974

Alice Rothchild writes, “I went on to do a medical internship at Lincoln Hospital in the South Bronx and an ob-gyn residency at Beth Israel Hospital (now BIDMC) in Boston. After decades of active practice, mostly at Harvard Vanguard Medical Associates, I turned my attention to both medical and human rights issues. I produced a documentary film that premiered last year, Voices Across the Divide, wwwvoicesacrossthedivide.com, and in September 2014 my second book was published, On the Brink: Israel and Palestine on the Eve of the 2014 Gaza Invasion.” (See page 14.)

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Thanks to you, money didn’t make this choice for me.”

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Calendar 2015–2016

AUGUST 3
White Coat Ceremony and Parents Reception
BUSM Talbot Green

SEPTEMBER 24
Annual Scholarship Dinner with Dean's Advisory Board
Hotel Commonwealth, Boston

SEPTEMBER 26
Dean's Club Dinner
Taj Boston Hotel

OCTOBER 15
Future Leaders/Recent Graduates Reception

MAY 5 & 6
BUSM Alumni Weekend

MAY 13–15
Commencement Weekend