DEAN’S MESSAGE

Last month, our School of Medicine community celebrated its 209th commencement, signaling the end of the academic year and the beginning of summer. As we enter a new season this month and switch gears, we have the opportunity to pause and recall the accomplishments we’ve achieved and the challenges we’ve met thus far. Let me stress the importance of being intentional about this period of reflection. If we do not deliberately take inventory of our lives, we risk awareness of opportunities to excel. As we reflect, we must consider that for which we are grateful, even amidst the demanding circumstances and situations we may have faced.

Diagnoses such as cancer are never welcomed, but we must give thanks for medical and scientific discoveries and advancements, like immunotherapy, which make recovery possible.

Apart from successfully educating and developing the next generation of medical practitioners and research scientists, the School of Medicine maintains many causes for celebration, including our consistent upward trajectory of grants and contracts, as well as generous private philanthropic support. We are extremely grateful to have received the transformational gift pledge of $20 million from entrepreneurial leader and long-time benefactor, Robert E. Fischell, ScD, which will enable us to become a major, national center for bioengineering innovation through the establishment of the Robert E. Fischell Center for Biomedical Innovation. This support will also provide funding for research and endowed professorships at the Fischell Center, and for our new School of Medicine research building, Health Sciences Research Facility III, which officially opened for business in the spring of 2018.

We were fortunate to have received Dr. Fischell’s altruistic gift pledge, along with the other philanthropic donations of our many supporters and School of Medicine champions, at our annual Gala. This year’s Gala event brought together over 1,000 alumni, donors, faculty, staff, students, and other special friends of the school under the theme of “Impassioned Care, Inspired Discoveries.” It was indeed an evening to celebrate the care we are privileged to deliver and the discoveries we are enthusiastic to make, and Dr. Fischell’s gift ensures we remain on the trajectory to continue doing so.

While we are forever indebted to the financial support we receive, we also recognize and express gratitude for the gift of service from our dedicated staff and faculty. After 44 years with the School of Medicine, Ronald S. Wade retires this month as the Director of the Anatomical Services Division and the Maryland State Anatomy Board. While we are saddened to lose an excellent administrator, colleague, and friend, we honor the steadfast quality of Ron’s commitment to medical education and research. By developing and maintaining a state-of-the-art facility for anatomy research, he provided not only our surgeons, emergency responders, and trauma specialists an invaluable training avenue, but those from all across the country have benefited as well. His management has been professional and respectful at all times. We thank and congratulate Ronn for everything he gave us.

As we look back at the wonderful gifts our community received, and recognize the global impact they have made and will continue to make, we take a step forward together. I am delighted that many of our graduates have chosen to remain in our community, and I am confident of the excellent University of Maryland School of Medicine representatives we cultivated in those whom we send out to other esteemed institutions. Although we take our next steps in different directions, we will share the encounter of both setbacks and successes. I invite you to embrace it all – because the challenges we face foster the most growth, and propel us forward into our best achievements. I leave you with a few words of impact from renowned English poet, John Milton:

“Gratitude bestows reverence, allowing us to encounter everyday epiphanies, those transcendent moments of awe that change forever how we experience life and the world.”

May we all carry this approach with us as we continue our journeys to deliver compassionate, patient-centered care, and contribute to life-changing discoveries wherever we go.

In the relentless pursuit of excellence, I am Sincerely yours,

E. Albert Reece, MD, PhD, MBA
Executive Vice President for Medical Affairs, UM Baltimore
John Z. and Akiko K. Bowers Distinguished Professor and
Dean, University of Maryland School of Medicine
Cancer immunotherapy is a new treatment that involves modifying the immune system to enable it to better attack cancer cells. In recent years, immunotherapy has emerged as a promising treatment for certain types of cancer. A patient’s own immune cells, or T cells, can be genetically engineered to recognize and attack a cancer. Last year, the U.S. Food and Drug Administration approved two versions of immunotherapy, which are known as chimeric antigen receptor (CAR) T-cell therapies — one for children and young adults with leukemia and another for adults with non-Hodgkin lymphoma. The latter treatment is now offered at the University of Maryland Marlene and Stewart Greenebaum Comprehensive Cancer Center (UMGCCC).

Researchers are testing cancer vaccines and antibody-based therapies to stimulate the immune system to kill other kinds of cancer cells. Aaron P. Rapoport, MD, Professor of Medicine and the Gary Jobson Professor in Medical Oncology at University of Maryland School of Medicine (UMSOM) and Director of the Blood and Marrow Transplant Program, is co-leader of the Tumor Immunology & Immunotherapy research program at the cancer center.

Dr. Rapoport’s research has focused on using a patient’s own genetically engineered immune cells to treat blood cancers. Since 1998, he has led six major clinical trials, with more than 150 patients. The results of his latest study, from 2015, showed significant success using genetically modified T cells to treat patients with multiple myeloma, a cancer of the bone marrow.

In April, the school opened the Fannie Angelos Cellular Therapeutics Laboratory, a state-of-the-art facility that will allow scientists to create the next generation of cancer cures — cells that help a patient’s immune system attack and eliminate cancer. The laboratory will also be used to study and develop ways to engineer cells for a wide variety of other illnesses, including diabetes and heart disease. The laboratory was made possible by a $1 million gift from Baltimore lawyer and Orioles owner Peter G. Angelos, as well as donations from other benefactors. Maryland Governor Larry Hogan, who in 2015 received treatment for lymphoma at the University of Maryland Medical Center, attended the opening ceremony for the lab.

The state-of-the-art laboratory, part of the UMGCCC, will produce cell-based therapies and cancer vaccines for immunotherapy research. The research will be conducted by physician-scientists from UMSOM. Currently, researchers must rely on outside facilities and other academic institutions for genetically modified cells to treat patients in clinical trials.

“Having our own cell-processing laboratory will increase our ability to offer novel and promising cell-based therapies to our patients,” says Dr. Rapoport, the lab’s director. “It will also help our investigators move their basic and preclinical research into the clinic more quickly so that patients may benefit from our discoveries.”

The new laboratory will be a resource for all the clinical departments and divisions at UMSOM, including hematology/oncology, cardiology, surgery, and neurotrauma. Researchers at three University of Maryland campuses — the University of Maryland, Baltimore; University of Maryland, College...
Eduardo Davila, PhD, Associate Professor in the Department of Microbiology and Immunology, and Co-Director of the Marlene and Stewart Greenebaum Cancer Center’s Tumor Immunology Program, plans to begin a first-in-human, Stage I trial next year using cells created at the new lab. “Without this lab, it would have been impossible to do this research here,” says Dr. Davila. He is working to develop immunotherapy treatments that can target multiple types of cancer.

For more information about the Marlene and Stewart Greenebaum Comprehensive Cancer Center, visit www.umms.org/umgccc.
On May 5th, the high point of the 2018 School of Medicine Gala came with a sudden announcement. On a stage filled with leading dignitaries, University of Maryland School of Medicine Dean E. Albert Reece, MD, PhD, MBA, revealed that the School had received $20 million in philanthropic support from one of its most distinguished board members and longtime benefactors, Dr. and Mrs. Robert E. Fischell. Standing onstage, Dr. Fischell and his wife, Susan, were acknowledged by the audience with cheers and thunderous applause.
Increasingly, the solutions to our most complex health problems will be found at the intersections of medicine, engineering, and business,” said Dean E. Albert Reece. “This generous gift pledge from Dr. Fischell will elevate the UM SOM as a national leader in making innovative discoveries and developing new medical technology in ways that will have direct benefit to patients around the world.”

The gift will be used to establish the Robert E. Fischell Center for Biomedical Innovation at UM SOM, while also providing funding for the school’s new 450,000-square-foot research building, Health Sciences Facility III. It also will provide critical support for research funds and endowed professorships at the Fischell Center.

Dr. Fischell was equally exuberant about the announcement. “We are absolutely thrilled to have the opportunity to support the UM SOM in this way,” he said. “Our specific purpose for the new center is to help expand the UM SOM’s capacity for biomedical engineering so that it will produce new technologies and devices that will help treat our most critical and chronic diseases.”

For years, the Fischells generously have supported the school with major donations and gifts, including the endowment of the first dean’s professorship in honor of Dean Reece. Claire Fraser, PhD, director of the Institute for Genome Sciences, was invested as the inaugural Dean’s Endowed Professor of Medicine.

Dr. Fischell, known for inventing life-saving medical devices, is one of the nation’s most innovative and successful technology entrepreneurs. He has invented or helped to invent several vital medical devices, including coronary artery stents, the implantable heart defibrillator, and the implantable insulin pump, as well as technologies to prevent migraine headaches and death from heart attacks. He holds more than 200 patents, including nearly 30 patents on orbiting spacecraft, and is credited with pioneering the modern era of space satellites.

In 2016, Dr. Fischell received the National Medal for Technology and Innovation from President Obama at the White House, the highest honor for technological innovation bestowed by the president of the United States. In 2015, he was inducted into the National Academy of Inventors. Dr. Fischell also is a member of the National Academy of Engineering and is the recipient of many major honors, including Inventor of the Year for the United States in 1983, induction into the Space Technology Hall of Fame and the Clark School’s Innovation Hall of Fame, and an honorary doctorate for humane letters from Johns Hopkins University in 2008.

Dr. Fischell earned a BS degree in mechanical engineering at Duke University before relocating to Maryland to work at the U.S. Naval Ordnance Lab in 1951 and then the Johns Hopkins Applied Physics Laboratory. In 1953, he earned a master’s degree in physics at the University of Maryland, College Park (UMCP), and in 1996, the university awarded him an honorary doctorate degree.

Dr. Fischell is an active member of the University of Maryland community, serving on the Board of Visitors of the A. James Clark School of Engineering at UMCP. His support helped establish the Fischell Department of Bioengineering in 2006 and the Robert E. Fischell Institute for Biomedical Devices at UMCP, which opened in 2016.

“Robert Fischell is truly a ‘Renaissance Man’ for the 21st century,” Dean Reece noted. “The School of Medicine is deeply grateful to him for this transformational gift. We are so fortunate to have his wisdom, experience, and entrepreneurial spirit at the University of Maryland School of Medicine.”
Following four years of countless tests, late-night study groups, and many cups of coffee, UMSOM fourth-year medical students celebrated their upcoming graduation at the 12th annual Student Awards Ceremony and Dinner. Held on Wednesday, May 16, 2018 at the Baltimore Marriot Inner Harbor at Camden Yards, the awards dinner provided an opportunity to recognize the accomplished graduating students who have received department awards and other academic prizes. This event also recognized the donors whose generous contributions fund these awards.

"Tonight, we salute our students, who have excelled throughout the course of their medical education, and we recognize our outstanding faculty, who mentor and train the future generation of physicians, scientists, and allied health professionals," said Dean E. Albert Reece, MD, PhD, MBA. "Those receiving honors and awards truly represent the best of the best and reflect the high caliber of talent the University of Maryland School of Medicine matriculates."

The awards ceremony honored students across a variety of medical disciplines who have demonstrated great promise during their time at the School of Medicine. Awards were presented from nearly every School of Medicine department, with many of the awards named in honor of influential department founders, former chairs or faculty members, or in recognition of those who had made generous contributions to the departments.

In addition to students receiving recognition at the ceremony, three faculty members were inducted into the Academy of Educational Excellence, established by Carolyn J. Pass, MD ’66 and Richard M. Susel, MD ’66, which awards faculty members who demonstrate excellence in both patient care and classroom instruction. This year’s honorees were Sandra M. Quezada, MD, MS, Assistant Professor of Medicine; Norman Retener, MD, Assistant Professor of Medicine, and Kerri Thom, MD, MS, Associate Professor of Epidemiology and Public Health. Faculty members inducted into the Academy are recognized on a plaque located inside the Pass and Susel Medical Education Facility in Howard Hall, and receive special pins to signify their membership into the Academy.

Drs. Pass and Susel also established The Medical Education Tool Chest, which assists faculty in funding the technical tools they need to succeed in today’s electronic classroom. This year’s recipient was Adam C. Puche, PhD, Professor of Anatomy and Neurobiology.

The School of Medicine Class of 2018 received their doctoral hoods in a special graduation ceremony at the Hippodrome Theatre on May 17. Commencement for the University of Maryland, Baltimore was on May 18, 2018 at the Royal Farms Arena.

Freeman A. Hrabowski, III, President of University of Maryland, Baltimore County was the keynote speaker.
On May 1, the Grid (Graduate Research Innovation District) held its inaugural Grid Pitch. The event, which highlighted business ideas of six teams comprised of students from across the University of Maryland Baltimore (UMB) campus, including the University of Maryland School of Medicine (UMSOM), is intended to serve as a celebration of ideas and aspiring student entrepreneurs.

Each team received four weeks of mentoring from David Wise, Director of the Maryland Momentum Fund and a $1,000 stipend for professional development. During the event, each team was given three to five minutes to present their concept to the audience of 80 to 90 people. “Baltimore is a city of makers, creators, builders, and problem solvers; the Grid brings this together for our UMB community, while adding a new and vibrant space for students at the BioPark. UMB is committed to supporting entrepreneurship and innovation, in both the student population and in our broader Baltimore community,” said Jenny Owens, ScD, MS, Faculty Executive Director.

The event was originally planned as a “Shark Tank” style competition, but instead of a traditional first, second and third place, funds were divided equally among each of the six teams. Each received a $1,000 to put toward their professional development. “These students have ‘entered the arena’ — and putting yourself out there is hard. It’s the small groups and individuals who have light and love in their hearts for others, and who dedicate themselves to a cause that change the world. It’s easy to see established entrepreneurs and think there is something special about them,” said Ms. Owens.

**About the Teams**

**CYSYTECH:** Led by pharmacy student My Ngo, Cystech wanted to provide reliable, non-invasive methods to detect and monitor the progression of bladder cancer using urine biomarkers. Cystech’s long term goal is to develop biomarkers that will eventually be used as potential drug targets or in diagnostic technologies.

**DAPKEN:** Dapken aims to develop solutions that provide personalized medicine. The team is developing BevaDx, a blood-based test that enables doctors to determine which cancer patients will benefit from Bevacizumab treatment using a patented biomarker. With BevaDx, the team envisions a treatment paradigm where only the right patient receives Bevacizumab at the right time. Dapken’s team members include pharmacy students Fahim Faruque, Chuka Udeze, Kevin Loh, and Natalie Park.

**INDUCENT THERAPEUTICS:** Led by GPILS Student Christian Kinney, Inducent Therapeutics is a drug platform for chronic illnesses that allows for the indefinite production of a biological therapeutic in appropriate quantities and at appropriate times after a small number of administrations. The platform is designed to eliminate the patients’ need to take medicine daily or weekly.

**THERASOL:** TheraSol wants to treat cancer metastasis in triple-negative breast cancer (TNBC) patients using plant-derived proteins. The team’s first product would comprise a therapeutic as an IV bolus and oral dosage form that uses an isolated compound found in taro extract as the active pharmaceutical ingredient. Team members include: UMSOM GPILS Student Raqeeb Jamil, UMSOM Student Aurasch Moaven, pharmacy students Sebastian Blilitza and Teddy Dunning. Viquar Hussain, a lawyer is also on the team.

**URBAN ALGAE:** Urban Algae is a biotech company focused on providing the public with toxin-free dietary algal supplements while revitalizing city spaces by building algae growing systems on roof tops. Based in Baltimore, Urban Algae works closely with IMET, a hub for biotechnology in the Mid-Atlantic States. Team members include marine estuarine environmental science students Kelsey Abernathy and Dan Fucich.

Sponsors for the Grid Pitch were the Maryland Department of Commerce and the University of Maryland BioPark.

**About the Grid**

The Grid had its grand opening on Dec. 7, 2017. It was established to provide resources and education around entrepreneurship and innovation. Since its opening, nearly 4,000 students, faculty, staff, start-ups, and community members attend workshops and meetings, get advice on small business development or legal issues, or take advance of the co-working space at its Hollins Street location.

In addition to its student-centric programs, the Grid offers a broad variety of resources to community members, including access to expert advice from the Small Business Development Center and a weekly Intellectual Property and Business Entrepreneurship Clinic offered by the School of Law.
2018 GALA CELEBRATION

On May 5, more than 1,000 business and community leaders, donors, faculty, staff, students, and other distinguished guests gathered for the 2018 University of Maryland School of Medicine’s Annual Gala in Baltimore. The theme for this year’s Gala was Impassioned Care, Inspired Discoveries, which set the tone for an evening of celebration and recognition of the achievements and discoveries of our world-class physicians, biomedical researchers, and allied health professionals. The School of Medicine’s Gala coincides with the Medical Alumni Association Reunion Weekend.

Honorary Gala Chairs
Gloria and Ken Banks

IMPASSIONED CARE
INSPIRED DISCOVERIES

Mayor Catherine Pugh joined the festivities.

June is PRIDE month

As we close the academic year, we have had much to be grateful for, and much diversity to celebrate. June is no exception as it is Pride Month, dedicated to celebrating sexual diversity and gender variance. Baltimore and UMSOM have a vibrant sexual and gender minority community. Our School of Medicine students in the LGBTQ Health interest group are collaborating with sister groups across the campus to represent our institutions at events across the city this month, and to engage in fellowship, inclusion, and community building that celebrates living one’s truth, and the dignity of all.

“Practices”

New UMSOM policy requires all patient care facilities to be called “practices.”

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