### The new Institute for Clinical and Translational Research



# SOMnews

## Point of PRIDE



Dr. Joseph H. Holmes was a medical house officer and chief medical resident at

the University of Maryland Hospital from 1935-1937. Dr. Holmes is nationally recognized for his **pioneering work in ultrasound imaging** 

and contact scanning in the U.S. — a direct precursor to the kind of ultrasound imaging we have today.



### DEAN'S MESSAGE

Over a decade ago, **Robert Chrencik, MBA, CPA,** President and CEO of UMMS, and I adopted the phrase **The Power of Partnership** to embody the close collaboration and unique alignment that the School of Medicine and Medical System share. Prior to that time, the School and hospitals worked almost independently, despite the fact that our faculty provided the care across the Medical System, causing a level of misalignment that

resulted in depressed revenues and stymied successes. By establishing a strong partnership, spearheaded by the leaders of our two great institutions, the School of Medicine and Medical System began to see immediate and dramatic results. After full alignment, our individual organizations experienced an unprecedented level of growth, becoming the multi-billion-dollar enterprise we are today. More recently, we've taken this partnership one step further, creating the **new University of Maryland Medicine brand to show our solidarity and steadfast commitment to being a joint, exceptional academic medicine enterprise.** This month, Mr. Chrencik and I have been invited by the AAMC's Council of Deans and Council of Teaching Hospital CEOs to showcase the rich partnership between our School and the Medical System.

Most importantly, the collaborative spirit between our School of Medicine and Medical System isn't just one that exists only at the level of the leadership. Indeed, **The Power of Partnership** is a concept that carries through all parts of our organizations, whether it be the partnership between our patients and our care teams, or the partnership between our basic and clinical research scientists.

The partnership between a patient and the care team is vital, not just to ensuring that a procedure or examination goes smoothly, but also that the recovery period is expeditious and free of complications. When a patient enters our doors, we forge an unwritten contract that we will provide sensitive, comprehensive care, utilizing the best science known today. For their part, our patients agree to be active participants in their care. For this reason, we've highlighted the high level of satisfaction our patients have reported regarding their care in this month's newsletter. Multi-disciplinary partnerships are vital to the success of our research enterprise. Since the launch of Vision 2020 in June of 2013, we have made a concerted effort to promote a culture of collaboration that transcends research fields and departments, bringing our best investigators together. We have devoted significant resources to foster these partnerships, and established a number of opportunities to increase team science across the School. One of these key initiatives is the new Institute for Clinical and Translational Research. Led by Stephen Davis, MBBS, this new institute draws upon the incredible intellectual capital we have among our faculty investigators from diverse research backgrounds. Collectively, they will work to rapidly bring discoveries made in basic science laboratories into therapeutics that will dramatically impact patient care.

### What's on My Mind...



...is The Power of Partnership, a phrase that embodies the work that we do every day, but especially in our mission areas of Research and Clinical Care.



A major component to our successful partnerships is our passion for what we do each day, from teaching our classes, to mentoring students and trainees, to the care we provide in our practices, to the research we conduct in our basic, translational, and clinical laboratories. Our common passion to help, to heal, and to strive for better brings us together. No one here works in a silo. We are all part of the same team, working to answer the **Big Science** questions facing biomedicine today. **The celebration of our communal passion, and the incredible results this has achieved, is the theme of this year's School of Medicine Gala, which will be held on May 5, 2018.** 

The strength of our enterprise comes from the partnerships we have formed with our colleagues. These partnerships



### What's New...

SOMnews has now expanded to eight pages, with more information and special sections on Research & Discovery, Clinical Care, Academic Innovations, and Community Impact.

### What's Inside...

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are successful because of the passion behind the work. Just as **University of Maryland Medicine** is stronger for the collaboration between the School of Medicine and Medical System, so, too, is our research portfolio and clinical practices buoyed by the deep commitment of our faculty community. I commend those who have already embodied **The Power of Partnership** in how they approach their work each day. Only by working cooperatively, collaboratively, and passionately can we hope to achieve our ultimate goal of improving the health of all humankind.

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

E. albert Rece

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

A Third Century Where Discovery Transforms Medicine 655 W. Baltimore Street • Baltimore, MD 21201



#### CLINICAL PROGRAM INIATIVES

### **"Practice" Makes Perfect** USING THE TERM "PRACTICE," <u>NOT</u> "CLINIC," MAKES ALL THE DIFFERENCE TO PATIENTS

What's in a word? When it comes to patient satisfaction, using the right name to describe a care delivery site means everything. That's why, says **David Schwartz, MD**, Clinical Professor in UMSOM's Department of Obstetrics, Gynecology and Reproductive Sciences, and Director of the Dean's Clinical Program Initiatives, the word "clinic" falls short in promoting the patient experience at the School of Medicine. *"Given the Dean's directive and the School's own PEP (Program for Excellence in Patient-Centered Communication) initiative, we are striving — and succeeding — to deliver personalized care with the goal of complete patient satisfaction," says Dr. Schwartz. "To do so, we must set the bar high for ourselves from the start, even in the words that we choose to reflect the quality of care we offer."* 

For patients, **"clinic"** all too often conveys the negative connotation of crowded, impersonal environment with excessively long wait times, *"a mass delivery of care that ignores the individual,"* notes Dr. Schwartz. On the other hand, the term "practice" connects in patients' minds with a qualitatively superior experience.



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"For our patients, higher satisfaction correlates with individualized attention being treated as a unique person with specific needs."

— David Schwartz, MD

*"Those attributes connect with the concept of a practice, as opposed to a clinic, which is what we are seeking to promote through PEP,"* says Dr. Schwartz.

As first reported in the January 2018 issue of SOMnews, UMSOM and FPI leadership introduced the PEP program in March 2016. In small-group PEP workshops led by respected and experienced UMSOM faculty who are Certified Facilitators, physicians are trained through both instruction and role-playing to practice specific communication skills in building more effective partnerships with their patients. In just two years, the program's 16 facilitators have led 45 PEP workshops and trained nearly 400 of UMSOM's 1,000 faculty physicians. While Dr. Schwartz acknowledges that 'clinic' does have its uses in other contexts, such as in the formal name for a facility, the term 'practice' is perfectly aligned with PEP's goals. "One of PEP's main performance metrics is 'Recognizing patient perspectives,' " he says. "Our data clearly indicates that patents appreciate individualized attention and direct communication with their physicians in a warm, welcoming environment. Obviously, we want to appeal to patients' sensitivities, down to the words we use with them. With the greater sense of professionalism that it suggests, 'practice' is the best expression of the excellent service our physicians seek to provide at UMSOM."





As part of the UMSOM's Service Excellence Initiative, **Dean E. Albert Reece**, **MD**, **PhD**, **MBA**, formally introduced the policy in October 2017 that the word "clinic" should no longer be used when referring to patient care facilities.

"Although this is not an inappropriate

word, over the years it has developed a negative connotation — one that is not associated with service excellence, patient-centered care, or personalized care," Dean Reece said. "In addition, patients report dissatisfaction in being 'referred to Dr. Brown's clinic' and sometimes ask, 'Does Dr. Brown have a practice?'"

"The term 'practice' connotes a level of professionalism that is in keeping with the quality of care provided by our outstanding faculty," he continued. "As we move forward with our focus on service excellence and patient care, it is an ideal time to make this important change in the way we present ourselves to our patients and to the broader community."





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Patients Make Positive Associations with "Practice"

<sup>4</sup>User-friendly
Courteous
Kind
Pleasant
Individual Attention
Personalized
Excellent
Thoughtful
Respectful

Professional

Efficient Top-notch

Wonderful<sup>33</sup>

Labor & Labor & Delivery

Labo



"See you at my practice this afternoon."

"Dr. Brown has an outpatient practice nearby."

"Please make an appointment to see Dr. Brown at his practice."

"I'm referring you to my pediatrics practice."



For more information, visit the Program for Excellence in Patient-Centered Communication (PEP) at www.medschool. umaryland.edu/programs/pep.

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### SOMnews Research&Discovery

COLLABORATION

## The Institute for Clinical and Translational Research: Seamless Access to Research Across the UMB Campus

he University of Maryland Baltimore (UMB) in December launched the Institute for Clinical and Translational Research (ICTR), an interdisciplinary resource hub for clinical translational research and training that brings together all of the schools on campus including the University of Maryland School of Medicine, the School of Dentistry, Carey School of Law, School of Social Work, School of Pharmacy, and School of Nursing.

*"UMB ICTR is disease-agnostic, facilitating clinical research to improve health across diverse communities and the entire lifespan,"* said **Stephen Davis, MBBS, FRCP, FACE, MACP,** the Dr. Theodore E. Woodward Chair in Medicine and Director of the ICTR.

Faced with more competition and funding pressures, Dr. Davis maintains that the resources in ICTR are critical for faculty and UMB



Dr. Stephen Davis

campus success. With concerns over funding, researchers cannot operate in silos and must look collaboratively in an interdisciplinary fashion to address important research issues. *"ICTR will provide the infrastructure and support for effective, safe, innovative and high quality clinical research,"*said Dr. Davis.

## GOALS

### AMONG THE KEY GOALS OF ICTR ARE:

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Promoting innovation in clinical and translational research by stimulating multi- and interdisciplinary team science directed at the translation of basic discovery to human studies and product development as other academic hubs and industry are engaged.

Educating and training generations of multidisciplinary clinical and translational scientists by providing education for trainees at all levels and backgrounds, including students in medicine, dentistry, nursing, pharmacy, social work, law, and graduate studies. "The goal of ICTR is to remove barriers to clinical and translational research and provide a superb environment for training the present and future generations of clinical scientists." – Dr. Davis



### **ICTR AWARDS ITS FIRST ROUND OF 2018 VOUCHERS**

Pictured from left to right: ICTR Voucher Program Co-Director Thomas Oates, DMD, PhD. Recipients: Jeffrey Fink, MD, Steven Kittner, MD, MPH; Alice Ryan, PhD, Guest Xiaoxuan Fan, PhD, Feng Qian, Dr. rer. nat.; Jessica Mong, PhD; Magali Fountaine, MD; and UMB ICTR Director Stephen Davis, MBBS.

## MISSION

The Mission of the UMB Institute for Clinical and Translational Research is to remove barriers to clinical and translational research by providing high-quality, cost-effective informatics, biostatistics, clinical resources, mentorship and other core services that will support clinical research, community engagement, ethics and regulatory science, pilot projects and the development of novel technologies.

Providing a forum for bio-directional conversations with communities, networks and practitioners outside academia to identify needs, synthesize emerging data supporting new health interventions and systematically examine ways in which evidence-based interventions are integrated into best practices in community settings to reduce disparities in health outcomes.

"Achieving these goals will have a major impact on the health of patients in diverse communities including rural and urban underserved populations in Baltimore and the Mid-Atlantic region," said Dr. Davis. ICTR is about research infrastructure. "Our goal is help all the clinical and translational researchers on this campus fulfill all their research ideas."

Resources to faculty and researchers and trainees across UMB are available in several major cores including: the Biostatistics Core, the Community and Collaboration Core, the Informatics Core, the Vouchers and Accelerated Translational Incubator Pilot Program; ICTR Studios Program and ICTR Research Navigator.

#### UNDERSTANDING THE MAJOR CORES OF ICTR

THE ICTR BIOSTATISTICS CORE is led by Soren Bentzen, PhD, DMsc, Professor, Epidemiology and Public Health. This core provides biostatistical support in the design, implementation, and interpretation of clinical translational research studies. The goal of this services is to assist researchers who do not have funding for bio-statistical support and to promote the appropriate use of biostatistics. The ICTR Biostatistics Core has experts on campus who can assist with obtaining data from outside sources. In addition, ICTR Biostatistics Core experts can help with statistical analysis needed in the protocols for grant-funded research. Another key focus of the ICTR Biostatistics Core is in statistical bioinformatics and the analysis of "big data" including systems biology, gene regulatory network inference, module biomarker discover, network biology, data integration, systems pharmacology, personalized medicine, disease-

- THE ICTR VOUCHERS PROGRAM AND ACCELERATED **TRANSLATIONAL INCUBATOR PILOT** awards micro grants valued up to \$10,000 in UMB Core services and/or community engagement/collaboration services to enable preliminary work and back researchers in generating pilot data on clinical translational research projects. The voucher program is open to all faculty and priority will be given to Internal Review Board (IRB) - approved Accelerated Translational Incubator Pilot Program(ATIP) grants. Other faculty requesting support that may lead to the generation of preliminary data, may also apply for a voucher up to \$5,000. The ATIP Grant Program provides starter funds up to \$50,000 for projects specifically focused on innovated translational research.
- **THE ICTR STUDIOS PROGRAM** offers a series of integrated, dynamic and interactive "roundtable" discussion to assist researchers. These discussions are designed to provide researchers with expertise in areas such as hypothesis generation, study design, bio-statistics, implementation, analysis and interpretation, recruitment and research ethics.

The UMB ICTR Studios program follows the same format as traditional, clinical, and translational research studios programs: A researcher completes a brief studio application, the studio "manager" reviews the request, assembles a panel of three to six experts (research faculty from multiple disciplines), and circulates the pre-review materials. Typically, researchers request one of seven studio formats: hypothesis generation, study design, grant review, implementation, analysis and interpretation, manuscript review, or translation. A studio moderator leads each studio session, managing the time (90 minutes) and discussion to optimize the usefulness of the session for the researchers. There is no limit to the number of Studios a researcher can request.

ICTR RESEARCH NAVIGATOR is a service that helps direct investigators to the services they need and advises them on the "next steps." Experts on the ICTR Research Navigator team advise researchers on how to map out the research process.

drug-gene association discovery, pattern recognition, image analysis, and data mining.

THE ICTR COMMUNITY AND COLLABORATION CORE is led by C. Daniel Mullins, PhD, Professor in the Pharmaceutical Health Services Research Department (PHSR) at the University of Maryland School of Pharmacy. This core provides expert patient- and community-centered services and resources such as the PATIENTS program, a program that partners with patients and care providers to answer questions about the best treatment options to improve health and quality of life. The ICTR Community and Collaboration Core also helps to set up focus groups, develop participant instructional videos and provide other educational and outreach services.

THE ICTR INFORMATICS CORE is led by J. Kathleen Tracy, PhD, Associate Professor, Epidemiology and Public Health. This program provides researchers, faculty, and trainees access to clinical and healthcare informatics resources and support with data management. Experts in this program are available to help researchers develop research surveys, data entry forms and databases. Data collected are stored and maintained locally in a firewalled server managed within ICTR.

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### SOMnews AcademicInnovations

#### STUDENT AFFAIRS







## **Dreams Do Come True!**



### MATCH DAY 2018

t was a day filled with anxiety and excitement at Baltimore's famed Hippodrome Theater on March 16, when the Class of 2018 received its matches, an event known as Match Day. At exactly noon, medical students here and around the country received an envelope telling them where they will do their residency training.

This year's students include Kwabena Yamoah. Born and raised in Ghana, Kwabena came to the US in 2007 when he was 17. He knew he wanted to go into medicine early in life, when he went with his grandfather, a nurse technician, to hospitals in Ghana. All through the early years of his childhood, he and his siblings were raised alone by his mother in Ghana. "I think the struggles from poverty is what inspires me to be successful. Making her happy is what really drove me to do this," he said. He wants to be a radiologist and hoped to be matched relatively near his wife, who is a neurosurgery resident at Hopkins. He was extremely happy to find out that he matched to the University of Maryland Medical Center in radiology. Rebka Tekeste moved to the United States from Ethiopia when she was 10. She had two children during her time in medical school, the first during her third year and the second just this February. Having her own children has given her important insight into the field of pediatrics. "It's very easy to know the medicine side of it, but having the first-time experience of being a parent has given me more of a perspective," she said, noting that it was tough to get through medical school and also become a new parent. "Family is important to me, and I made it work," she said. She matched to the University of Maryland Medical Center in pediatrics.

Sarah Kaslow took a year off in the middle of medical school to get a public health degree from Johns Hopkins - and have a baby. After getting a degree and giving birth, she returned and finished her MD. She matched with New York University Langone Hospital in general surgery.

Zulgarnain (Sono) Khan was born in Pakistan, but his family moved here when he was a small child so that he and his siblings could have better opportunities. He grew up Catonsville and plans to specialize in cardiology. He matched to the University of Maryland Medical Center in internal medicine.

**Danny** and **Minna Leydorf** are a brother and sister from Annapolis. They are three years apart and were roommates through school. Danny wants to be a surgeon, and Minna wants to be a pediatrician. Minna says having her brother go through medical school with her has been a great experience. "We've both grown immensely, and I believe for the better, through the challenging, but worthwhile, process of medical training thus far," she said. Danny matched at Anne Arundel Medical Center in general surgery, while Minna matched to the University of Maryland Medical Center in pediatrics.

Stefano Muscatelli played baseball at St. Mary's College, and wants to be a sports medicine orthopedist. He matched to the University of Michigan in orthopedics.

Christina Tise is getting a PhD in genetics as well as an MD. She plans to combine research and working with patients, and will focus on pediatrics and genetics. She matched at Stanford University in pediatrics.

Joshua Olexa and Gloribel Le are getting married in April. Joshua applied to residency programs in neurosurgery and Gloribel applied to programs in pediatrics, but mainly they hoped to be located together. Joshua was driven to neurosurgery after his three back surgeries. He was fascinated with the research but really loves the clinical aspect. "The interaction with people and the desire to help them is was what drove me into medical school," he said. Realizing that with bench work he would be working less directly with patients. Gloribel has always worked with children and has always had a passion for pediatrics. This began in high school when she volunteered with children with disabilities. They came up on stage together and were elated to find out that they had both matched at the University of Maryland Medical Center — he in neurosurgery and she in pediatrics. Every student selected their own soundtrack for their walk to the stage. Many students danced their way up, to applause. This year, 142 UMSOM students matched at 69 different hospitals in 30 states. Thirty-nine members of the Class of 2018 will stay in the state of Maryland for their residency training.

Jondavid Landon spent a year after college working on a 36-foot sailboat and sailing from Maine to the Caribbean. After that he became a construction worker and contractor, and only then did he decide to go to medical school. He was matched to Eastern Virginia Medical Center in emergency medicine.

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### CommunityImpact

#### GLOBAL HELP







## Helping a Maternity Ward in Uganda UMSOM STUDENT RAISES FUNDS FOR ULTRASOUND AND TRAINING

ourth-year University of Maryland School of Medicine (UMSOM) medical student **Sarah Boudova**, **PhD**, has launched a campaign to ship an ultrasound machine to a hospital in Uganda. She is currently completing her rotation at Mbarara University of Science and Technology (MUST) in southwestern Uganda and recognized the need for this technology, which is widely available in the United States.



*for improved antenatal diagnostics,*" said Dr. Boudova. In 2015, the maternal mortality rate for the hospital was 270 per 100,000 births, and the perinatal mortality rate was 56 out of 1,000.

Dr. Boudova arrived in Mbarara on March 20 and will spend most of April working in the hospital. She has begun didactic trainings in the theory behind ultrasound, use of ultrasound in obstetrics and the specifics of the donated machine.

In Mbarara, Uganda most women go through pregnancy without ever having an ultrasound. Clinicians at Mbarara University believe that introducing ultrasound will dramatically improve maternal and child outcomes, according to Dr. Boudova.

Working with **James Campbell, MD, MS,** Professor of Pediatrics, and **Janie Zuber, MD** from UMSOM's Institute for Global Health, the UMSOM Global Health Interest Group, the Women's Health Interest Group, the UMSOM Point of Care Ultrasound Interest Group and Probo Medical, Dr. Boudova has arranged to ship a refurbished ultrasound machine to Uganda. In addition, the necessary training in basic obstetric ultrasound will be provided. Probo Medical has generously donated the machine, and Dr. Boudova is working to raise \$3,000 to ship the machine to Mbarara.

Mbarara Regional Referral Hospital (MRRH), the hospital associated with MUST, is a 600-bed government hospital that serves as the only referral center for the eight million people in southwest Uganda. Every year there are 12,000 deliveries in the department, which is staffed by 12 attending physicians and 35 residents. *"Most women at Mbarara go through pregnancy without ever receiving an ultrasound. There is a great need* 

Faculty, staff and family members attended a fundraiser in February to benefit the Uganda Maternity Ward. Through the fundraiser and donations, approximately \$2,370 has been raised.



Among those who attended the fundraiser were Miriam Laufer, MD, (center) Associate Professor of Pediatrics and Director of the Malaria Research Program, husband Patrick Daniels (left), son Caleb and Mark Travassos, MD, MSc, Assistant Professor Pediatrics (right).

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If you are interested in helping to fund this work please go to https:// funds.gofundme.com/dashboard/portable-ultrasound-mbarara-uganda.

### Dr. Zhongjun Jon Wu Receives Endowed **Professorship in Entrepreneurial Surgical Science**



More than 26 years after coming to the United States from a remote area in Southwest China, Zhongjun Jon Wu, PhD, has become one of the leading bioengineering scientists, and he has earned his

place among top faculty at the University of Maryland School of Medicine (UMSOM). On March 1, he was invested at Westminster Hall as the Peter G. Angelos Distinguished Professor in Entrepreneurial Surgical Sciences.

"I am so honored and so humbled, to receive this prestigious endowment," Dr. Wu said.

Bartley Griffith, MD, FACS, FRCS, the Thomas E. and Alice Marie Hales Distinguished Professor in Transplant Surgery, has worked closely with Dr. Wu throughout his career. "I've been waiting for this opportunity for 35 years. Without him, I would not have been successful," said Dr. Griffith.

Other speakers at the ceremony included: William J. Federspiel, PhD, the William Kepler Whiteford Professor, Department of Bioengineering, Director, Medical Devices Laboratory, McGowan Institute of Regenerative Medicine, University of Pittsburgh; and Ned Hwang, PhD, the James L. Knight Professor of Biomedical Engineering Emeritus, University of Miami.

The Angelos Professorship was established through a leadership gift from Mr. Peter Angelos, and significant contributions from Thomas & Alice-Marie Hales, Hamish and Christine Osborne, the Abell Foundation, and the State of Maryland's E-Nnovation Initiative Fund.

"The honor associated with the appointment to an endowed position has remained unchanged for the last 500 years and is recognized as one of the highest tributes that an institution can bestow upon its most distinguished faculty," said E. Albert Reece, MD, PhD, MBA, Executive Vice President for Medical Affairs, UM Baltimore, John Z. and Akiko K. Bowers Distinguished Professor, Dean, University of Maryland School of Medicine. "Endowed professorships, including the new Peter Angelos Distinguished Professor, provide our excellent faculty members with critical resources needed to sustain and expand promising research, launch innovative clinical initiatives, and educate and train the physician-scientists of tomorrow." Deen Reece highlighted that UMSOM is fortunate to have nearly 70 endowed chairs and professorships in various stages of completion.



A LONG CAREER IN BIOMEDICAL ENGINEERING Dr. Wu began his career at the University of Miami, where he received his PhD in biomedical engineer-



Joining Dean Reece in presenting the John B. Davidge Medal was Rajabrata Sarkar, MD, PhD, the Barbara Baur Dunlap Professor in Surgery.

ing in 1996. He was recruited by the Department of Surgery at UMSOM as an Assistant Professor from the University of Pittsburgh in 2003, when he founded the Artificial Organs Laboratory. Dr. Wu was promoted to full professor in July 2014.

Dr. Wu is currently engaged in the basic and applied research of cardiovascular and pulmonary disease and the fundamental technical problems associated with artificial and biohybrid organ development. Dr. Wu's current research projects include the use of ventricular assist devices in heart failure, development of pediatric ventricular assist devices, development of artificial pumping lungs, computational design and modeling of biomedical devices, experimental study and computational modeling of blood damage, and stem cell-based cellular therapy for cardiovascular disease and pulmonary disease.





April 2018 Vol.20 No.4



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### UNIVERSITY of MARYLAND SCHOOL OF MEDICINE



### "Practices"

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

SOMnews is produced by the University of Maryland School of Medicine Office of Public Affairs

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