University of Maryland School of Medicine

Forging New PATHWAYS for the FUTURE

EDUCATION  CLINICAL CARE  RESEARCH  COMMUNITY

STRATEGIC PLAN 2017-2022
Forging New PATHWAYS for the FUTURE
On behalf of the entire SOM community, I am pleased to present the University of Maryland School of Medicine’s 2017-2022 Strategic Plan, Forging New Pathways for the Future.

The plan is the result of thoughtful input and discussion across all departments, centers, institutes, programs and other academic units, and at every level of the School of Medicine. I am most grateful for the time and effort that has been invested over the past several months in developing this document, which will serve as our road map as we approach 2022. We have benefited greatly from strong faculty leadership, and from the dedicated working groups made up of faculty, staff and students, to guide this initiative.

This plan comes at a time of great momentum for the School of Medicine. We have never been in a stronger position in each of our four key mission areas: clinical care, education, research, and community engagement and impact. Yet we cannot rest. The challenges in improving human health around the nation and the world continue to grow. There are key areas that we must target for improvement.

By remaining undaunted in purpose and resilient in execution, we can achieve even higher goals than in our previous five years. What we accomplish in the next half decade will be critical to maintaining our upward trajectory, elevating our profile as one of the nation’s leading research-intensive medical schools, and, most importantly, leveraging our impact to improve national and global health.

Since our previous strategic plan (2011-2016), we have:

• Enriched our culture of research and discovery, and expanded it to every level of the organization — providing new opportunities for all students to conduct research and develop critical thinking skills. In addition, we have established core resources and professional development support for faculty investigators. Our research grants now total more than $400 million each year, and we expect to exceed $500 million per year by 2020.

• Emerged as a leader in global health with our new Institute for Global Health, along with our other international programs in 35 countries around the world and global programs conducted by the Institute for Human Virology and many other departments. We have seen breakthrough research and development work in key therapeutics or vaccines for malaria, MERS, Ebola, cholera and now Zika. We are ranked among the top universities in the nation for public health and vaccine development.

• Actively promoted faculty collaborations across the School of Medicine, through awards and grants; created a series of exciting and effective multidisciplinary groups, including the Brain Science Research Consortium Unit, and the Lung Healing Program; and worked with UM College Park to launch a new Center for Sports Medicine, Health & Human Performance.

• Established a worldwide reputation for new treatments that are advancing care for the most critical patients — exemplified by our top programs in cancer treatment (with the NCI-designated UM Marlene and Stewart Greenebaum Comprehensive Cancer Center), cardiovascular care, transplantation, trauma and critical care, neuroscience, and metabolic diseases.

Now we raise our vision to the next level of excellence. We will promote and reward innovation in teaching and learning; ensure the highest level of quality and service excellence in patient care; serve as a catalyst for evidence-based impact in communities at home and abroad; and create new pathways in understanding diseases and discovery of new treatments and cures through leading-edge research.

I believe that with the collective efforts and dedication of our faculty, staff, trainees and other stakeholders, there are no limits to what we can accomplish. Let us work together to meet and exceed these goals, and to improve the lives of citizens in our community, our state and around the world.

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Vice President for Medical Affairs, University of Maryland
John Z. and Akiko K. Bowers Distinguished Professor and
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Mission
The University of Maryland School of Medicine is dedicated to improving the world of tomorrow through our four primary mission areas: Education, Research, Clinical Care, Community Engagement and Impact. We are committed to an unswerving pursuit of excellence through innovation and discovery.

Vision
The University of Maryland School of Medicine believes that advancing knowledge and discovery is crucial to solving the world’s most complex and pressing problems, by engaging ALL members of our academic community, through discovery and innovation.

Values
These values serve as the basis for the University of Maryland School of Medicine’s efforts to fulfill its mission and achieve its vision:

LEADERSHIP AND ETHICS
We have a responsibility to lead the way in pursuing innovation and discovery to advance medicine and science to improve human health and well being. Only by acting with the highest ethical values can we be effective in all that we do.

DISCOVERY AND INNOVATION
Collaborating with diverse groups locally and globally, we will push the boundaries of what is possible in medicine and science. We will encourage the spirit of innovation across our community, and follow where it takes us.

DIVERSITY
We understand the importance of embracing diversity at all levels, and in all forms. We become a stronger institution when we embrace many views and many voices, all working together for the greater good.
CHAMPION EXCELLENCE IN TEACHING AND SCHOLARSHIP

The learning community at the School of Medicine encompasses medical and graduate students, and allied health students — as well as post-doctoral fellows, residents, and attendees in continuing education. To provide the best education for all, we will encourage innovation, increase access, promote student and faculty excellence, ensure that our school values teaching, and provide the physical and technological infrastructure to support an ever more exceptional education.
GOAL 1
Achieve educational and curricular innovation.

OBJECTIVES
Provide greater flexibility and innovation within the curriculum.
- Create or promote specialization tracks and other programs that allow students to explore.
- Provide additional learning opportunities in research, education, and clinical or population medicine.
- Take advantage of the rich training opportunities and partnerships available in the Baltimore-Washington area.

Update our curricula to ensure they reflect the latest in medical education.
- Regularly review curricula against current academic imperatives.
- Assimilate new and rapidly changing knowledge more effectively.
- Increase opportunities for offsite and interdisciplinary student experiences.
- Provide more opportunities for students to explore issues in business, finance, intellectual property, quality and safety, informatics, leadership, telehealth, humanism, and other areas.

Identify, develop and utilize new and better evaluation methods.
- Implement best practices in assessment, including expanded use of technology and simulation (such as standardized patients), across our programs.
- Review our curricula periodically to ensure content relevance, eliminate redundancy, and increase content integration across different years.
- Institute a process of Continuous Quality Improvement (CQI) to regularly collect and review measureable outcomes to improve programmatic quality and ensure compliance with accreditation standards.

Seek an expanded philanthropic base to help us pursue new educational opportunities.
- Increase philanthropic dollars directed toward education.
- Secure grants for innovative educational programs, and encourage student-initiated funding opportunities.

GOAL 2
Prioritize recruitment and retention of an outstanding, highly qualified and diverse body of faculty and students.

OBJECTIVES
Design a new business model to reduce the cost of attendance for all students — including benefits for student employees of UMMC and increased scholarship funding.

Work with the campus leadership and community members to improve and enrich life in our neighborhood.
- Create a more vibrant on-campus student life
- Assure safety on and around campus for our students and neighbors
- Improve shuttle bus service, and increase parking availability.

Enhance the sense of camaraderie and engagement among students.
- Invest in formal mentorship programs to ensure that each student feels welcome and supported.
- Increase cohesiveness throughout the School of Medicine by promoting more social activities that cross educational programs.

Develop, coordinate and support diversity initiatives.
- Identify preexisting diversity initiatives within the School of Medicine, and place them under the auspices of the Office of Academic Affairs and a Diversity Advisory Committee
- Enhance ongoing relationships with other educational institutions for developing additional diversity initiatives, including linkage programs, summer opportunities and pipeline programs.

Promote alumni involvement.
- Improve tracking of alumni from all School of Medicine programs, embrace social media to maintain connections, and involve alumni in educational and philanthropic opportunities.
- Increase alumni participation in lectures, mentoring and other activities so they can provide valuable feedback to current students.

GOAL 3
Value, recognize and reward teaching activities to better encourage and inspire our educators.

OBJECTIVES
Recognize and value all aspects of education in the School of Medicine’s promotions process.
- Reward excellence in teaching, and evidence-based educational pursuits. For example, we will develop metrics for education and related activities in the appointments, promotions and tenure process.

Encourage the development of educators at all levels — including faculty, residents, post-doctoral fellows and upper-level students.
- Recognize the breadth and importance of educational activities at the School of Medicine by strengthening mentoring and advising programs, ensuring that residents are adequately prepared to pass along their knowledge to medical students, and encouraging students to “teach the teachers.”
- Make certain that dedicated faculty educators have protected time to devote to teaching and associated activities.

Create a broad, diverse group of faculty, staff, students and others who will discuss and implement new pedagogical models.

Recruit, recognize and encourage those who educate our community members and patients — including physicians, therapists, medical technologists and genetic counselors.

GOAL 4
Provide top-tier educational infrastructure.

OBJECTIVES
Continue to build our educational technology capacity to support on- and off-campus activities.
- Enhance the ability of students offsite to connect with campus.
- Develop a tracking database and provide other assistance to faculty applying for training-related grants.
- Ensure that all learners at the School of Medicine have access to the information technology resources and knowledge-sharing opportunities that will enrich their educational experience.

Enhance our learning environment to ensure the best educational experience for all.
- Expand both learning opportunities and dedicated student space across the University of Maryland Medical System.
- Ensure that academic class-rooms across the campus provide proper environmental (HVAC) conditions.
- Streamline resource access for all learners and educators — from parking to computer credentialing to classroom and library access.

Each education program at the School of Medicine will develop strategies to implement these objectives, specific to its own community of learners.
PROMOTE EXCELLENCE IN HEALTH CARE,
CENTERED ON LOCAL AND GLOBAL NEEDS
Everything we do at the School of Medicine — from providing unparalleled medical education to conducting innovative fundamental and translational research — ultimately supports one goal: excellence in clinical care and service for patients. Between 2017–2022, our goal is to become the region’s first choice for health care by providing services that are best-in-class, cost-effective, patient-centered, and accessible to everyone. We will focus on coordinating important services on a regional level by integrating information and care processes to enhance efficiency, effectiveness and access.
GOAL 1
Promote patient-centered care and excellence at every point of care in all faculty practices and hospital settings.

OBJECTIVES
- Facilitate effective teamwork among clinical and non-clinical staff.
- Continue to make our services accessible and patient-centered through Partnership in Service Excellence initiatives.
- Recruit outstanding School of Medicine graduates and faculty to work across the Medical System.
- Integrate education and research with clinical programs.

GOAL 2
Enhance and expand our clinical destination programs in cancer treatment, transplantation, trauma and critical care, heart and vascular medicine, and neurological care, which attract patients from across the region and around the world.

OBJECTIVES
- Create links among programs to enhance patient-centeredness and access.
- Promote these programs at all levels, from local to international.

GOAL 3
Establish new clinical destination programs, reflecting our expertise and the needs of our community.

OBJECTIVES
- Establish destination programs in:
  - Sports and performance medicine
  - Neurodegenerative and cognitive disorders
  - Neurological and neurosurgical disorders
  - Women and Children’s health
  - Extremity disorders and injuries
  - Digestive health
  - Obesity and diabetes
  - Addiction disorders
- Establish our hospital for children as a destination program center.

GOAL 4
Grow our ambulatory care capacity across the region, in response to a shift in care delivery to more out-patient and satellite patient care facilities.

OBJECTIVES
- Develop adult and pediatric Ambulatory Surgery Centers that are accessible and convenient for patients.
- Expand our ambulatory care sites, including Immediate Care and comprehensive ambulatory support services including laboratory, imaging and physical therapy, both at UMMC, and at UMMS hospitals, Waterloo, and our northern Maryland locations.
- Emphasize the rational flow of care and distribution of services across sites.

GOAL 5
Establish a strong population health program in West Baltimore, in partnership with the University of Maryland Medical Center, to understand and positively affect the health of our neighbors.

OBJECTIVES
- Transform our network of primary care and specialty practices into a fully integrated medical neighborhood for the communities of West Baltimore.
- Integrate our primary care practices, including family medicine, general pediatrics and general internal medicine.
- Establish the University of Maryland Medical Center Midtown Complex Care Center for adults, and the University of Maryland Children’s Hospital Complex Care Center.
- Build an effective, sustainable population health management infrastructure within UMMC care systems.
- Integrate mental health and addiction services into primary and specialty care settings, and increase access to these services.
- Partner with UMMC/UMMS Population Health to strengthen information management technologies that promote data-driven care.
- Develop educational population health programs (including injury prevention and violence reduction) for the UMMC community.
DEVELOP INNOVATIVE MEDICAL DISCOVERIES AND BREAKTHROUGHS

The School of Medicine is one of the nation’s fastest-growing research institutions, ranking highly in per-faculty funding from the National Institutes of Health, other federal and state agencies, and philanthropic foundations and associations.

We will expand our leadership in biomedical research by meeting the challenges of increased regulation and competition; exploring new frontiers in clinical, translational, and basic research; developing new research initiatives that build on our strengths and solve real-world problems; recruiting outstanding research faculty; and bringing in new philanthropic dollars that will support investigations seeking better approaches to curing diseases and promoting health.
GOAL 1
Enhance research collaboration across all academic units: departments, centers, institutes and programs.

OBJECTIVES
Identify faculty facilitators to foster communication among investigators across departments, centers, institutes and programs.

Expand our online tools to enhance and facilitate communication and collaboration.

Create joint retreats and seminars that encourage awareness of colleagues’ work and facilitate collaborative interaction.

Identify metrics (such as shared manuscripts and grant submissions) and consider incentives to encourage partnerships.

GOAL 2
Promote the growth and advancement of existing and emerging centers of clinical-translational research excellence.

OBJECTIVES
Seek a Clinical Translational Science Award (CTSA) that would open doors to a host of research opportunities.

Invest in the computation and informatics infrastructure now essential to basic and clinical/translational research activities — including state-of-the-art instrumentation.

Develop disease-focused Clinical Centers of Excellence that build upon existing institutional research strengths.

GOAL 3
Enhance the productivity of existing senior and junior faculty, and prioritize recruitment of new, well-funded investigators.

OBJECTIVES
Identify and facilitate clear lines of communication and collaboration.

Create joint retreats and seminars that encourage awareness of colleagues’ work and facilitate collaborative interaction.

Identify metrics (such as shared manuscripts and grant submissions) and consider incentives to encourage partnerships.

Recruit scores of leading researchers and physician scientists at all faculty ranks to accelerate breakthrough discoveries, through the Special Trans-Disciplinary Recruitment Award Program (STRAP).

GOAL 4
Enhance the visibility of SOM research and increase philanthropic support.

OBJECTIVES
Sponsor local, national and international symposia at the University of Maryland School of Medicine.

Promote awareness of our research through articles and blogs by School of Medicine researchers.

Developing fundraising strategies built around key programs and themes, including the School of Medicine’s “big science/moonshot” themes.

GOAL 5
Manage the regulatory burden to reduce institutional costs and protect investigator time by developing efficient management systems.

OBJECTIVES
Consult with experts to identify best practices and appropriate school-wide targets.

Develop and deploy methods for monitoring regulatory efficiency.

Design software that operates seamlessly across systems, and provides real-time information to regulatory groups and faculty.

Create an oversight team of administrators and faculty to provide advice and accountability.

Assemble teams of basic and clinical faculty to shape and build on each aspirational research focus and help recruit others to achieve these goals.

Bring together other teams, composed of administrators, faculty and development officers, who will identify philanthropic, institutional and federal funds to support the development of each goal, and who will monitor each program’s success.

Use evaluation metrics that include multi-investigator research publications, success in recruiting new faculty, and acquisition of new research funding.

GOAL 6
Identify aspirational research goals that focus on state-of-the-art basic and clinical research, and develop new and effective interventions and therapies based on those goals.

OBJECTIVES
Develop programs that expand upon our existing research strengths.

Identify new goals with long-term strategic importance — from bench research to bedside to community applications.
ENGAGEMENT AND IMPACT: PARTNER TO INFLUENCE HEALTH AT HOME AND ABROAD

The University of Maryland School of Medicine strives to be a collaborative, innovative and metrics-driven partner in local, regional, and international communities. Over the next five years, we will improve health outcomes and public trust through:

- Educational, clinical and research partnerships.
- Translational, community-based research.
- Rigorous evaluation and reporting of our successes and challenges.
- Expertise shared reciprocally with colleagues within the University of Maryland as well as peers and policy-makers at home and abroad.
- Effective and efficient use of resources.

All community-based endeavors will be conducted within a scholarly research framework, with a reliable measurement system in place for each activity.
GOAL 1
Strengthen evidence-based initiatives that address community health needs.

OBJECTIVES
Rigorously measure, evaluate and publish data from community engagement activities which inform new strategies and identify best practices.

- Centralize program measurement in a new School of Medicine Program Evaluation Core — housed in the Department of Epidemiology and Public Health as part of the Center for Innovative Biomedical Resources (CIBR). This will strengthen community research by assisting with research designs, interventions, and creation of metrics on outcomes and impact.

- Establish a clearinghouse for materials relating to community engagement projects.

- Pinpoint disparities in health care and factors that contribute to disparities in health to better target care to underserved communities.

Establish and reinforce partnerships to increase our impact.

- Establish a position of Director of Community Engagement to provide direction to the School of Medicine’s community engagement mission, and to:
  - Track partnerships at all levels more effectively
  - Identify opportunities for new research in the local community and abroad.
  - Identify opportunities for new research in the local community and abroad.

- Establish new relationships with other UM entities to design population-based studies that expand understanding of what works — and what does not work — to address issues such as chemical dependency.

- Engage our neighbors in our research and academic programs in order to foster health and research literacy and inspire trust, especially in underserved communities.

- Work with local organizations and leaders to develop innovative research and education initiatives that benefit citizens of our city and region.

- Promote existing initiatives, such as the Mini-Med School, that enhance health literacy. In turn, faculty, staff and students will have the opportunity to learn from our neighbors.

GOAL 2
Support our faculty members in conducting translational, community-based research that improves health outcomes and enhances the School of Medicine’s reputation as a national academic leader in population health.

OBJECTIVES
Collaborate with community health organizations to develop, conduct, evaluate and disseminate research and interventions that address public health issues.

- Integrate community concerns and feedback into our research programs.


- Call on Maryland’s Area Health Education Centers (AHEC) to seek community members’ input on health care priorities, social and environmental determinants of health, and interventions that would meet their needs.

- Share our expertise locally, nationally and internationally.

- Create educational environments for training new cadres of researchers through community engagement.

- Share our knowledge widely through telemedicine, conferences, webinars, exchange programs, and training and fellowships.

- Test the feasibility of establishing satellite facilities overseas in mission-relevant areas.

GOAL 3
Enhance the School of Medicine’s impact on health policy at all levels, local to international, based on sound science.

OBJECTIVES
Identify opportunities for faculty members to take part in policy and planning, including as advisors, and provide time and assistance for them to do so.

Offer students, faculty members and members of the community, training in communication skills, cultural competency, and facilitating science- and evidence-based policy.

Ensure that all forays into policy making and advising are based on measurable, scholarly research.