



# The University of Maryland School of Medicine is a place of discovery, caring, and learning.

Our focus is on the innovations that advance medicine and science, the health and well-being of the citizens of Maryland and West Baltimore, and the education of future health care leaders.

We find ourselves in the right place at the right time with the right people.

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# Strategic Plan

2025-2030



### **The Right Place**

We sit amidst a rich ecosystem of powerhouse institutions focused on advancing knowledge and improving humanity.

As Maryland's largest public medical school, we have an obligation to partner, to collaborate, and to facilitate. We will move in new directions. and we will pull others along with us. We seek scientific breakthroughs and aim to multiply the breakthroughs of our peers. We embrace the dizzying pace of biomedical discoveries.

It is our space.

### **Our Ecosystem**



### **The Right Time**

Today, more than ever, our innovative skills are needed to solve the complex individual and global health diseases and health disparities faced by millions across the nation. We are also needed to tackle the generational health challenges of our time: obesity and metabolic syndrome, an aging population, emerging pathogens and climate medicine, mental health and addiction, health inequity and disparities, brain diseases and neurodegeneration, and big data computation.

We see what lies ahead if nothing changes. We recognize our good fortune to practice our science and healing at this moment in time. A time when transformations in artificial intelligence and big data allow us to make therapeutic quantum leaps forward.

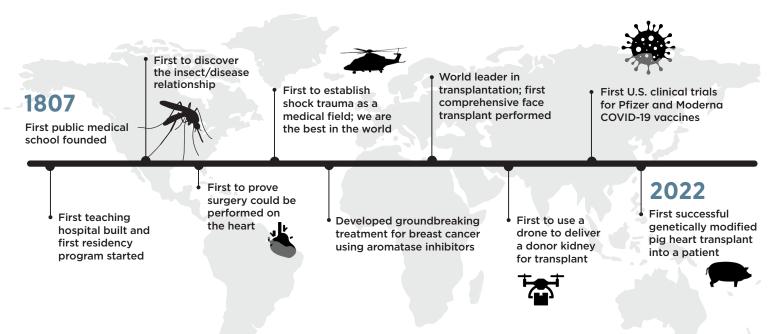
This is a destiny we cannot waste nor ignore.

Our time is now.

### We are Primed to Lead in Biomedical Research



### Throughout Our History, We Have Been World Leaders in Academic Medicine



### Three New Institutes Increase Our Pace of Discovery

### **MEDICINE INSTITUTE FOR NEUROSCIENCE DISCOVERY**

- Accelerates translational brain research
- Collaboration between basic and clinical scientists and practicing physicians
- Founded 2023



### **INSTITUTE FOR HEALTH COMPUTING**

- Leverages AI, big data, and precision medicine to transform patient care
- MPower partnership between UMB, UMMS, and
- **UM College Park**
- Founded 2023



### **KAHLERT INSTITUTE FOR ADDICTION MEDICINE**

- Transforms addiction prevention, treatment, education, and research
- Unites addiction leaders across **UMB** campus
- Founded 2023

### The Right People

We are a diverse community of nearly 16,000 faculty, students, trainees, staff, alumni, and volunteers all dedicated to our vision and mission.

We are the epidemiologists who uncovered stealth pathogens in long-term care facilities; the psychiatrists who linked inflammation to autism and schizophrenia risk factors; and the global health experts who showed just a single dose of a vaccine can prevent typhoid in Malawi's most vulnerable children.

We are the medical educators who teach rehabilitation engineering; the community scientists who lead the national conversation about social determinants of health; and the physicians who encourage other physicians to improve their probabilistic skills to ensure Al clinical algorithms get it right.

### Our people have the talent.





# The Generational **Health Challenges** of Our Time

### **Obesity and Metabolic Syndrome**

Approximately one in four Maryland youth is overweight or obese.

### **An Aging Population**

By 2040, nearly one-quarter of Maryland's population will be age 60 or older.

### **Emerging Pathogens and Climate Medicine**

Three out of four emerging infectious diseases are zoonotic.

### **Mental Health and Addiction**

Maryland's overdose death rate is 50% higher than the national average.

### **Health Inequity and Health Disparities**

A black baby born in Maryland is 2.5 times more likely to die than a white baby.

### **Brain Diseases and Neurodegeneration**

Over 100,000 Marylanders age 65 or older have Alzheimer's disease.

### **Big Data Computation**

Al tools can level the playing field to help highlight and erase inequities in health.

**Our immediate** task is to change the course of these challenges impacting our communities.



### We Have a Plan

Our future success, as envisioned in this strategic plan, relies on you, our faculty and staff members, our students and trainees, and our leadership teams.

We asked for your input and ideas. You responded with overwhelming enthusiasm to be heard during grassroots brainstorming sessions, and to volunteer for meetings and working groups. You delivered insightful observations, suggestions, and critiques to make the School of Medicine a stronger institution.

*In the following pages, the plan identifies key* priorities; forges a path forward for our missions of Education, Research, Clinical Care, and Community; and compels us to remain focused. It is built upon your collaborative efforts and reflects your aspirations for our School.

### Thank you all.

With enthusiasm and commitment,

Mark T. Gladwin, MD

Dean, University of Maryland School of Medicine Vice President for Medical Affairs, University of Maryland, Baltimore John Z. and Akiko K. Bowers Distinguished Professor and Dean

### **Our Vision**

To stand as one of the nation's leading public medical schools, distinguished by an unwavering commitment to fostering vibrant and healthy communities through bold discovery science, transformative education, and personalized, equitable patient care.

### **Our Mission**

We pursue excellence across biomedical research, education, and patient care to advance health equity and wellness for people in Baltimore, the State of Maryland, and around the world. Together, we work to solve generational health challenges and make lasting contributions to the betterment of our diverse and interconnected communities.

GOAL 1 GOAL1 ← Develop, recruit, and educate academically talented medical, Lead research on generational health challenges as well as other emergent health priorities.

physical therapy, allied health, and graduate students, as well as residents, trainees, and post-doctoral fellows who are representative of the Maryland population.

Create a broad collaborative culture to encourage

Framework

GOAL 2

GOAL 2 ◀ Prepare for the future of health care by creating innovative and collaborative new programs that educate and position students and trainees to serve, lead, and impact Maryland's health care and science enterprises.

GOAL 3 Accelerate innovation and discovery by creating a culture of efficiency and service.

GOAL 3 ◀ Prioritize educator career development and increase retention, advancement, and job satisfaction.

GOAL 4 Develop, recruit, and retain rising star investigators and complementary high-impact biomedical researchers and mentors.

new research endeavors and entrepreneurship.

GOAL 4 ◀ Ensure the academic environment caters to the physical, emotional and mental well-being, and resilience of students, faculty, and staff.

**EDUCATION** 

We teach and train the next generation of health and science professionals

RESEARCH

We build on generations of discoveries to advance therapies and cures

**CLINICAL CARE** 

We use precision medicine to improve health for generations to come

COMMUNITY

We collaborate with generations in our West Baltimore neighborhood and beyond

Grow the faculty practice by expanding and optimizing ambulatory and telehealth services and leveraging the entrepreneurial capabilities of the group practices to deliver high-quality clinical care and positive patient experiences. GOAL 1

Provide accessible and equitable health care via long-term partnerships with FQHCs, UMMC/Midtown, and UMB schools that result in improved health and well-being for the West Baltimore and Eastern Shore communities.

GOAL 2

Ensure timely and apt patient flow leading to the 'right patient is in the right place' within the academic medical system and community network resulting in patient-centered care, increase in capacity, and optimal resource utilization.

GOAL 2

Foster a culture of sustainable collaboration and shared leadership with the community to address their health priorities while aligning with the efforts of UMB and UMMC.

GOAL 3

Establish a learning health system — in collaboration with UMMS, UMB, and UM College Park — that uses data science to accelerate clinical innovations, hasten implementation of evidence-based care, eliminate health disparities, and reduce health care costs.

GOAL 3

GOAL 4

Create employment opportunities for West Baltimore residents within UMB, UMMC, and the local community that lead to improved individual economic vitality.

GOAL 4

Develop cohesive, data-driven administrative structures to deliver efficient and effective clinical care operations.

Lead the city, state, and national conversation on mitigating health disparities and improving health equity.





**EDUCATION** 

We teach and train the next generation of health and science professionals

### GOAL 1:

Develop, recruit, and educate academically talented medical, physical therapy, allied health, and graduate students, as well as residents, trainees, and post-doctoral fellows who are representative of the Maryland population.

#### **OBJECTIVES**

### Increase student scholarly productivity and knowledge dissemination through participation in research, symposia, seminars, and annual meetings.

- Provide transparent and consistent financial support for student attendance, participation, and membership in local, state, and national research organizations.
- Enhance opportunities for participatory basic and clinical investigation.
- Bolster physician-scientist training pathways - medical school to fellowship - through progressive NIH grant phases.
- Increase extramural funding for graduate training including T32s, F awards, and other fellowships.

### Increase opportunities for student rotations, electives, and experiences at all UMMS hospital sites as well as rural and underserved communities.

- Expand the number of preceptors at UMMS hospitals and rural communities.
- Create student experiences at faculty-supervised health clinics at the Mondawmin Mall Health Village and other faculty clinics.
- Partner with UM Eastern Shore (UMES) to prepare their students for medical and health science advanced education.
- Collaborate with UMES for student education in rural settings.

 Foster relationships with Choptank Community Health System and UM Shore Regional Health to create training opportunities for medical students and residents.

### **Build brand awareness and** philanthropy funding to recruit the most highly qualified students.

- · Increase means-based and merit-based competitive scholarships for partial and full tuition and stipend support.
- Partner with the Office of Development to create scholarship campaigns.
- Increase marketing and communications efforts to create affinity among potential students.

### Foster student academic success, personal growth, and satisfaction.

- Increase awareness and quality of student support services including academic advising, counseling, mentoring, career planning, and tutoring — to address individual needs.
- Encourage participation in student groups, community engagement, extracurricular activities, and leadership and research opportunities.
- Embed our value-based culture of service, humanism, and integrity, into curricula.

#### **OUR PRIORITIES**

- Student recruitment and retention
- Enhancement of all training pathways
- Development of faculty educators
- Development of clinical training sites for medical students and residents
- Educational technology and space
- Student research
- Student support
- Interprofessional education and experiences
- Advanced training in precision medicine
- Philanthropy for education
- Marketing





### GOAL 2:

Prepare for the future of health care by creating innovative and collaborative new programs that educate and position students and trainees to serve, lead, and impact Maryland's health care and science enterprises.

#### **OBJECTIVES**

### Launch complementary new dual degree programs in collaboration with School of Medicine departments as well as UMB and UM College Park.

- These programs may include: Master's in AI/ML, BS-MD, and BS-DPT.
- Align health sciences leadership for all dual degree programs around a culture of education innovation.

### Ensure student productivity and academic success with training to build expertise in:

- EPIC tools for panel-based population health care,
- Virtual reality/augmented reality modalities and AI,
- · Interdisciplinary team dynamics,
- · Value-based care models,
- Multi-omic technologies to advance precision medicine and population health management.

# Proactively update curricula to align with evidence-based clinical care and community health needs.

- Integrate digital health platforms into curricula.
- Develop training for educators to incorporate telemedicine practices into teaching methodologies.
- Enhance or incorporate social determinants of health and DEI/ JEDI into course content.

# Update and modify infrastructure for adaptability to educational technology advances.

• Develop a comprehensive infrastructure upgrade plan that prioritizes classrooms, laboratories, simulation centers, and relaxation spaces.





### GOAL 3:

Prioritize educator career development to increase retention, advancement, and job satisfaction.

#### **OBJECTIVES**

### **Increase professional** development opportunities to expand educators' instructional skill sets.

- Create collaborative learning communities to support longitudinal, interprofessional education goals and projects.
- · Boost the personnel and support for the Medical Education Leadership Academy to expand the scope and availability of instructional programming.
- Develop a mentoring program for faculty support during their first year as an educator.
- Add education interests to the faculty profile searchable database system.
- Partner with the Faculty Center for Teaching and Learning Education to support educational scholarship and publication.

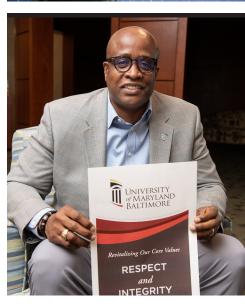
### Recognize and value faculty educational excellence.

- Establish appointments, promotions, and tenure metrics and incentives for teaching, mentorship, and educational service.
- Standardize the teaching portfolio and training for promotion packets.
- Create an annual recognition program for outstanding educators.
- Account for work Relative Value Unit (RVU) requirements and grant expectations for faculty engaged in significant teaching, mentorship, and educational activities.

### Partner with UMB to align education programs with the **University Strategic Plan.**







### **EDUCATION PROGRAMS**

- MD
- MD/PhD
- MD/MBA
- MD/MPH
- MD/Masters
- MD/MS in Bioengineering
- MPH
- DPT
- DPT/PhD
- DPT/MPH
- Genetic Counseling Masters
- Pathologists' Assistant Masters

- MS Laboratory Management
- BS Medical Laboratory Science
- Graduate Program in Life Sciences PhDs and Masters:
  - Biochemistry and Molecular Biology
  - Cellular and Molecular Biomedical Science
  - Epidemiology
  - Gerontology
  - Human Genetics and Genomic Medicine
  - Molecular Medicine
- Molecular Microbiology and Immunology
- Neuroscience
- Physical Rehabilitation Science



Ensure the academic environment caters to the physical, emotional and mental well-being, and resilience of students, faculty, and staff.

### **OBJECTIVES**

### Enhance support services to ensure accessibility for all students, faculty, and staff.

- Partner with community-based mental health providers and expand on-campus mental health options.
- Integrate student-faculty communities to establish a mutually supportive and collaborative learning environment.

# Bolster the awareness, use, and caliber of interprofessional wellness programming.

 Appoint a wellness director to curate and disseminate wellness programming, initiatives, events information, and curricular wellness content.

- Integrate resilience training into curricula.
- Encourage the development and growth of student-led, interprofessional affinity groups that provide peer support and mentorship.
- Develop a school-wide health habit challenge in conjunction with UMB URecFit and Wellness.
- Enhance financial literacy programming for students to effectively manage educationrelated expenses.













RESEARCH

We build on generations of discoveries to advance therapies and cures

### GOAL 1:

Lead research on generational health challenges as well as other emergent health priorities.

#### **OBJECTIVES**

### Recruit world-class leaders with a passion to solve generational health challenges and a track record of programmatic research accomplishments.

- Ensure focused recruitment of faculty who will build synergy with existing expertise.
- Target leaders with translational research perspectives and develop and retain internal leaders.

### **Diversify research support across** multiple funding domains.

- Form collaborative teams to attract large programmatic grants from federal, foundation, and other sources across the entire translational research spectrum.
- Obtain state and local funding most relevant to the generational health challenges faced by the Maryland and the West Baltimore communities.
- Target philanthropy based on the lived experiences of philanthropists.
- Develop seed funding with partner institutions.

### **Build and continuously strive for** excellence across all institutes and centers addressing generational health challenges.

- Continue support for existing centers and institutes and close the gap between current research strengths and capabilities and those needed to address generational health challenges.
- Partner with UMMS to ensure research is relevant to the current practice of medicine and embedded in a learning health system.
- Prepare to respond with resources to create new institutes and centers for emergent generational health challenges.

### **Commit resources to become** a national leader in health equity research.

- Examine all current and emergent generational health challenges through the lens of health equity.
- Engage the community in research via outreach and education.
- Expand community-based clinical research sites across the state to increase access and engagement and generate systemwide informatics relevant to health equity.

#### **OUR PRIORITIES**

- Generational health challenges research
- High-impact recruitment
- Entrepreneurism
- Internal and external collaboration
- Minority investigators and under-resourced populations
- Community involvement in research
- UMMC Joint Strategic Plan
- Research regulatory/compliance systems and space





### GOAL 2:

Create a broad collaborative culture to encourage new research endeavors and entrepreneurship.

#### **OBJECTIVES**

### Stimulate translational research by increasing engagement among investigators.

- Encourage bilateral collaboration among investigators in basic science departments, institutes, and centers and their counterparts in clinical departments to pursue fundamental discovery through partnerships.
- Situate basic scientists and clinical investigators in physical proximity, wherever possible, based on their fields of interest.
- Pursue programmatic funding and training focused on translational research.

# Seek partnerships with the rich array of academic and health care institutions located in the DC-Maryland-Virginia region.

- Integrate research efforts across UM campuses to synergize new programs (e.g., Bioengineering, Health Computing, and AI).
- Align with the Baltimore
   VA Medical Center (VA) on
   recruitment and research growth.
- Expand partnerships with the NIH for targeted research opportunities and reciprocal trainee research experiences.
- Create a Center for Defense Medicine to support investigators who pursue Department of Defense funding.

# Cultivate an entrepreneurial mindset among investigators while decreasing barriers to innovation.

- Advance research that explicitly includes entrepreneurship in its mission and objectives.
- Improve processes for technology transfer and conflict of interest management for faculty pursuing entrepreneurship.
- Expand relationships and build awareness of industry partners and the UM BioPark.
- Develop a network of CEOs and entrepreneurs to serve as mentors and provide venture support to faculty start-ups.



### GOAL 3:

Accelerate innovation and discovery by creating a culture of efficiency and service.

### **OBJECTIVES**

### Maximize efficiency of space utilization for research.

- Create policies and develop processes for space allocation based on investigator need and productivity.
- Provide state-of-the-art laboratory space for new rising star investigators and high-impact recruits.

### Partner with UMB to streamline regulatory and compliance systems to increase research productivity.

- Optimize timelines for approval of protocols and amendments in animal and human research.
- Educate investigators about the operations and timelines of the Office of Research Administration. **Sponsored Programs** Administration (SPA), and Sponsored Projects Accounting and Compliance (SPAC) to ensure aligned expectations.
- Encourage faculty participation on internal and external committees focused on research policy, funding allocation, and administration; include this service in the APT promotion and tenure process.

### Increase the efficiency of the clinical trials activation process and expand patient and investigator participation in clinical research, in partnership with UMMS/UMMC.

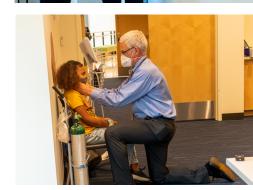
- Prioritize research that contributes to a learning health system.
- Increase collaboration between the Center for Clinical Trials and UMMS/UMMC Research Integrity Office to reduce time to activation.
- Improve technology and adopt enterprise systems to support clinical research.
- Build capacity to support and scale investigator-initiated clinical research.
- Build a new community partnership that establishes infrastructure and processes for conducting clinical research.

### Refine and adapt the Core Services to provide a sustainable, efficient, and evolving array of state-of-theart instrumentation and specialized research expertise.

- Enhance the annual review process to assess the performance of each Core, avoid duplication of technologies and services, and evaluate financial support requests.
- Continually communicate and build awareness of the Core Services resources.







### GOAL 4:

Develop, recruit, and retain rising star investigators and complementary high-impact biomedical researchers and mentors.

#### **OBJECTIVES**

# Create a supportive environment with a defined academic-success pathway for rising star early-career investigators.

- Identify exceptional current trainees and recruit external early-career faculty scientists and physician-scientists with a passion for research and develop them as independent investigators.
- Provide resources and develop robust, personalized mentoring programs to foster success as independent investigators.

# Identify priority areas for strategic recruitment of high-impact investigators.

- Target and recruit investigators, whose research complements our institutional strengths and who have the pedigree to develop large programmatic research initiatives.
- Recruit scientists and physicianscientists into clinical departments to enhance the departmental research and academic stature.
- Identify investigators with the potential to develop research in emergent areas of science and medicine.



### Develop strong MD and PhD scientist training pathways.

- Establish programs to support success through progressive NIH grant phases, including increasing the number of T32 training programs across the School of Medicine.
- Improve support infrastructure for graduate student and postdoctoral programs.
- Develop external-partner programs to create synergies for post-doctoral fellow training.







CLINICAL CARE

We use precision medicine to improve health for generations to come

### GOAL 1:

Grow the faculty practice by expanding and optimizing ambulatory and telehealth services and leveraging the entrepreneurial capabilities of the group practices to deliver high-quality clinical care and positive patient experiences.

#### **OBJECTIVES**

### Develop and launch new clinical outpatient programs and sites to further expand care to our patients in the community.

- Establish brick-and-mortar locations through joint ventures with ambulatory surgical centers and for-profit specialty care networks.
- · Promote the growth of contractual agreements with aligned ambulatory partners.
- Partner with UMMS/UMMC in enabling EPIC teams to respond more rapidly to the prioritized needs of clinical programs.
- Develop an infusion therapy program across Maryland.

### **Enhance patient access and** convenience to ambulatory services and programs.

- Launch focused telehealth options that include virtual visits for nonurgent clinical communications and teleconsult capabilities between targeted academic clinical services and community physician sites, such as primary care, OB-GYN, and cancer.
- Enhance delivery of services at **UMMC University Imaging Center** and/or explore private radiology partnerships to expedite imaging access within the network.

### **Expand our patient-centered** capabilities to perform efficiently and effectively in value-based care incentive programs.

- Complete an assessment of current participation and new opportunities in value-based care programs.
- Engage departmental leaders and staff in value-based care programs and establish participation in new contracts.
- Include cost-savings programs across UMMS as part of an initiative led by UM Faculty Physicians, Inc. (FPI).
- Disseminate an annual report based on outcomes and impact.

#### **OUR PRIORITIES**

- Optimize bed and clinic utilizations
- Administrative support staff and nursing staff
- Right patient in the right place
- Outpatient/ambulatory network
- Quality and efficiency of inpatient services
- Optimize revenue cycle and revenue streams
- Data analytics to improve clinical performance
- Service lines
- Alian with UMMC Joint Strategic Plan





### GOAL 2:

Ensure timely and apt patient flow leading to the 'right patient is in the right place' within the academic medical system and community network resulting in patient-centered care, increase in capacity, and optimal resource utilization.

### **OBJECTIVES**

### Improve access to care to ensure timeliness and favorable proximity for patients.

- Increase telehealth opportunities, especially to improve access for West Baltimore patients.
- Bolster service line capacity and optimize operational efficiency, in particular for the priority disciplines of anesthesiology, emergency medicine, pathology, and radiology, as well as UMMSfocused programs and solutions.
- Develop advanced practice provider/physician partnerships to increase capacity.
- Enhance access to preventative radiology screenings.

### Promote patient retention and referrals across the UMMC/FPI network.

- Incentivize providers to enhance patient access, 'keepage,' and high-quality clinical care.
- Establish strong relationships between departmental leadership, the academic medical center, and community locations to foster retention.
- Evaluate patient satisfaction with call center and website interactions.

### Partner with UMMC to implement the Joint Strategic Plan.





### GOAL 3:

Establish a learning health system — in collaboration with UMMS, UMB, and UM College Park — that uses data science to accelerate clinical innovations, hasten implementation of evidence-based care, eliminate health disparities, and reduce health care costs.

### **OBJECTIVES**

### Ensure that clinical data are accessible, reliable, usable, and timely.

- Map EPIC data to a researchfriendly data model.
- · Recruit clinical faculty with expertise in big data and applied clinical research.
- Build out the honest brokeranalyst team to meet demand for academic data use.
- Adopt framework agreements that enable clinical, data-focused external collaborations.

### Create an ethos that probes the clinical care status quo. values data-driven decision making, and promotes systemwide prospective testing of novel treatment strategies and interventions.

- Establish care networks within specialties to connect providers across UMMS.
- Educate trainees to understand data modeling and integration of research into clinical practice.
- Raise awareness among clinicians about the role of data analysis and prospective testing in continuous quality improvement and about the benefits of pragmatic and adaptive clinical trials.

### **Optimize operational processes** to facilitate prospective testing and quality improvement.

- Liaise with the Institutional Review Board to increase knowledge about pragmatic research methods and to develop rapid consent models.
- Partner with the UMMS EPIC team to ensure capacity to build out pragmatic and adaptive clinical trials.
- Identify and adopt models for operations and compensation for clinicians and/or clinics — that support and encourage research participation across our partner institutions, UMMS, and the VA.
- Test new care interventions across UMMS and the VA.







Develop cohesive, data-driven administrative structures to deliver efficient and effective clinical care operations.

### **OBJECTIVES**

### Assess existing supportive infrastructure to determine needs for FPI resources and programs.

- Evaluate and optimize revenue cycle management to capture potential missed opportunities.
- Create staff retention programs.
- Improve administrative resource sharing centrally and across clinical departments.
- Establish precise and robust data management, tracking, and personnel with IT and EPIC expertise.

# Use data to establish effective communication channels across the service lines to ensure appropriate allocation of care.

- Capitalize on IT strengths to build a data-sharing infrastructure.
- Create real-time data visibility on bed capacity and operating room block usage.
- Commit to partnering across service lines using efficient staffing models.
- Initiate regular data review forums to inform future action.
- Leverage informatics to identify impediments for patients to access care.

### Foster an interrelated academic health system funds flow model across FPI, UMMC, and School of Medicine.

• Implement the four core funds flow priorities and processes for purchased services, structural deficits and supports, coordination of payments, and establishment of incentive alignment.











COMMUNITY

We collaborate with generations in our West Baltimore neighborhood and beyond

### GOAL 1:

Provide accessible and equitable health care via long-term partnerships with Federally Qualified Health Centers (FQHC), UMMC/Midtown, and UMB schools that results in improved health and well-being for the West Baltimore and Eastern Shore communities.

### **OBJECTIVES**

**Engage with community leaders** to identify their health care priorities and build a two-way communication framework that fosters a strong collaborative partnership.

- Identify and name clinical/health care contacts to liaise with the community.
- Use existing community structures, such as schools and faith-based organizations, for two-way communication with the community.
- Establish health care initiatives that feature bricks-and-mortar and/or mobile interdisciplinary care clinics and early detection, screening and prevention programs, such as:
  - Care coordination after discharge from ER or inpatient care,
  - Lung cancer and heart diseases.
  - Substance abuse disorder.
  - Mother/baby health,
  - Culturally competent LGBTQIA+ care.
  - Youth 'safe space' drop-in health care and wellness activities.

Capitalize on and include the expertise and skills of faculty and the volunteerism of students from all UMB schools to provide multidisciplinary services at community-based clinical sites.

• Leverage the UM Greenebaum Comprehensive Cancer Center and new institutes, such as the UM-MIND, the Institute for Health Computing, and the Kahlert Institute for Addiction Medicine, to advance health equity in clinical care and research.



#### **OUR PRIORITIES**

- Physical footprint/infrastructure for 'visible' clinical care in **West Baltimore**
- Clearing house and/or database of resources and current activities
- Affinity groups for projects
- Partnership with community leaders
- Priorities determined by community members
- Emphasis on interdisciplinary programs at UMB schools
- Sustainable engagement
- Resources from the State
- Research programs to address unique needs of vulnerable populations





Foster a culture of sustainable collaboration and shared leadership with the community to address their health priorities while aligning with the efforts of UMB and UMMC.

#### **OBJECTIVES**

### Seek community insight and input to identify priorities for vital conditions for health and wellbeing, and leverage the resources and strengths of the community.

- Form a community advisory board for which members are compensated.
- Include community representation on UMB decision-making bodies.
- Hold regular public meetings/ town halls with community organizations.
- Develop a data-sharing mechanism with community leaders.

### Facilitate coordinated and cohesive engagement between community leaders, UMB, and UMMC.

- Grow the partnership with the **UMB Community Engagement** Office to increase the impact of programs and clinical services.
- Develop a comprehensive and inclusive database of current UMB programs, activities, and community partners.
- Establish affinity groups to create awareness and unite efforts.

- Emphasize sustainability of research programs and volunteer activities to maintain consistent engagement and organized transition to new initiatives.
- Use the new UMB Center for Community Health as the coordinating entity for crossdiscipline community endeavors with UMB schools.

### Acknowledge, value, and expand the community endeavors of faculty and the volunteerism of students and staff.

- Incorporate humanism and community impact in the faculty APT promotions and tenure process.
- Mentor early-career faculty to ensure the legacy of established community programs.
- Matriculate students and residents, who are interested in population and community health, into the School of Medicine, training programs, and faculty practices.
- Develop a Certificate in Community Engagement credential.







### GOAL 3:

Create employment opportunities for West Baltimore residents within UMB, UMMC, and the local community that lead to improved individual economic vitality.

### **OBJECTIVES**

Partner with UMMC to enhance the Career Academy for recruitment, retention, and career advancement in targeted health care positions.

- Identify in-demand jobs to expand career training opportunities.
- Create mentoring programs for employees.
- Expand training opportunities for research- and academic-related positions (e.g., research coordinators and lab technicians).

**Enhance biomedical programming** for K-12 students in Baltimore City and other under-resourced areas of Maryland to build interest in and awareness of medical, science, and allied health career opportunities.

• Partner with community leaders to identify priority programming (e.g. literacy, mentoring, and volunteer training programs).

- Create paid internships and job opportunities within UMB and UMMS/UMMC for high school and college students.
- Seek philanthropic support to offer scholarships and expand K-12 programming and Mini-Med School.
- Collaborate with UMB schools and programs to increase student and faculty participation in youth programming.
- Partner with existing School of Medicine summer research programs to expand participation of students from local historically black colleges and universities.

Collaborate, by engaging existing UMB and UMMC efforts, with local companies and state agencies to identify workforce and business development opportunities and means of promoting local businesses.









Lead the city, state, and national conversation on mitigating health disparities and improving health equity.

### **OBJECTIVES**

### Establish a cohort of faculty who are recognized as experts and opinion leaders on health equity and health disparities.

- Develop a media relations program and training for faculty experts.
- Identify and nominate faculty for positions on city, state, and national boards, panels, committees, and agencies.
- Seek opportunities to inform state and local policy.
- Create an annual national-level symposium for our experts and community leaders to present research, programs, and case studies.

### Collaborate with the community to tell the West Baltimore story.

- Engage with community leaders, Baltimore City Fire Department, and the UMB Community Engagement Office to identify community priorities and barriers to care.
- Create documentaries, educational videos, and media toolboxes in partnership with Baltimore's emergent Black film makers to highlight the needs and successes, as well as to amplify the voices of the West Baltimore community.

### Foster and grow a cohort of students, faculty, and staff committed to restorative justice and motivated to ensure health equity.

• Involve students in purposeful community outreach, clinical care, and partnered programs.

- Integrate concepts of health equity, anti-racism, population health, community care, and social determinants of health into curricula.
- Deliver training modules on antiracism, health equity, and social determinants of health to educate any UMB faculty, student, or staff member involved in a community project.

### Obtain extramural research support from NIH. Health Resources & Services Administration (HRSA), state and local government, the business community, and UMB/ **UMMC** to conduct research and scholarly activity.

- Develop an internal database of social determinants of health, health equity, and community-partnered research projects and goals.
- Increase community participation in research projects (e.g., as co-investigators, research staff, advisory boards).
- Encourage and prepare faculty/ teams to be competitive for program- and center-level grants.
- Collaboratively engage the Central Maryland Area Health Education Center, Inc. to support and expand its portfolio of activities funded by the HRSA.







# **Implementation Starts Now**

# We have two levels of accountability

# **LEVEL I**Dean's Mission Area Working Group Leaders

## Education



Donna Parker, MD Senior Associate Dean for Undergraduate Medical Education

## Research



Chris O'Donnell, PhD Vice Dean, Research Development & Operations

## **Clinical Care**



William Regine, MD,
FACR, FACRO
Isadore & Fannie
Schneider Foxman Chair
of Radiation Oncology
Senior Associate Dean
for Clinical Affairs
President, UM Faculty
Physicians, Inc.

## **Community Co-leaders**



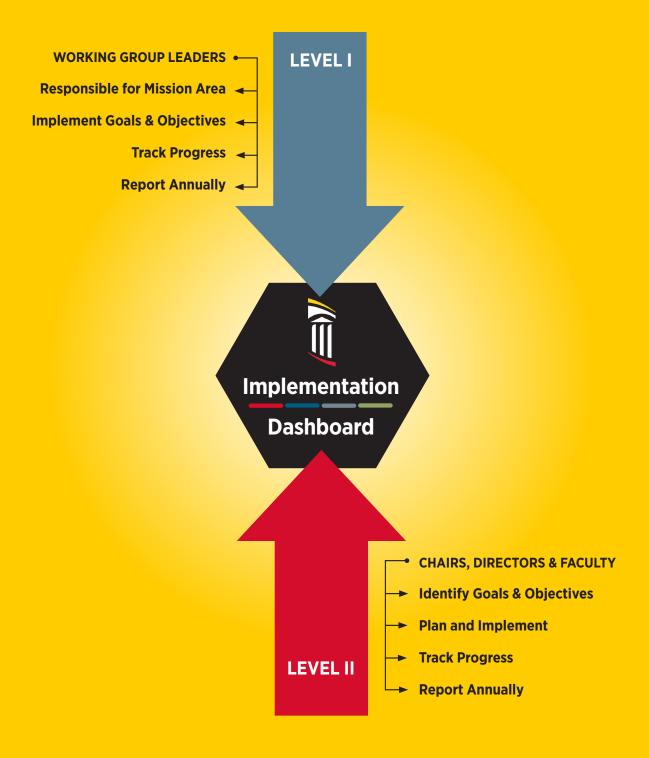
David Stewart, MD
Chair, Department of
Family & Community
Medicine



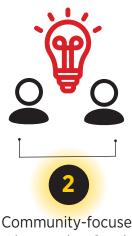
Esa Davis, MD, MPH Senior Associate Dean for Population & Community Medicine Associate Vice President for Community Health

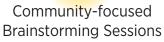
# **LEVEL II**

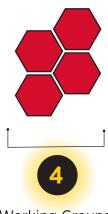
Department Chairs, Institute & Center Directors, and Faculty Members



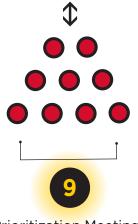
# **Engagement Highlights**



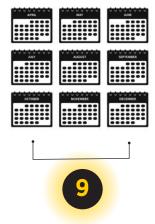




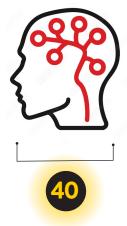
Working Groups



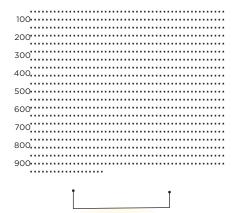
Prioritization Meetings



Months of Engagement in 2023



Grassroots Brainstorming Sessions with Departments, Institutes, and Centers



Faculty Brainstorming Participation



# **Acknowledgements**

#### **COMMUNITY BRAINSTORMING** SESSIONS

Carla Alexander, MD Department of Medicine, Institute of Human Virology

Anthony Amoroso, MD Department of Medicine, Institute of Human Virology

David Benavides, MD, PhD Department of Neurology

Cherif Boutros, MBChB, MSc Department of Surgery

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Sara Dudley, MD Department of Radiation Oncology

Dana Farrakhan, DrPH, MHS University of Maryland Medical Center

Magali Fontaine, MD, PhD Department of Pathology

C. Monica Gellene, CRA, MBA Center for Vaccine Development & Global Health

Michelle Giglio, PhD Department of Medicine, Institute for Genome Sciences

Stephanie Hare, PhD Department of Psychiatry

Bret Hassel, PhD Department of Microbiology & Immunology, UM Marlene & Stewart Greenebaum Comprehensive Cancer Center

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Gina Jordan, MD Department of Emergency Medicine

Leslie Katzel, MD, PhD Department of Medicine

Niharika Khanna, MBBS, MD Department of Family & Community Medicine

Da'Neal Knight-McCoy, LMSW Department of Psychiatry

Cheryl Knott, PhD School of Public Health, UM College Park UM Marlene & Stewart Greenebaum Comprehensive Cancer Center

Rishi Kundi, MD Department of Surgery, R Adams Cowley Shock Trauma Center

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Taylor Lascko Institute of Human Virology

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**Sherry McCammon** Center for Vaccine Development & Global Health

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Yolanda Ogbolu, PhD, NNP Dean, School of Nursing

**Christiane Pollock** Department of Neurology

Belinda Rodriguez Center for Vaccine Development & Global Health

Ashutosh Sachdeva, MBBS Department of Medicine

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Lisa Schocket, MD Department of Ophthalmology & Visual Sciences

Elana Smith, MD Department of Diagnostic Radiology & Nuclear Medicine

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David Stewart, MD Department of Family & Community Medicine

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Vicki Tepper, PhD Department of Pediatrics

Erin Walton, MSW, LCSW-C Department of Epidemiology & Public Health

Walker Weinstein, RN Institute of Human Virology

Lauren Wright Office of Public Affairs & Communications

#### PRIORITIZATION MEETINGS

#### **Clinical Care Prioritization Meeting**

**Anthony Amoroso, MD**Department of Medicine,
Institute of Human Virology

Megan Anders, MD, MS Department of Anesthesiology

**Brian Barr, MD**Department of Medicine

**Brent Bauer, MD**Department of Orthopaedic Surgery

Samra Blanchard, MD Department of Pediatrics

**Michael Bond, MD**Department of Emergency Medicine

**Peter Bowman, PT, DPT**Department of Physical Therapy and Rehabilitation Science

**David Efron, MD**Department of Surgery,
R Adams Cowley Shock Trauma Center

**Dara Farber, MD**Department of Medicine

**Jennifer Hopp, MD**Department of Neurology

Nicholas Jaidar, MHA UM Marlene & Stewart Greenebaum Comprehensive Cancer Center

Adam Kaufman, MD, PhD
Department of Otorhinolaryngology

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Matthew Laurens, MD, MPH
Department of Pediatrics,
Center for Vaccine Development
& Global Health

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Kashif Munir, MD
Department of Medicine

Faria Nasim, MBBS Department of Medicine

**Shana Ntiri, MD, MPH**Department of Family & Community
Medicine

**Songul Onder, MD**Department of Medicine

**Justin Price, MD**Department of Medicine

**Thomas Ptak, MD, PhD, MPH**Department of Diagnostic Radiology
& Nuclear Medicine

Paula Rosenblatt, MD
Department of Medicine,
UM Marlene & Stewart Greenebaum
Comprehensive Cancer Center

**Gary Schwartzbauer, MD, PhD**Department of Neurosurgery

Paul Staats, MD
Department of Pathology

**Ozhan Turan, MD, PhD**Department of Obstetrics, Gynecology & Reproductive Sciences

**Eric Weintraub, MD**Department of Psychiatry,
Kahlert Institute for Addiction Medicine

#### **Education Prioritization Meeting**

**Idris Amin, MD** Department of Neurology

Toni Antalis, PhD
Department of Physiology,
UM Marlene & Stewart Greenebaum
Comprehensive Cancer Center

**Nicholas Carbonetti, PhD**Department of Microbiology
& Immunology

**Gregory Carey, PhD**Department of Microbiology
& Immunology,
Undergraduate Medical Education

**Wendy Citron, MD**Department of Radiation Oncology

Jaclyn Clark, MD Department of Surgery

Marianne Cloeren, MD, MPH Department of Medicine

Sarasijhaa Desikan, MD Department of Surgery

**Alexander Drohat, PhD**Department of Biochemistry & Molecular Biology

**Sarah Dubbs, MD**Department of Emergency Medicine

Mark Ehrenreich, MD
Department of Psychiatry

**David Eisenman, MD**Department of Otorhinolaryngology

**Kyle Fletke, MD**Department of Family & Community Medicine

Michelle Giglio, PhD
Department of Medicine,
Institute for Genome Sciences

**Erin Giudice, MD**Department of Pediatrics

**Van Holden, MD**Department of Medicine

Olga loffe, MD
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UM Marlene & Stewart Greenebaum
Comprehensive Cancer Center

William Jackson, PhD
Department of Microbiology
& Immunology

**Kelby Kaplan, PT, DPT, EdD**Department of Physical Therapy
& Rehabilitation Science

D. Rick Matteson, PhD
Department of Physiology,
Undergraduate Medical Education

**Amal Mattu, MD**Department of Emergency Medicine

**Lilia Mijares, PhD, MLT**Department of Medical & Research
Technology

Jessica Mong, PhD

Department of Pharmacology, Graduate Program in Life Sciences

Melissa Motta, MD, MPH Department of Neurology

Rachel Nathan, MD Department of Medicine

Mary Njoku, MD

Department of Anesthesiology

Ami Patel, MD Department of Medicine

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Adam Puche, PhD Department of Neurobiology

Stacy Schwartz, MD Department of Medicine

Mukta Srivastava, MD Department of Medicine

Diane Marie St. George, PhD Department of Epidemiology & Public Health

Shannon Takala Harrison, PhD Department of Medicine, Center for Vaccine Development & Global Health

#### **Research Prioritization Meeting**

Odessa Addison, DPT, PhD Department of Physical Therapy & Rehabilitation Science

Zubair Ahmed, PhD Department of Otorhinolaryngology

Jennifer Albrecht, PhD Department of Epidemiology & Public Health

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Raymond Cross, MD Department of Medicine

Ivy Dick, PhD Department of Physiology

Allan Doctor, MD Department of Pediatrics

Stephen Gottlieb, MD Department of Medicine

Daniel Harrison, MD Department of Neurology

Feng Jiang, MD, PhD Department of Pathology

Niharika Khanna, MBBS, MD Department of Family & Community Medicine

Raya Kheirbek, MD Department of Medicine

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Joana Carneiro da Silva, PhD Department of Microbiology & Immunology, Institute for Genome Sciences, Center for Vaccine Development & Global Health

Joseph Stains, PhD Department of Orthopaedics

Sarah Sunshine, MD Department of Ophthalmology & Visual Sciences

Marcelo Sztein, MD Department of Pediatrics

William Teeter, MD Department of Emergency Medicine

Phuoc Tran, MD, PhD Department of Radiation Oncology

Marco Venniro, PhD Department of Neurobiology

Stefanie Vogel, PhD Department of Microbiology & Immunology

Bruce Wasserman, MD Department of Diagnostic Radiology & Nuclear Medicine

Terry Watnick, MD Department of Medicine

David Weber, PhD Department of Biochemistry & Molecular Biology, Institute for Bioscience & Biotechnology Research

Hilary Whitlatch, MD Department of Medicine

Gentry Wilkerson, MD Department of Emergency Medicine

Peixin Yang, PhD Department of Obstetrics, Gynecology & Reproductive Sciences

#### **WORKING GROUPS**

#### **Clinical Care Working Group**

#### **LEADER**

William Regine, MD, FACR, FACRO Department of Radiation Oncology, UM Faculty Physicians, Inc.

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Department of Obstetrics, Gynecology & Reproductive Sciences

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**Graeme Woodworth, MD**Department of Neurosurgery

#### **Community Working Group**

#### LEADER David Stewart, MD

Department of Family & Community Medicine

CO-LEADER Esa Davis, MD, MPH Department of Family & Community Medicine

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Department of Medicine,
Institute of Human Virology

**Daniel Gingold, MD, MPH** Department of Emergency Medicine

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& Nuclear Medicine

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& Public Health

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**Jeffrey Nusbaum, MD, MBA**Department of Emergency Medicine

**Vicki Tepper, PhD**Department of Pediatrics

#### **Education Working Group**

#### **LEADER**

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& Public Health

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#### **LEADER**

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**Joni Prasad, PhD**Department of Microbiology & Immunology

**Elana Rosenthal, MD**Department of Medicine,
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Michelle Shardell, PhD
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& Public Health,
Institute for Genome Sciences

**David Weber, PhD**Department of Biochemistry & Molecular Biology

ENGAGEMENT, PLAN DEVELOPMENT & WRITING

Wendy O'Donnell, MS
Director of Strategic Projects
& Communications
Office of the Dean

# CREATIVE, DESIGN & PRODUCTION

Krissy Rifkin
Director of Design
& Creative Strategy
Office of the Dean



# Appendix 1 | Our School

#### 7,539 Workforce | 2023

3,157 Faculty 2,133 Staff **Students** 1.248 **Trainees** 1,001

558

303

#### 1,248 Student Enrollment | 2023

222 Physical Therapy (DPT) MD/PhD 63 44 Public Health (MPH) 31 Medical & Research Technology (MS & BS) 20 Genetic Counseling (MGC) Clinical Research Certificate 3

PhD & Graduate (MS)

#### **6,519 Medical Student Applications**

#### Class of 2028

165 **Matriculants** 5% **Acceptance Rate** 

DPT/PhD

#### **8 Graduate Programs in Biomedical** Science | 2023

**Biochemistry and Molecular Biology** Cellular & Molecular Biomedical Science **Epidemiology & Human Genetics** 

Gerontology

**Molecular Medicine** 

Molecular Microbiology & Immunology

Neuroscience

**Physical Rehabilitation Science** 

580 **Applications** 78 **Matriculants** 13.4 % Acceptance Rate

## **Bioengineering | UM College Park**

# **Joint Degree Programs**

Fischell Department of Bioengineering will co-locate to UMB in fall 2024, to be housed in new 4MLK building at the UM BioPark

7-10 Jointly Appointed Faculty **Graduate Students** 20-40

## **Community Health**

14M **Educated about COVID-19** 12,000 **COVID-19 Vaccines Administered** 269 **Community Health Workers Administered COVID-19 Vaccines** 230 People Screened for HIV through Jacques Initiative

### **Community Education**

Adult Participants in Mini-Med School (2002-2023) 400 Children Participants in Mini-Med School for Kids (2008-2023) 200 School Children in Pipeline

**STEM Programs** 

6th Grade Students in CURE

Scholars

#### School Mental Health Program | 2023

6,000 **Child Participants** 1,220 **Prevention Activities** 

124 **Teachers** 

22 **Baltimore City Schools** 

#### **STAR TRACK Adolescent Health** Service | 2023

1,425 Youth and Young Adults Received

**Health Education** 

556 Youth Screened for HIV

Youth and Young Adults Screened

for STIs

501

258 Youth and Young Adults

**Connected with Medical Care** 

#### \$1.3B Operating Budget | FY23

\$529.6M Total Grants & Contracts \$405.1M Medical Service Plan

\$218.5M Services to Affiliated Hospitals

\$71.3M **State Appropriation** \$33.1M **Tuition and Fees** \$17.9M Gifts, Endowments, and

Other Income

#### \$529.6M Research Grants & Contracts | 2023

**Faculty Members with Research** 838 **Grants or Contracts** 

\$210.2M NIH

\$86.2M Other Federal \$68.6M Corporate

\$63.5M State and Local Government

\$37.2M Nonprofit \$34.4M Other \$23.7M UMB Fund

\$4.7M Core Services (external)

#### **981 Entrepreneurial Endeavors**

#### FY20-FY23 Totals

Scientific Disclosures 391

(pre-patent)

245 Foreign Patents Issued 162 **Technology Inventions Licensed** 

154 U.S. Patents Issued

Start-up Companies Formed

#### Faculty Physicians, Inc. (FPI)

1,127 **Physicians & Clinicians** 1,402 **Staff Employees** 

#### **25 Departments**

#### Anesthesiology

Samuel M. Galvagno, DO, PhD Interim Chair

#### **Biochemistry and Molecular Biology**

Gerald M. Wilson, PhD

Interim Chair

## Dermatology

Shawn Kwatra, MD

Chair and Dr. Joseph W. Burnett Distinguished Professor in Dermatology

# Diagnostic Radiology and

**Nuclear Medicine** 

Elias R. Melhem, MD

Dean John M. Dennis Chair of Radiology

#### **Emergency Medicine**

Brian J. Browne, MD

Chair

#### **Epidemiology and Public Health**

Jay S. Magaziner, PhD, MSHyg Chair

#### Family and Community Medicine

David L. Stewart, MD

#### Medical and Research Technology

Paul N. Staats, MD Interim Chair

#### Medicine

Stephen M. Davis, MBBS, FRCP,

FACE, MACP

Theodore E. Woodward Chair of Medicine

#### Microbiology and Immunology

James B. Kaper, PhD

Chair and James and Carolyn Frenkil Distinguished Dean's Professor Vice Dean for Academic Affairs

#### Neurobiology

Asaf Keller, PhD Donald E. Wilson, MD, MACP Distinguished Professor and Chair of Neurobiology

## Neurology

Peter B. Crino, MD, PhD Chair and Dr. Richard and Kathryn Taylor Endowed Professor of Neurology

#### Neurosurgery

Graeme F. Woodworth, MD Chair and Howard M. Eisenberg, MD Distinguished Professor of Neurosurgery

#### Obstetrics, Gynecology & Reproductive Sciences

Irina Burd, MD, PhD Chair and Sylvan Frieman, MD Endowed Professor of Obstetrics, Gynecology & Reproductive Sciences

#### Ophthalmology and Visual Sciences

Lisa S. Schocket, MD Interim Chair

#### Orthopaedics

R. Frank Henn, MD Interim Chair

#### Otorhinolaryngology

Rodney J. Taylor, MD, MPH Bruce and Isobel Cleland Chair of Otorhinolaryngology-Head & Neck Surgery

#### Pathology

Paul N. Staats, MD Interim Chair

#### **Pediatrics**

Steven J. Czinn, MD Chair and Drs. Rouben and Violet Jiji **Endowed Professor** 

#### Pharmacology

Margaret M. McCarthy, PhD Chair and James and Carolyn Frenkil Dean's Professor

## Physical Therapy & Rehabilitation Science

Victoria G. Marchese, PhD, PT Chair and Jane Kroh Satterfield Endowed Professor of Physical Therapy and Rehabilitation Science

#### Physiology

J. Marc Simard, MD, PhD Interim Chair

#### **Psychiatry**

Jill RachBeisel, MD Dr. Irving J. Taylor Professor and Chair

#### **Radiation Oncology**

William F. Regine, MD, FACR, FACRO Isadore & Fannie Schneider Foxman Chair of Radiation Oncology Senior Associate Dean for Clinical Affairs President, UM Faculty Physicians, Inc.

#### Surgery

Christine L. Lau, MD, MBA Dr. Robert W. Buxton Chair of Surgery Surgeon-in-Chief, University of Maryland Medical Center

#### 5 Institutes

#### Institute of Genome Sciences

Jacques Ravel, PhD Interim Director

#### Institute for Health Computing

Bradley A. Maron, MD Co-Director Senior Associate Dean for Precision Medicine

#### Institute of Human Virology

Shyamasundaran Kottilil, MBBS, PhD Interim Director

#### Kahlert Institute for Addiction Medicine

Asaf Keller, PhD Sarah Kattakuzhy, MD, MPH Eric Weintraub, MD Associate Directors

#### University of Maryland Medicine Institute for Neuroscience Discovery

Margaret M. McCarthy, PhD Director

#### 21 Research Centers

#### R Adams Cowley Shock Trauma Center

Thomas M. Scalea, MD, FACS, MCCM The Honorable Francis X. Kelly Distinguished Professor of Trauma Surgery Physician-in-Chief

#### University of Maryland Marlene & Stewart Greenebaum **Comprehensive Cancer Center**

Taofeek K. Owonikoko, MD, PhD Director

#### Center for Vaccine Development and Global Health

Kathleen M. Neuzil, MD, MPH, FIDSA Myron M. Levine, MD, DTPH Professor of Vaccinology Director

#### Baltimore Polycystic Kidney Disease Research and Clinical Care Center

Terry J. Watnick, MD Joan B. and John H. Sadler, MD Professor of Nephrology Director

#### Center for Advanced Imaging Research

Thomas Ernst, PhD Director

#### Center for Advanced Research **Training & Innovation**

E. Albert Reece, MD, PhD, MBA CARTI Endowed Professor Director

#### Center for Biomedical Engineering and Technology

W. Jonathan Lederer, MD, PhD Director

#### Center for Biomolecular Therapeutics

David J. Weber, PhD Director

#### Center for Blood Oxygen Transport & Hemostasis

Allan Doctor, MD Director

#### Claude D. Pepper Older Americans **Independence Center**

Jay S. Magaziner, PhD, MSHyg Leslie I. Katzel, MD, PhD Alice S. Ryan, PhD Co-Directors

#### Clinical and Translational Research Informatics Center

Jessica P. Brown, PhD Director

#### General Clinical Research Center

Stephen N. Davis, MBBS, FCRP, FACP, FACE Theodore E. Woodward Chair of Medicine Director

#### Center for Innovative Biomedical Resources

Nicholas P. Ambulos, PhD Director

#### Center for Integrative Medicine

Christopher R. D'Adamo, PhD Director

#### Center for International Health. Education, and Biosecurity

Man E. Charurat, PhD, MHS Global Director

#### Maryland Psychiatric Research Center

Deanna L. Kelly, PharmD, BCPP Dr. William and Carol Carpenter Professor of Psychiatry for Mental Illness Research Acting Director

#### Center for Precision Disease Modeling

Zhe Han, PhD Director

#### Center for Research on Aging

Jay S. Magaziner, PhD, MSHyg Director

# Center for Shock, Trauma and Anesthesiology Research

Wei Chao, MD, PhD, FAHA
Anesthesiology Professor of Translational
Research
Rosemary A. Kozar, MD, PhD
Co-Directors

#### Center for Stem Cell Biology & Regenerative Medicine

Curt I. Civin, MD Philip A. Zaffere Distinguished Professor of Regenerative Medicine Director

# Center for Vascular & Inflammatory Diseases

Dudley K. Strickland, PhD *Director* 

#### **6 Programs**

# Program for Aging, Trauma, & Emergency Care

Jay S. Magaziner, PhD, MSHyg Interim Director

# Program in Health Equity & Population Health

Laundette Jones, PhD, MPH Timothy D. O'Connor, PhD *Co-Directors* 

#### **Program in Oncology**

Taofeek K. Owonikoko, MD, PhD *Director* 

# Program for Personalized and Genomic Medicine

Alan R. Shuldiner, MD John L. Whitehurst Professor of Medicine Director

#### Program in Trauma

Thomas M. Scalea, MD, FACS, MCCM The Honorable Francis X. Kelly Distinguished Professor of Trauma Surgery Director

#### **Program in Transplantation**

Daniel G. Maluf, MD *Director* 

# University of Maryland Medical System (UMMS) | Clinical Sites

- 13 Inpatient Hospitals
- 16 Outpatient Centers
- 3 Other Medical Facilities

#### UMMS | Patient Base 2023

2M Patients 49% Black | 39% White | 12% Other 17M Clinical Encounters

#### **UMMC Joint Strategic Plan**

Access here:



### **23 Residency Programs**

Anesthesiology Dentistry

Dermatology

**Emergency Medicine** 

Family & Community Medicine

Internal Medicine/Pediatrics

Medicine

Neurology

Neurosurgery

**Obstetrics & Gynecology** 

Ophthalmology

Orthopaedic Surgery

Otorhinolaryngology-Head & Neck Surgery

**Pathology Anatomic & Clinical** 

**Pediatrics** 

**Pharmacy Practice** 

**Plastic Surgery** 

**Preventive Medicine** 

Psychiatry

**Radiation Oncology** 

Radiology

Surgery

Urology

#### **64 Fellowship Programs**

#### Anesthesiology

Anesthesiology-Critical Care Medicine Anesthesiology-Pain Medicine

Adult Cardiothoracic Anesthesiology

Obstetric Anesthesiology

Regional Anesthesiology & Acute Care

Pain Medicine

Trauma Anesthesiology

#### Dentistry

Oral and Maxillofacial Surgery/Oncology,

Microvascular Surgery

#### **Emergency Medicine**

Advanced Emergency Medicine

Ultrasound

#### Maternal & Fetal Medicine

#### Medicine

Cardiovascular Disease

Clinical Cardiac Electrophysiology

Critical Care Medicine

Endocrinology, Diabetes, & Metabolism

Gastroenterology

Geriatric Medicine

Hematology and Medical Oncology

Infectious Diseases

Interventional Cardiology

Interventional Pulmonology

Nephrology

Pulmonary Disease/Critical Care Medicine

Rheumatology

Sleep Medicine

Transplant Hepatology

#### Neurology

Clinical Neurophysiology

- Neuromuscular and EMG
- Epilepsy and EEG

**Epilepsy** 

Movement Disorders

**Neurocritical Care** 

Neuroimmunology/Multiple Sclerosis

Vascular Neurology

#### Ophthalmology

Cornea & External Disease

Glaucoma

### Orthopaedic Surgery

**Hand Surgery** 

Limb Preservation & Deformity Correction

Orthopaedic Surgery of the Spine

Orthopaedic Trauma

## Pathology

Cytopathology

Hematopathology

#### **Pediatrics**

Neonatal-Perinatal Medicine

Pediatric Critical Care Medicine

Pediatric Gastroenterology

Pediatric Infectious Diseases

# Primary Care Sports Medicine

**Psychiatry**Addiction Medicine

Addiction Psychiatry

Child and Adolescent Psychiatry

Consultation Liaison Psychiatry

Forensic Psychiatry

#### Radiology

**Abdominal Imaging** Cardiothoracic Radiology Emergency and Trauma Imaging **Imaging Informatics** Magnetic Resonance Imaging Musculoskeletal Radiology Neuro-endovascular Intervention Neuroradiology Women's Imaging and Breast Imaging Surgery

**Abdominal Transplantation Surgery** Minimally Invasive Surgery

Thoracic Surgery Independent Fellowship Vascular Surgery

#### Trauma

Acute Care Surgery Surgical Critical Care

# **Appendix 2 | Sources**

#### The Right People | Research Publications (page 6)

Pathogens in long-term care facilities

JAMA, Prevalence of Acinetobacter baumannii and Candida auris in Patients

Receiving Mechanical Ventilation Oct. 12, 2023

https://jamanetwork.com/journals/jama/ fullarticle/2810677?resultClick=1

#### Autism and schizophrenia risk factors

Science Translational Medicine, A single-cell genomic atlas for maturation of the human cerebellum during early childhood Oct. 12, 2023

https://www.science.org/doi/10.1126/scitranslmed.ade1283

#### Vaccines for Malawi children

The Lancet, Efficacy of typhoid conjugate vaccine: final analysis of a 4-year, phase 3, randomised controlled trial in Malawian children

Jan. 25, 2024

https://www.sciencedirect.com/science/article/pii/S0140673623020317?via%3Dihub

#### Al clinical algorithms

New England Journal of Medicine, Preparing Physicians for the Clinical Algorithm Era August 10, 2023 https://www.nejm.org/doi/full/10.1056/NE-JMp2304839

## **Generational Health Challenges** | Statistics (page 8)

#### Obesity and Metabolic Syndrome

Approximately one in four Maryland youth is overweight or obese.

The Governor's Office for Children https://goc.maryland.gov/obesity-2/

#### An Aging Population

By 2040, nearly one-quarter of Maryland's population will be age 60 or older. Maryland Department of Aging: State Plan on Aging 2022-2025

https://aging.maryland.gov/SiteAssets/Pages/StatePlanonAging/MD%20 State%20Plan%202022-2025.pdf

#### **Emerging Pathogens and Climate** Medicine

Three out of four new emerging infectious diseases are zoonotic.

Centers for Disease Control and Prevention: Zoonotic Diseases https://www.cdc.gov/onehealth/basics/ zoonotic-diseases.html#:~:text=Scientists%20estimate%20that%20more%20 than.States%20and%20around%20 the%20world

#### Mental Health and Addiction

Maryland's overdose death rate is 50% higher than the national average. National Center for Drug Abuse Statistics https://drugabusestatistics.org/drug-overdose-deaths/#delaware

#### Health Inequity and Health Disparities

A black baby born in Maryland is 2.5 times more likely to die than a white baby. Maryland Department of Health: 2019 Maryland Rural Health Conference https://health.maryland.gov/mhhd/ Documents/Black%20vs%20White%20 Rural%20vs%20Non-Rural%20Infant%20 Mortality%20Trends%20in%20Maryland%202019%20pp.pdf

## Brain Diseases and Neurodegeneration

Over 100,000 Marylanders age 65 or older have Alzheimer's disease. Alzheimer's Association: Maryland https://www.alz.org/professionals/public-health/state-overview/maryland

#### Big Data Computation

Al tools can level the playing field to help highlight and erase inequities in health. Nature Medicine, 13 January 2020: Treating health disparities with artificial intelligence.

https://www.nature.com/articles/s41591-019-0649-2

# **Appendix 3 | Aligning with UMB**

#### **UMB Strategic Plan**

In keeping with the adoption of the UMB core values, which are consistent with the cultural spirit of the School of Medicine, our strategic plan also aligns with the themes, objectives, and outcomes in the UMB Strategic Plan.

#### **Understanding the Chart**

This chart shows how each GenMD goal correlates to a companion UMB theme and outcome. The number within the colored hexagon represents the four GenMD goals for each of Education (red), Research (blue), Clinical Care (gray), or Community (green).

Access the UMB Strategic Plan to learn more about the 25 outcomes.



UMB STRATEGIC PLAN THEMES	1	2	UMB OUTCOMES 3	4	5
Accountability and Integration of Core Values			3 4	3 3 4	
Student Growth and Success	0	4	3 4	12	0
University Culture, Engagement and Belonging	300	12	4		
Innovation and Reimagination	0430	3 2	0203	04	
Community Partnership and Collaboration	112	1 2	000	234	
Global Engagement and Education	0	0			

GenMD Goals

EDUCATION RESEARCH CLINICAL CARE COMMUNITY

1 2 3 4 1 2 3 4 1 2 3 4

# **Our Core Values**

# RESPECT and INTEGRITY

We value each other and hold ourselves accountable for acting ethically and transparently using compassion and empathy.

# WELL-BEING and SUSTAINABILITY

We care about the welfare of our people, planet, communities, and University.

# **EQUITY** and **JUSTICE**

We embrace and are committed to diversity, and we value inclusive and just communities. We oppose discrimination in all its forms.

# **INNOVATION** and **DISCOVERY**

We imagine and explore new and improved ways to accomplish our mission through education, research, clinical care, and service.



# The Right Place / The Right Time / The Right People

GenMD is an aspiration we all have for a new, innovative era at the School of Medicine; born from the grassroots spirit of the strategic plan's development.

GenMD is the power to unite us around our common purpose, culture, and potential for the future.

GenMD is a concept that fuses the two meanings of 'MD' — medicine and Maryland — with the foundational role of the generational health challenges in the strategic plan.

