## THE CATALYST CAMPAIGN

# A CATALYST FOR DISCOVERY, RESEARCH, AND INNOVATION

#### Priority: Discovery-Based Medicine

Since the University of Maryland School of Medicine's inception in 1807, our faculty have made numerous advances that have dramatically and measurably impacted and improved lives. Our research has not just been theoretical science, but has always had a patient-centered focus. Every day, our faculty are conducting groundbreaking research, asking "big science" questions, and making discoveries leading to new treatments and cures. Our physician-scientists truly embody the school's guiding principle of discovery-based medicine.

We're a leader in a variety of research areas, including chronic diseases, stem cell and composite tissue transplantation, genomics, cancer, HIV/AIDS, heart disease, kidney disease, regenerative medicine, shock trauma and anesthesiology, biomedical engineering and technology, brain science, and global health.

With substantial gifts from generous donors like you, we've created new centers and institutes of excellence and interdisciplinary research collaboration where the greatest minds in medicine are making discoveries that lead to new treatments and cures.

 Your gift to the Catalyst Campaign makes groundbreaking basic and translational research like this possible:

Cardiovascular research and treatment

— Genomics research

Global health and vaccinology

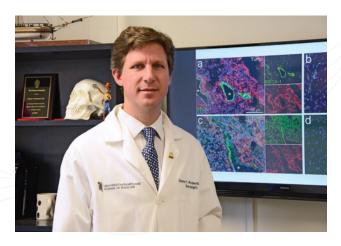
→ Stem cell research and treatment

Cancer research and treatment

- Neurodegenerative disease research and treatment

## THE **CATALYST** CAMPAIGN

# THE IMPACT OF YOUR GIFT TO SUPPORT DISCOVERY-BASED MEDICINE



### Improving Quality of Life $\sim$

The School of Medicine is leading the way for new, non-invasive treatments of neurological diseases, thanks in part to the work of **Director Graeme**Woodworth, MD, FACS, and team at the school's Brain Tumor Treatment & Research Center.

One of these non-invasive treatments, **MR**-guided Focused Ultrasound (FUS), is possible through collaboration with physician-scientists across neurology, neurosurgery, and radiology. Our cutting-edge technologies set our program apart from others in the country in eliminating

progressive symptoms of many neurodegenerative conditions that restrict patients' quality of life.

#### • Improving Global Health

The Institute for Global Health (IGH), led by Founding Director Christopher Plowe, MD, MPH, FASTMH, was established to improve global health by conducting innovative, world-leading research in Baltimore and around the world to diagnose, prevent, treat, control, and ultimately eradicate diseases of global impact.

With sites in 14 countries, our researchers are working to control serious diseases such as malaria, HIV, Zika, Ebola, cholera, typhoid, and a range of other serious diarrheal diseases. Within



the IGH is the **Center for Vaccine Development** (CVD), currently led by **Kathleen Neuzil**, **MD**, **MPH**, **FIDSA**, which, for more than 40 years, has worked domestically and internationally to develop, test, and deploy vaccines to aid underserved populations.

In 2014, when the devastating Ebola epidemic struck West Africa, scientists at our **CVD-Mali center** led the successful effort to contain this deadly virus. Our researchers also developed the only cholera vaccine recommended by the U.S. Centers for Disease Control and Prevention (CDC) for use as protection in U.S. adults traveling to areas with cholera.