

DEAN'S MESSAGE: What's On My Mind



What's on my mind this month is the fantastic news we received recently about one of our outstanding Institutes—a fitting way to ring in the holiday season.

Last month, the Institute of Human Virology (IHV) was awarded more than \$138 million in five-year grants by the U.S. Centers for Disease Control and Prevention (CDC) to combat HIV/AIDS and other health issues in Kenya, Tanzania, Zambia and Nigeria.

IHV has been a powerhouse in the enormous international battle to defeat HIV/AIDS. Since 2004, the Institute has received nearly \$926 million from the President's Emergency Plan for AIDS Relief (PEPFAR), the federal program that has saved millions of lives around the world by providing HIV medicines to those who couldn't otherwise afford them. Over the past twelve years, IHV has partnered with the governments of Botswana, Ethiopia, Guyana, Haiti, Kenya, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia to coordinate a global response to the AIDS pandemic.

The Institute will use the new CDC grants to form the IHV Center for International Health, Education, & Biosecurity (CIHEB). This Center is the culmination of more than a decade of designing and implementing global health programs to fight HIV/AIDS and other health problems. The Center will be led by **Deus Bazira Mubangizi, DrPH, MBA, MPH**, Assistant Professor of Medicine at IHV and UM SOM. Dr. Mubangizi has been heavily involved in IHV's PEPFAR work, and in this new role, he will further develop the Institute's work in this and other areas.

Dr. Mubangizi has spent much of his career working to improve health care in Africa, Asia and the Caribbean. He has focused his research on finding more effective ways to spread health care innovations, as well as on improving health care, and especially primary care, in resource-limited settings. In his new role, he will work to develop innovative partnerships between academia, foreign governments, and community organizations to help developing nations diagnose, treat, and prevent AIDS and other diseases.

IHV's new grants build upon other recent grants, including \$97.5 million in funding awarded in 2015–16 to fight infectious disease in Botswana, Kenya, Nigeria and Zambia. The new funding will allow IHV to increase its footprint in a range of places, on several important health problems. IHV researchers and clinicians will work with Kenyan researchers and public health officials to strengthen the country's approach to both infectious and non-infectious diseases, and will also help start the country's first methadone treatment center—heroin addiction is an increasing problem in the country. The grants will also allow IHV to expand its HIV prevention, care and treatment services in both Tanzania and Zambia.



As many of you already know, IHV was co-founded and is currently directed by **Robert C. Gallo, MD**, the Homer & Martha Gudelsky Distinguished Professor in Medicine at the University of Maryland School of Medicine. Dr. Gallo is widely known for his co-discovery of HIV as the cause of AIDS, and for the development of the HIV blood test. He is a true giant in the world of HIV/AIDS research, and we are deeply appreciative of his work at UM SOM and IHV.

Over the years, IHV has also made several crucial discoveries related to HIV. Scientists there have identified new anti-HIV suppressive factors and have pioneered a novel oral vaccine delivery system. These and other innovations could eventually lead to what Dr. Gallo has called the "Holy Grail" of HIV research: a vaccine that could protect against a range of HIV strains.

IHV has also been a boon for the region, both in terms of employment and in terms of treatment. It has more than 300 employees, including 70 faculty, who focus on researching chronic human viral infection and disease, including HIV, as well as the hepatitis C virus, human T cell leukemia viruses

1 and 2, human papillomavirus, herpes viruses, and virally-related cancers. IHV also cares for approximately 6,000 patients in Baltimore, and close to a million in Africa and the Caribbean.

IHV's rate of discovery is also unmatched. It has been awarded 105 patents for such things as the development and use of transgenic rats, finding small proteins that kill tumor cells, chemokines that inhibit HIV infection, bacterial delivery systems for DNA vaccines and the development of new strategies to improve vaccine effectiveness—to name just a few of their successes.

Of course, IHV's success is just one example of how our School is forging ahead in so many areas. We can all be extraordinarily proud of our accomplishments over the past year. However, there is much more to be done as we strive toward the goals we have set—to make new discoveries, and to help patients, our community and the world at large. With those words in mind, I wish you a safe and joyful holiday.

In the relentless pursuit of excellence, I am

Sincerely yours,

E. Albert Reece, MD, PhD, MBA
Vice President for Medical Affairs, University of Maryland
John Z. and Akiko K. Bowers Distinguished Professor and Dean, University of Maryland School of Medicine



Point of Pride

The Institute of Human Virology (IHV), directed by **Robert Gallo, MD**, the **Homer & Martha Gudelsky Distinguished Professor in Medicine**, reached a **patient milestone** in **2015**, surpassing



one million HIV/AIDS patients who have been **cared for and treated** in their **overseas clinics**.

Institute of Human Virology



Awarded \$138M to **Combat HIV/AIDS** in Africa

and Announces Plans to Launch Center for International Health, Education & Biosecurity

The Institute of Human Virology (IHV) at the University of Maryland School of Medicine announced on November 22 that more than \$138 million has been awarded to the Institute from multiple five-year grants awarded by the Centers for Disease Control and Prevention to combat HIV/AIDS in Kenya, Tanzania, Zambia, and Nigeria.

The Institute concurrently announced the formation of the IHV Center for International Health, Education, & Biosecurity (CIHEB), to be led by **Deus Bazira Mubangizi, DrPH, MBA, MPH**, Assistant Professor of Medicine and Director of the Center for Health, Education, & Biosecurity in the Institute of Human Virology. The Center, in addition to the significant new funding, is the culmination of more than a decade of designing and implementing successful global health programs through unparalleled leadership and a talented team who dedicate their lives to ending the HIV/AIDS pandemic.

“Since 2004, the IHV has been awarded close to an astonishing \$926 million from the President’s Emergency Plan for AIDS Relief (PEPFAR), a program initiated by President



IN HIS ROLE AS THE INSTITUTE’S CIHEB DIRECTOR, DR. MUBANGIZI WILL FACILITATE UNIQUE PARTNERSHIPS BETWEEN ACADEMIA, FOREIGN GOVERNMENTS, AND COMMUNITY ORGANIZATIONS TO HELP DEVELOPING NATIONS LEARN HOW TO DIAGNOSE, TREAT, AND PREVENT THEIR OWN AIDS AND RELATED EPIDEMICS.

George W. Bush and continued by President Barack Obama,” said **Robert C. Gallo, MD**, The Homer & Martha Gudelsky Distinguished Professor in Medicine, and Co-founder and Director of the Institute of Human Virology, who is most widely known for his co-discovery of HIV as the cause of AIDS and for the development of the HIV blood test. Dr. Gallo is also Co-founder and Scientific Director of the Global Virus Network (GVN).

“It goes without saying that the establishment of our Center for International Health, Education, & Biosecurity is long overdue,” said Dr. Gallo. “Dr. Mubangizi has led much of our recent PEPFAR program success, and I have no doubt he will continue to build upon the Institute’s expertise and extend our reach in other regions of the world to end HIV/AIDS and related illnesses. I am proud of our faculty and staff who are committed to helping developing nations prevent and address infectious diseases, and build infrastructures that better protect humanity from biosecurity threats.”

“Our global program’s success is attributed to the bold vision of my colleagues



Robert C. Gallo, MD



Robert Redfield, MD

and IHV co-founders, Dr. Robert Redfield and Dr. William Blattner, who is now retired,” said Dr. Gallo. “They have led teams who dreamt big, achieved immense success—including caring for well over one million individuals overseas—and pioneered programs that now serve as public health models worldwide. I congratulate both on the launch of this new and already prominent Center.”

“Building a team at the IHV which will continue to make a significant impact on global health through this new Center is a great source of personal pride for me and all of my colleagues involved,” said **Robert Redfield, MD**, Professor of Medicine, Co-founder, Associate Director and Director, Division of Clinical Care and Research, Institute of Human Virology. “Seeing Dr. Mubangizi take the reins of our varying global programs ensures that the strong foundation that we laid since 2004 is just the beginning of the IHV’s impact on international health, education, and biosecurity.”

Dr. Mubangizi’s research interests include diffusion of health innovations, interdependence between public-private health partnerships, private health insurance, health financing under decentralized systems, pharmaceutical regulation, hospital governance, and efficient models for delivery of primary care services in resource-limited settings. His experience comprises ten countries from Africa, Asia and the Caribbean.

In his role as the Institute’s CIHEB Director, Dr. Mubangizi will facilitate unique partnerships between academia, foreign governments, and community organizations to help developing nations learn how to diagnose, treat, and prevent their own AIDS and related epidemics. “I look forward to building upon the work done over the past twelve years within the IHV’s Division of Clinical Care and Research and Division of Epidemiology and Prevention to strengthen public health infrastructures overseas through strategic international, national, and local collaborations,” said Dr. Mubangizi. “Through the design and implementation of our combined evidence-driven unique education, training, and treatment service delivery programs, we will better address each country’s complex HIV/AIDS and other public health epidemics with an integrated approach that will extend into overall infectious disease protection.”

Dr. Mubangizi continued, “The next era of our work will be built on a foundation of strong scientific evidence, leveraging technology in all its forms to improve efficiency and undertake key implementation science research that will ensure effective-

Nigeria



ness of interventions across the three pillars of health, education and biosecurity. Most importantly everything we do will start with the end in mind—promoting solutions that are home grown and sustainable. Further, I hope to seek opportunities that will foster

collaboration between the Institute and other departments and Schools at the University of Maryland, Baltimore with similar interests.”

Over the past twelve years, the IHV has partnered with the governments of Botswana, Ethiopia, Guyana, Haiti, Kenya, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia to coordinate a global response to the AIDS pandemic. CIHEB’s \$138 million in PEPFAR funding will build upon the IHV’s existing programs, including \$97.5 million awarded to the IHV in the previous 18 months to combat infectious disease in Botswana, Kenya, Nigeria, and Zambia.

Tanzania



Zambia



The new \$138 million in grant funding includes the following:

- \$20 million to partner with the Kenya Medical Research Institute (KEMRI) to support the Kenyan Ministry of Health’s efforts to strengthen interventions, program development, and policies regarding the country’s public health practices related to non-infectious and infectious diseases in Kenya.

- \$35 million to collaborate with the Nairobi city council and government of Kenya to provide technical assistance for the prevention, care, and treatment of HIV and infectious disease services within inner city Nairobi, and to support the growth of Kenya’s first Methadone treat-

ment center through the expansion of services targeted at key populations and hard to reach groups.

- \$50 million to support the implementation and expansion of comprehensive, integrated, high quality HIV prevention care and treatment services to the population of Kenya’s Kisii and Migori counties through the establishment of effective and sustainable public health systems with accountability and oversight.

- \$12.5 million to support the expansion of effective, high quality, sustainable, and comprehensive HIV prevention, care, and treatment services in 12 target regions of Tanzania that include 90 districts, local and national government authorities, as well as local partners and organizations.

- \$12.5 million to partner with the government of Zambia to develop and implement community interventions to end the transmission of HIV infection and to provide an infrastructure that facilitates linkage to care and sustained viral suppression.

- \$8 million to support the government of Nigeria in the development of a robust data quality assessment and improvement system, and the implementation of an outcome evaluations program targeting HIV epidemic control; and, to study varying interventions to identify gaps in HIV healthcare driving significant loss of care among adolescents.

Kenya



Another Successful Year for Camp Cardiac Baltimore



responsible for the development and logistical organization of the program, recruitment of students/faculty teachers, and serving as the liaison with the Camp Cardiac headquarters. A basic course design includes CPR certification, introductory lectures (i.e. introductions to health care careers, admissions, medical ethics, etc.), dissection of a pig heart, and healthy living and exercise activities.

Individual camps also have the ability and discretion to imprint their own stamp on the course, taking advantage of the uniqueness of the hosting institution. This year,

Baltimore campers learned how to perform aspects of the physical exam and participated in standardized patient interviews. Other highlights included a visitation to the Matri Simulation Center to learn about basic laparoscopic surgery techniques, along with spending time working on high fidelity mannequins. Tours of Shock Trauma and the helipad were also included.

This year's program director, Sergiu Costinas, categorizes the camp as "an unforgettable experience for a medical student to be able to participate in an educational process and encourage scientific thought, creativity, and an interest in medicine" for high schools students.

Stefanie Zaner, assistant program director, applauded the camp as "exhilarating and rewarding for its ability to foster collaboration, because teamwork is one of the principles of all fields in healthcare."

A very special thanks to past program directors, Morgan Oskutis and Connor Oates, whose leadership built a solid foundation for its current success.

The recruitment efforts for the 2017 Camp Cardiac Baltimore are already underway!



With a focus on both education and real world experience, the program provides high school students with a unique opportunity to learn directly from experts in the medical field.



somnews

UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE DECEMBER 2016 VOL.18 NO.4

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

▲ E. Albert Reece, MD, PhD, MBA, Vice President for Medical Affairs, University of Maryland, and Dean, University of Maryland School of Medicine ▲ Chris Hardwick, Executive Editor ▲ Caelie Haines, Managing Editor

▲ Tom Jemski and Mark Teske, Head Shot Photos ▲ Brushwood Graphics Design Group, Design

▲ Submitting information to SOMnews: Please email your submission six weeks prior to the month you wish to see your submission included to Caelie Haines, Public Affairs Manager, at chaines@som.umaryland.edu.

▲ Printed using environmentally-responsible low VOC inks.



Find the University of Maryland School of Medicine on Facebook, <http://www.facebook.com/Maryland.Medicine> or follow us on Twitter @UMmedschool.



www.medschool.umaryland.edu

