Institute for Global Health
Center for Global Communicable and Emerging Infectious Diseases

Communicable diseases, such as malaria, tuberculosis, and HIV, continue to cause nearly 20 million deaths annually. Through the **Center for Global Communicable and Emerging Infectious Diseases** within the Institute for Global Health, we are:

- Researching and investigating pressing communicable disease challenges worldwide;
- Training new physician leaders;
- Conducting lifesaving research to improve clinical care through partnerships with academic institutions and nonprofit organizations worldwide; and
- Continuing to attract a high percentage of National Institutes of Health training and research grants.

Among a number of high-impact research studies, the center is leading:

Center for Innovation in Point-of-Care Technologies for HIV/AIDS at Northwestern University (C-THAN)

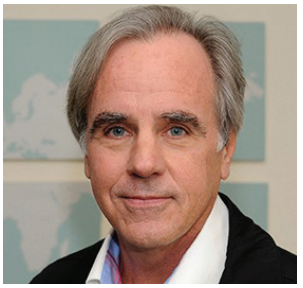
The mission of this project, led by Robert Murphy, MD, and Sally McFall, MD, is to develop a pipeline of point-of-care technologies critical for improved management of HIV/AIDS-infected individuals in low- and middle-income countries and facilitate technology and commercialization. This project is a partnership with the Center for Innovation in Global Health Technologies (CIGHT). CIGHT is based at Northwestern's McCormick School of Engineering. The Kellogg School of Management is also a partner in this innovative initiative.

Epigenomic Biomarkers of HIV-Associated Cancers in Nigeria - NCI Northwestern U54 Consortium

Robert H. Lurie Comprehensive Cancer Center of Northwestern University was awarded this U54 grant from the National Cancer Institute to establish a consortium, working in partnership with the University of Jos, University of Lagos, and the Mayo Clinic College of Medicine and Science. The joint U.S. and Nigerian consortium studies epigenetic signatures of the two most common HIV-associated cancers in Nigeria (liver and cervical cancer). The goal of this project, led by Dr. Murphy and Lifang Hou, MD, PhD, is to improve our understanding of the role of HIV and other infections in cancer development. This will offer earlier diagnosis of premalignant and early-stage cancers and potentially lead to effective new strategies for cancer prevention, diagnosis, and treatment.

The NEST (Newborn Essential Solutions and Technologies) Project

A collaboration of Rice University, Northwestern University, the University of Malawi, the London School of Hygiene & Tropical Medicine, and 3rd Stone Design, the NEST project was among four finalists of the McArthur Foundation's inaugural 100&Change competition. The NEST project aims to address a lack of life-saving resources for newborns in African hospitals by creating a package of rugged technologies for newborn care, improving access, developing new distribution systems, and educating clinicians and innovators in newborn health. Among NEST members and collaborators are Kara Palamountain, MBA, research associate professor in the Kellogg School of Management, and Dr. Robert Murphy.



"Over 125 Northwestern faculty members are doing important work in HIV/AIDS, tuberculosis, malaria, viral hepatitis, and other devastating communicable diseases. The Center for Global Communicable Diseases supports and connects those individuals to each other and to resources needed to conduct their work."

Robert Murphy, MD, Director of the Center for Global Communicable and Emerging Infectious Diseases and Executive Director of the Institute for Global Health

Metabolic and Immune Consequences of Antibiotic-Related Microbiome Alterations During TB Treatment

This R21 grant project aims to determine the (1) longitudinal dynamics of the microbiome immune metabolic functions during and after TB therapy and (2) evolution of microbiome-linked inflammatory markers during and after TB therapy. This project may lead to new TB vaccine and treatment strategies.

HIV and Mycobacterial Disease in Mali

This research training grant will provide technical assistance and oversight of a comprehensive faculty development program for researchers studying HIV/AIDS in the context of mycobacterial disease in Mali.

Northwestern/Nigeria Research Training Program in HIV and Malignancies (NN-HAM)

This research training grant is the first renewal of a program aimed at creating the first generation of research scientists in Nigeria who are focusing their careers on HIV-associated malignancies. This cycle aims to expand expertise in molecular epidemiology, biostatistics, and health informatics at the University of Jos and University of Lagos in Nigeria.

Building Capacity for Patient-Centered Outcomes Research to Improve the Quality and Impact of HIV Care in Tanzania

Through this National Institutes of Health Fogarty International Center-funded project, led by Claudia Hawkins, MD, and Lisa Hirschhorn, MD, MPH, we propose to strengthen the patient-centered outcomes research capacity of the Tanzanian Muhimbili University of Health and Allied Sciences (MUHAS) HIV research community with a long-term goal of incorporating this discipline into studies to optimize patient-centered care in HIV facilities in Dar es Salaam, and improve patient and health system outcomes.

Expanded Multidisciplinary NeuroAIDS Research Training to Improve HIV Outcomes in Nigeria

Nigeria has a high burden of HIV-related brain disorders (NeuroAIDS), including mental health disorders and neurocognitive or neurological impairment. Sponsored by the Fogarty International Center of the National Institutes of Health, this project has developed three NeuroAIDS research cores with 10 investigators, two observational studies, and trained research support staff, including three psychometricians at the University of Ibadan. It is led by faculty member Babafemi Taiwo, MBBS.

Clinical Evaluation of a New Highly Sensitive Multiplex qRCR for Detecting Tuberculosis and Non-tuberculous Mycobacteria (R03)

Through this project, led by Mamoudou Maiga, MD, MSc, PhD, scientists are evaluating a new way to differentiate tuberculosis from non-tuberculosis mycobacteria. Both diseases are major public health problems in developing countries, and the development and validation of these tools will significantly contribute to the fight against them worldwide.

Please Join Us in Partnership

We invite interested friends to join us embracing the tremendous potential of the Center for Global Communicable Diseases. Your support will enable the center's breakthrough work led by our dedicated faculty physicians and scientists. The following funding opportunities are available to accelerate the center's exciting trajectory.

Endowing and Naming the Center	$10 million
Endowing and Naming Professorships	$3 million
Creating Research Innovation Funds at the Center	$500,000+
Supporting Pilot Research Awards and Other Initiatives through Endowed and Outright Gifts	$10,000+