

Brazil

WCMC's principal collaborations in Brazil are at the Federal University of Bahia's School of Medicine (UFBa) and the Oswaldo Cruz Foundation/
Brazilian Ministry of Health (Fiocruz) in Salvador.
This year marks the 50th anniversary of WCMC's collaboration with these institutions. Over 350
Brazilian and Weill Cornell medical students, residents and faculty have participated in this bilateral research training exchange program.
Multidisciplinary research focuses on leishmaniasis, tuberculosis, leprosy, HTLV-I, and helminth infections. The research program employs approaches from epidemiology, immunology, genetics, clinical trials and vaccine development.

Dr Edgar Carvalho is an adjunct WCMC faculty member based in Brazil and is the principal collaborator. He is the Principal Investigator of the NIH funded Tropical Medical Research Center focused on Leishmaniasis which affects 12 million people worldwide. All four main forms of this parasitic disease, visceral (VL), cutaneous (CL), disseminated (DL) and mucosal leishmaniasis (ML), are prevalent in the study areas in the Northeast of Brazil. The main objective of this program is to expand and translate the knowledge acquired in the host parasite relationship in leishmaniasis to improve diagnosis and establish new forms of therapy.

India

The BJMC/Sassoon Hospital Campus is located in the city of Pune (population 4 million) in the state of Maharashtra. The 1300-bed public hospital cares for underserved populations from the surrounding rural and urban communities. The 21 clinics see ~450,000 outpatients per year. BJ Medical College was founded in 1871 and is among the top ten medical colleges in India.

BJMC/Sassoon Hospital has long collaborated with US academic centers including the Mayo Clinic, Vanderbilt University, Johns Hopkins School of Medicine, and Weill Cornell Medical College. BJMC has received NIH funding for 20 years, resulting in over 100 publications in peer-reviewed journals. In 2006, BJMC successfully competed to become an NIH international HIV clinical trials unit (CTU),

with a focus on HIV and co-infections occurring in pregnant women and children. The BJMC CTU completed India's first NIH-funded phase III trial to prevent mother-to-child HIV transmission and is currently conducting five trials as part of the NIH-sponsored AIDS Clinical Trials Group (ACTG) and International Maternal Pediatric Adolescent AIDS Trials Group (IMPAACT).

Dr. Mathad (WCMC) currently leads research at BJMC on latent tuberculosis infection in pregnancy. Over one-third of India's women carry latent tuberculosis infection, which often progresses to active tuberculosis disease during pregnancy, increasing illness and death for both mothers and their infants. Her research describes the body's immune response to tuberculosis changes with stage of pregnancy and HIV status. This information will help identify which pregnant women are most likely to develop active TB, improving the diagnosis and prevention of tuberculosis in pregnant women and their infants.

Ghana

The Noguchi Memorial Institute for Medical Research (NMIMR) in Accra Ghana was established in 1979 as a semi autonomous research institute affiliated with the University of Ghana. The Institute is the leading biomedical research facility in Ghana and is committed to research on national health priorities and training of biomedical scientists. Weill Cornell faculty member Dr. Linnie Golightly has conducted research in partnership with the Noguchi Memorial Institute since 2004 on cerebral malaria. Dr. Golightly has had continuous NIH support for the past ten years and is the recent recipient of an NIH K24 for mentoring physician scientists. Dr. Ben Gyan, the Chair of Immunology at the Noguchi Memorial Institute is the primary collaborator. The Noguchi Memorial Institute has world class immunology and parasitology laboratories and collaborates with 5 regional hospitals in the greater metropolitan area of the capital city of Accra. Weill Cornell research focuses upon endothelial cell damage and the pathophysiology of cerebral malaria and on rapid diagnosis of cerebral malaria using a simple hand held retinal scanner.



Weill Cornell Medical College