Improving healthcare in Tanzania through medical education, leadership training, and innovation

Tanzania has 1 physician per 50,000 patients, the lowest ratio of physicians to patients in the world. Of the 49 million people living in Tanzania, approximately 34 million will never see a doctor in their lifetime. The mission of the Weill Cornell Medicine program in Tanzania is to improve healthcare by strengthening Weill Bugando School of Medicine and training the next generation of Tanzanian physicians and scientists.

Medical Education: One Thousand Doctors Trained

Weill Bugando opened in Mwanza, Tanzania in September 2003 and has been affiliated with Weill Cornell Medicine ever since. The medical school was named Weill Bugando in recognition of Joan and Sanford Weill’s generous support. Located in the Lake Victoria region of western Tanzania, it offers an MD, Master’s in Medicine, and graduate degrees. Its main teaching hospital is the 900-bed Bugando Medical Centre.

Dr. Robert Peck, Weill Cornell Medicine faculty-physician is based full-time at Weill Bugando and leads Weill Cornell’s efforts in medical education. An additional fifty physicians from Weill Cornell Medicine travel to Tanzania each year to teach in two-month blocks. Since 2003, nearly one thousand Tanzanian physicians have graduated from Weill Bugando.

Leadership Training: The Future of Weill Bugando and the Tanzanian Health Care System

Weill Cornell Medicine offers advanced training to the most promising Tanzanian physicians. Our trainees have gone on to become Department Chairs, Hospital Directors, and public health leaders at Weill Bugando and other health facilities across Tanzania. Leadership training includes:

- Graduate study at Weill Cornell Medicine in New York through the Master of Science Program in Clinical Epidemiology and Health Services Research
- A program that trains twenty Weill Bugando MD graduates each year to design, implement, and lead new large-scale initiatives in HIV prevention and tuberculosis treatment, with support from the Mulago Foundation
- Scholarships and faculty mentorship for physicians to pursue a PhD at Weill Bugando in the basic or clinical sciences.

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Surgical training at Weill Bugando

Dr. Robert Peck teaching Weill Bugando medical students
Innovations to Improve Health in Tanzania

Weill Cornell Medicine faculty in Tanzania are conducting innovative research that is significantly improving the health of local communities. Examples of research projects include:

- **Schistosomiasis:** Dr. Jennifer Downs is developing new ways to diagnose and treat this water-borne tropical infection, which affects nearly half the population in Mwanza, causes liver and kidney failure, and can increase susceptibility to HIV infection.

- **HIV Prevention and Treatment:** Weill Cornell researchers, in collaboration with the Tanzanian Ministry of Health, and with support from the Bill & Melinda Gates Foundation, are studying how engaging and educating local religious leaders can increase the uptake of HIV prevention measures in the general population. With support from the National Institute of Health, we are studying a social worker intervention to improve survival of patients with HIV after hospitalization.

- **Hypertension:** Cardiovascular disease is a growing health problem in Tanzania and early onset hypertension is the single most important cause. Weill Cornell Medicine faculty and our Tanzanian colleagues are investigating the causes of hypertension in Tanzania and developing hypertension treatment programs to prevent cardiovascular disease deaths.

Future Directions

Over the next five years, Weill Cornell Medicine plans to expand clinical services and research in maternal-child health and cardiovascular disease prevention at Weill Bugando—areas of major public health need in which additional training could have an immediate and major impact. It is implementing innovative programs to improve access to reproductive health, pediatric primary care, and anti-hypertensive medications, with the goal of developing Tanzanian physicians into national leaders in maternal-child health and cardiovascular disease prevention.

Over the next five years, Weill Cornell will train Tanzanian leaders in maternal-child health and cardiovascular disease prevention.