Building a sustainable health research ecosystem in Ghana and across Africa

Gordon A. Awandare
Pro Vice-Chancellor, Academic/Student Affairs at University of Ghana
Founding Director, West African Centre for Cell Biology of Infectious Pathogens
The Africa we want

• Goal # 2 of Agenda 2063: Well-educated citizens and skills revolution underpinned by science, technology and innovation

• Need for sustainable research ecosystems - for both physical and intellectual transformation

• Universities are best placed to build sustainable research capacity:
  ✓ Combining education, research and innovation
  ✓ In partnership with industry

• Investment in research in Africa still very low (<0.5% of GDP)

• Significant number of Africa’s intellectuals lost to brain drain:
  • Major push factors include poor research ecosystem and low remuneration
Research capacity building at University of Ghana

- Research income a major source of funds for universities globally - African universities need to be well positioned to compete for funding
- Establishing a sustainable research ecosystem is essential for global competitiveness
- University of Ghana (UG) has made significant progress in quest to become a research-intensive university
- Established Office of Research, Innovation and Development in 2010, with a Pro Vice-Chancellor responsible
- Interfacing with government and industry partners
- Promoting centres of excellence – three World Bank centres and others

UG Finance, 2024
Capacity-building actually works

From beneficiary to implementor - through TDR

- I got into research through a fellowship on a TDR grant
  - Masters fellowship: 1999-2021 at Noguchi, UG
- Got PhD opportunity while attending a MIM conference supported by TDR
- PhD fellowship from NIH/Fogarty International Centre grant at University of Pittsburgh
- Returned home and established a research capacity building centre at UG
  - West African Centre for Cell Biology of Infectious Pathogens (WACCBIP)
  - Supported by World Bank and Wellcome Trust
WACCBIP impact – 2014-2024

$53m >15 funding agencies

- Building a world-class research environment
- Fostering leadership development and mentorship
- Reducing the brain drain and promoting brain repatriation

FELLOWSHIPS

400

151 women
249 men
Strengthening University of Ghana School of Public Health (UGSPH) as leading implementation research institution in Africa

1. TDR supports UGSPH in development of implementation research (IR) curricula/courses, competency framework, faculty training and career development at sub-regional, regional and global levels.

2. UGSPH collaborates at the regional/sub-regional level to strengthen IR capacity of other regional institutions.

3. Achieved through regional training centre (RTC) in the WHO African Region and TDR Postgraduate Training Scheme (MPH, MSc. and PhD) with IR focus.
UGSPH is one of seven regional training centres across six WHO regions.
TDR supports UGSPH as RTC in WHO African Region (2014-2024)

A decade of demonstrated leadership in IR training across Africa and beyond

- UGSPH coordinates running of Massive Open Online Course (MOOC) in IR, globally
- UGSPH supports other RTCs to run MOOC in WHO regions
- 2018 to date >25,000 trained so far
TDR Postgraduate Training Scheme – UGSPH part of Global Network of Institutions

486 Master's students trained

Total worldwide since 2015

- Mali: University of Sciences Techniques and Technologies, Bamako
- Colombia: University of Antioquia, Medellin
- Senegal: University Cheikh Anta Diop, Dakar
- Ghana: University of Ghana (UGSPH), Accra
- South Africa: University of the Witwatersrand, Johannesburg
- Zambia: University of Zambia, Lusaka
- Lebanon: American University of Beirut, Beirut
- Indonesia: University Gadjah Mada, Yogyakarta
- Bangladesh: BRAC University, Dhaka
- India: Indian Institute of Health Management Research, Jaipur
Impact of TDR Postgraduate Training programme at UGSPH (2016-2024)

• Providing quality IR education, promoting cross-cultural experiences and networking

67 IR Scholars
22 countries

27 females
40 males

Tuberculosis, HIV, malaria, yaws, schistosomiasis, helminthiasis, etc.
Impact of implementation research at UGSPH on delivery of health interventions in Ghana

1. Addressing RTS, S/ASO1E vaccine defaults in Ghana through implementation research (Okyere J et al., 2023).

2. Identified the barriers to TB treatment adherence in Ghana from the patients' perspective (Appiah et al., 2023)

3. Factors affecting patients on antiretroviral therapy (ART) lost to follow-up in Ghana (Kogi et al., 2024)
TDR’s Impact: Supporting the development of global leaders across Africa

“... a significant milestone in my academic journey, ...allowed me to pursue my goal of becoming an Implementation Research Scientist. ..provided protected time and ample funding to carry out high-quality research”

Dr Chinenye Bembir (2015 PhD)
Centre for Translation and Implementation Research, College of Medicine, Univ of Nigeria

“... an invaluable catalyst in shaping my academic and professional journey. I have learned to recognize the intricate interplay between health outcomes and social determinants”

Dr Mbele Whiteson (2023, MSc. AHSS)
Medical officer in Charge, Kasiya Mission Hospital, Ministry of Health, Zambia

“The TDR Fellowship has been pivotal in advancing my career in global health by equipping me with invaluable knowledge, cross-cutting skills, and a strong professional network”

Dr Melvin Katey Agbogbatey (2018 MPH)
Research Fellow @ KCCR, Ghana and Bernhard Nocht Inst for Trop Med
Sustaining a culture of IR training

UGSPH contributing to continuously improving IR training globally

- Piloting the TDR-initiated IR leadership programme
- Institutionalizing IR training through IR Masters programme
- Coordinating delivery of MOOC globally
- Learnings from MOOC used to incorporate interactive tools into the online learning space
Acknowledgements

- **TDR**
  - Funding
  - Equitable partnership with UG
- **ARTC team at SPH, UG**
  - Effectively running the programmes
- **World Bank and Wellcome**
  - Funding WACCBIP, UG