

Sub-Saharan Africa/US Collaborative Research Partnerships

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Objectives

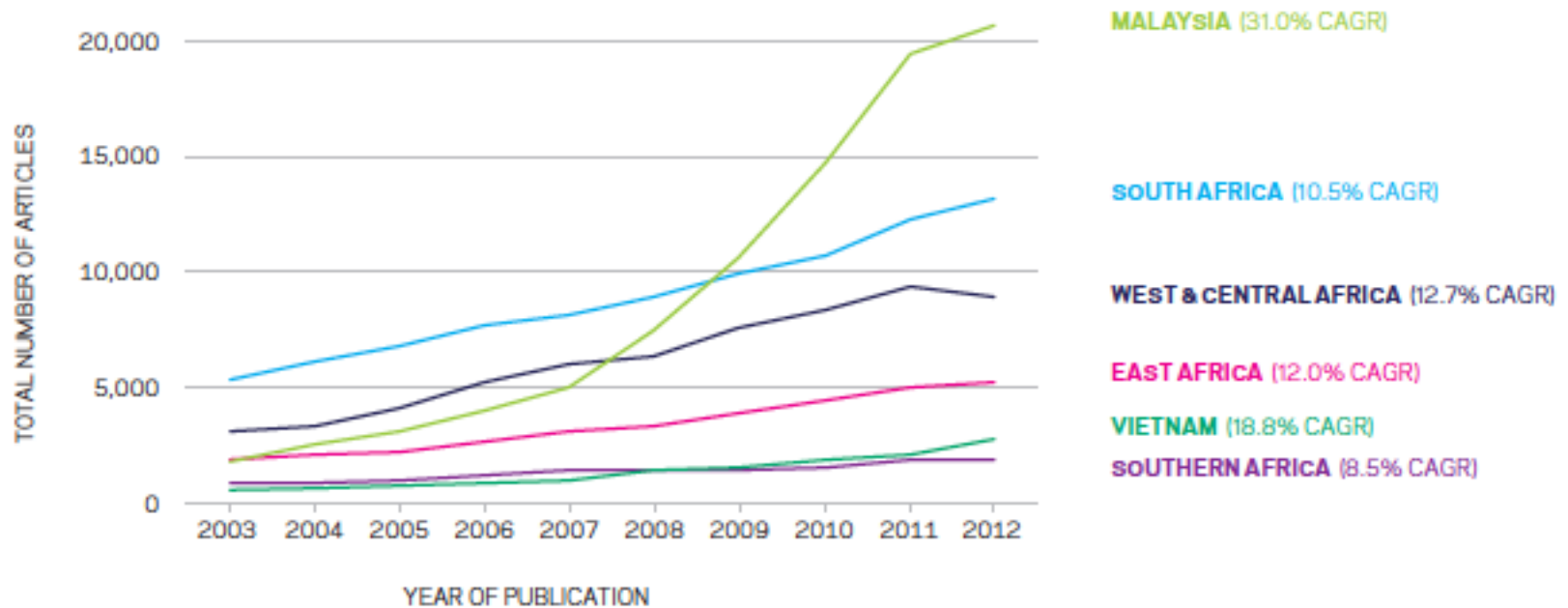
- State of research capacity strengthening in Sub-Saharan Africa
- Outline priority interventions for strengthening research capacity in Sub-Saharan Africa
- Share experiences from the Cardiovascular Research Training Institute (CART)
- Future directions

A DECADE OF DEVELOPMENT
IN SUB-SAHARAN AFRICAN
SCIENCE, TECHNOLOGY,
ENGINEERING & MATHEMATICS
RESEARCH

**State of research capacity
strengthening in SSA**



Sub-Saharan Africa has greatly increased both the quantity and quality of its research output



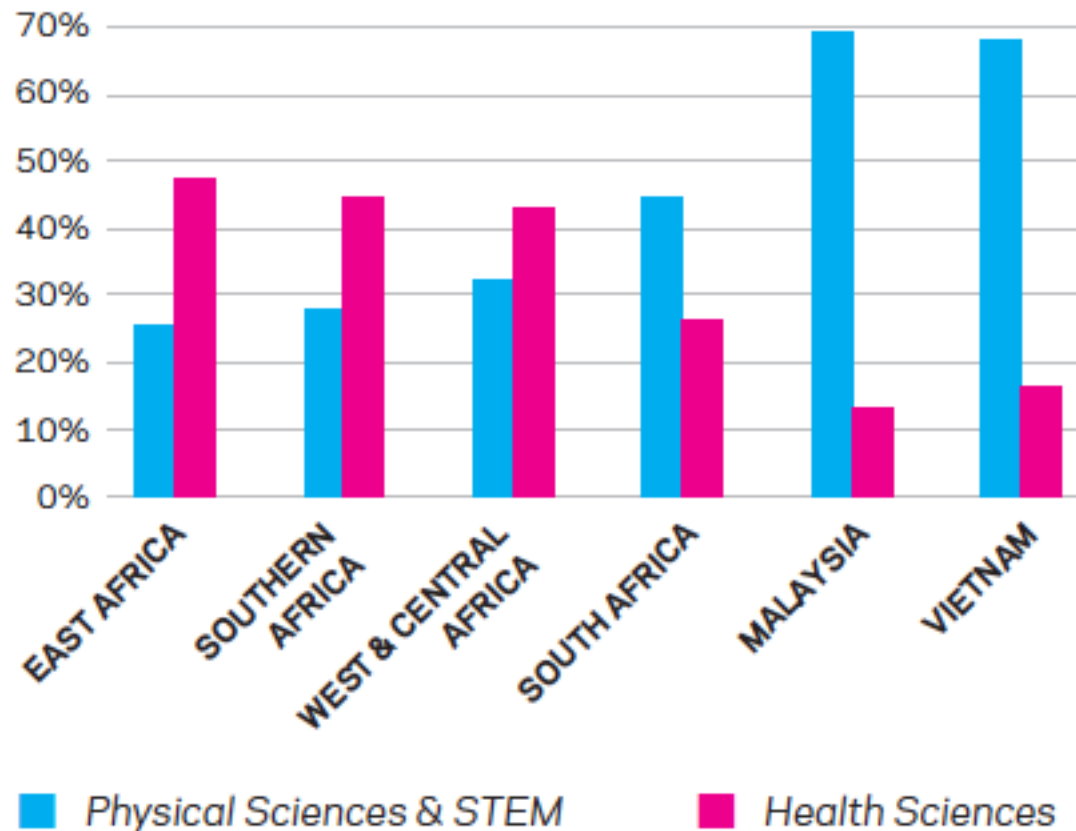
Overall number of articles and Compound Annual Growth Rate (CAGR) for SSA regions and comparator countries, 2003-2012.

Research output in SSA

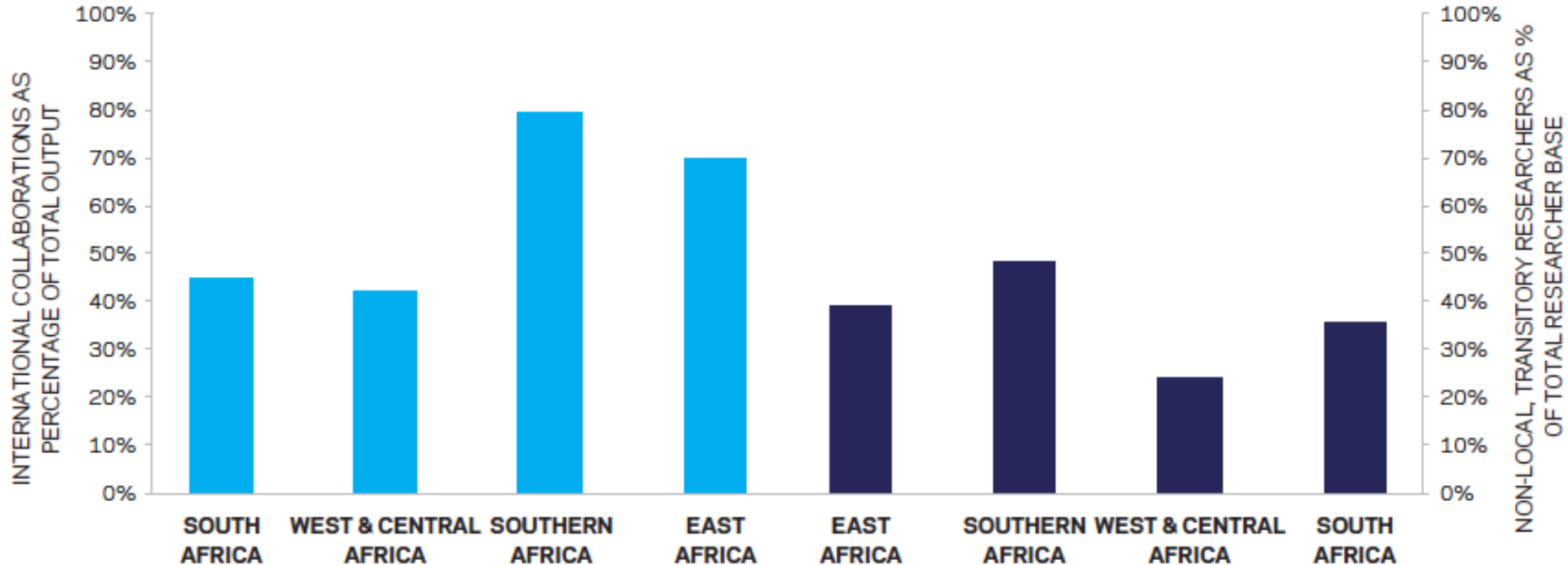
- SSA's share of global research increased from 0.44 to 0.72% between 2002-2014
- West and Central Africa increased its world article share from 0.23%-0.4% in the same period
- Southern Africa minus South Africa barely increased its share from 0.07% to 0.09%.
- SSA still accounts for less than 1% of the world's research output, despite representing 12% of global population

45% of research in SSA is in health sciences

Percentage of total article output in the Physical Sciences & STEM versus the Health Sciences



Most research in SSA, relies heavily on international collaboration and visiting faculty for their research output



Inter-regional collaboration between SSA regions is very poor **OR** largely non-existent

INTER-REGIONAL COLLABORATION

0.9%-2.9%

Inter-African collaboration (without any South-African or international collaborator) comprises 2% of all East African research, 0.9% of West & Central Africa, and 2.9% of Southern Africa.

Poor funding for research by African countries

- Funding for research by African countries is only about 0.3% of their GDP— seven times less than what developed countries allocate to R & D.
- On average Africa has only 164 researchers per million people while the global average stands at 1,081 researchers per million people.
- In Sub-Saharan Africa there are only about 80 researchers per million in the population

Priority interventions for strengthening research capacity in SSA



Council on Health Research for Development (COHRED)

Global Forum for Health Research

Special Programme for Research
& Training in Tropical Diseases (TDR)



CHANGING MINDSETS
Research capacity
strengthening in low-
and middle-income
countries

Priority interventions for strengthening research capacity in SSA

- In addition to supporting individual RCS, focusing far more on supporting institutional RCS, which requires a change in the mindset of funders and other international organizations.
- Concrete action to promote the retention of skilled and experienced researchers in LMICs. This requires interventions, such as
 - improving conditions of service
 - job security, career pathways
 - **opportunities for engagement with peers**

Priority interventions for strengthening research capacity in SSA

- Increased collaboration between and within LMIC institutions rather than competing for resources. This requires a mindset change within 'southern' institutions.
- Recognizing and then exercising their power to address the perceived power imbalance in north-south collaboration.
- Insist on an equal partnership, with explicit capacity strengthening components because most funders require the involvement of local counterparts for research undertaken in LMICs by northern institutions.

Cardiovascular Research Training (CaRT) Institute

Fogarty-funded D43 Training Program

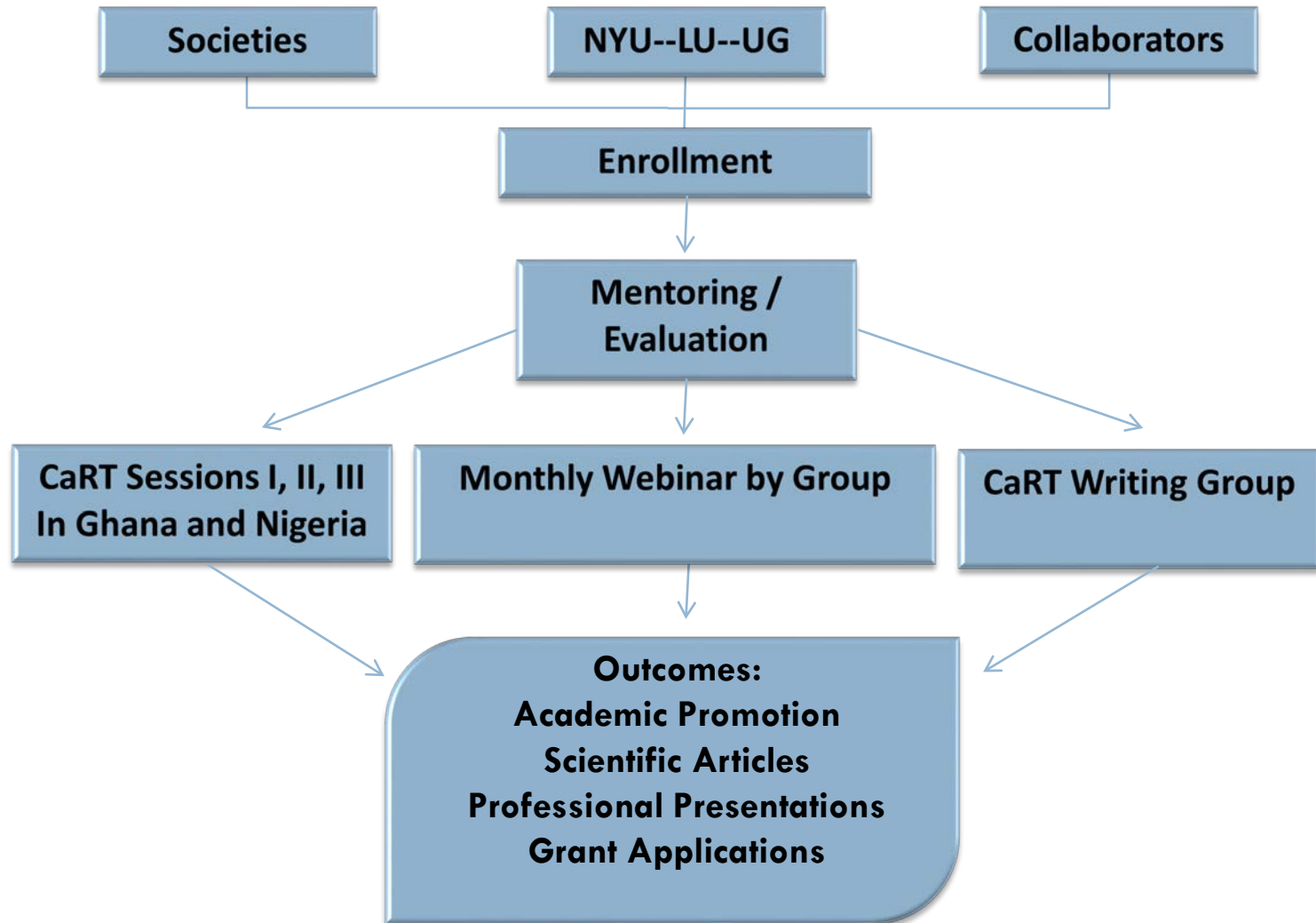
- CaRT is a collaborative training program between the NYU School of Medicine, Loyola University, and University of Ghana School of Public Health.
- Goal is to develop junior faculty, postgraduate physicians, and matriculated MPH/PhD students as independent investigators.
- Training occurs entirely in Ghana
- Trainees are mandated to form multidisciplinary research groups
- Adopts a long-term training model requires mentees to attend the program for a period of 2 years

Cardiovascular Research Training (CaRT) Institute Fogarty-funded D43 Training Program

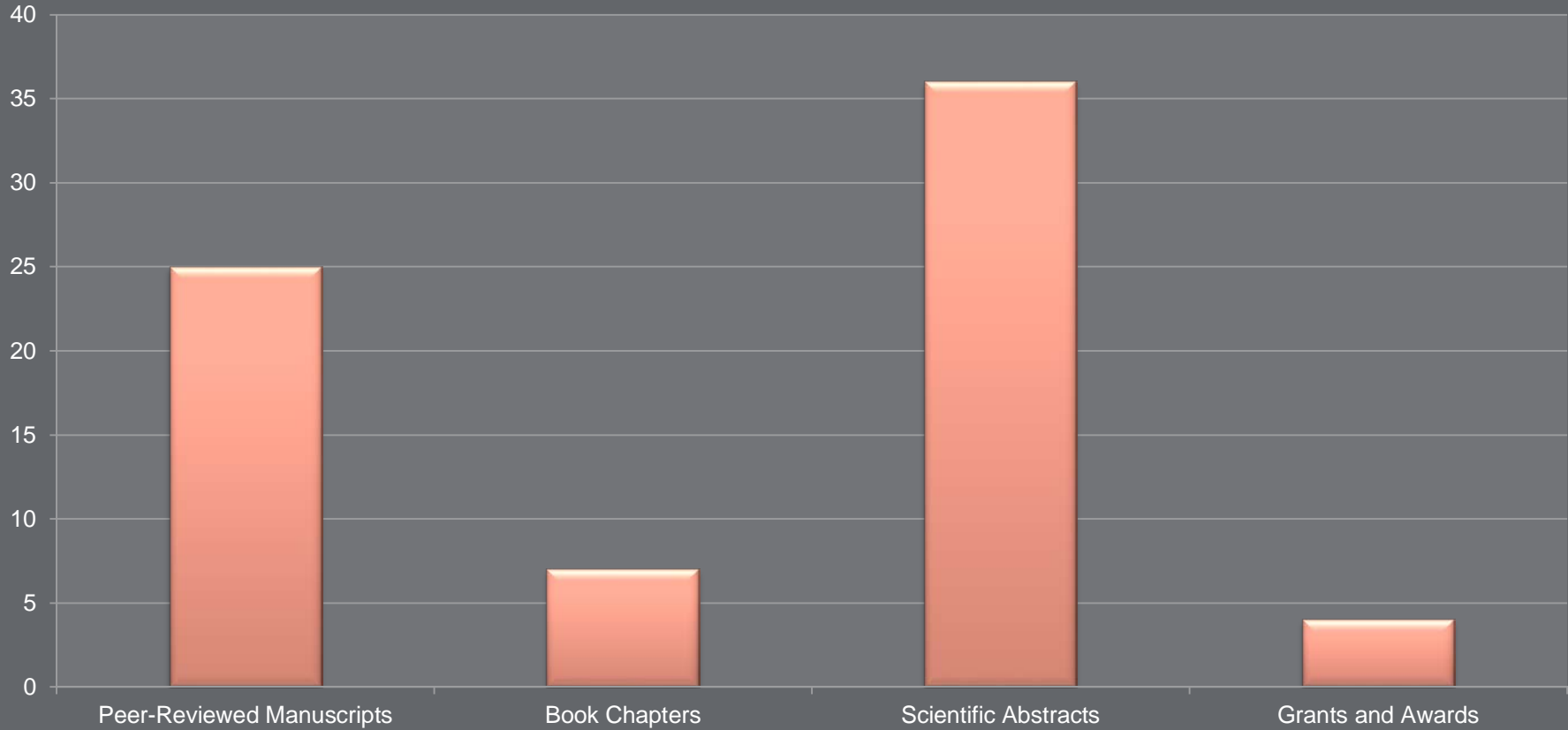
- During the first year:
 - Attend three intensive courses two weeks each: fundamentals of research methodology, comparative effectiveness research, health services research, advanced biostatistics, dissemination and implementation research.
- During the second year:
 - Mentees participate in various career development and mentorship activities and
 - hone their acquired research skills as they develop and implement individual research projects and prepare manuscripts and grant applications.

Organizational Structure

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Accomplishments



Future directions in research capacity strengthening

- *“.....As researchers, we must commit ourselves to research capacity strengthening activities that not only strengthen but also inspire health scholars to make a difference in their local contexts. There is urgency in promoting transformative leadership as we build and strengthen research capacity that is sustainable and balances two fundamental values: excellence in research and relevance, and leadership in setting local research agendas”.....Collins Airhihenbuwa (Dean, St. Louis University College of Public Health & Social Justice)*
- Need to examine research in the context of culture using the PEN-3 Model

Claim Your Space: Leadership Development as a Research Capacity Building Goal in Global Health

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Freddy Zizi, MBA², and Kolawole Okuyemi, MD, MPH⁴**

Abstract

As the burden of noncommunicable diseases (NCDs) rises in settings with an equally high burden of infectious diseases in the Global South, a new sense of urgency has developed around research capacity building to promote more effective and sustainable public health and health care systems. In 2010, NCDs accounted for more than 2.06 million deaths in sub-Saharan Africa. Available evidence suggests that the number of people in sub-Saharan Africa with hypertension, a major risk factor for cardiovascular diseases, will increase by 68% from 75 million in 2008 to 126 million in 2025. Furthermore, about 27.5 million people currently live with diabetes in Africa, and it is estimated that 49.7 million people living with diabetes will reside in Africa by 2030. It is therefore necessary to centralize leadership as a key aspect of research capacity building and strengthening in the Global South in ways that enables researchers to claim their spaces in their own locations. We believe that building capacity for transformative leadership in research will lead to the development of effective and appropriate responses to the multiple burdens of NCDs that coexist with infectious diseases in Africa and the rest of the Global South.

Rationale for this recommendation

- **Strengthening research capacity needs transformative leadership training:**
 - *He who is leading and has no one following is only taking a walk. (African proverb)*

- **Claim Your Space**
 - *Until the lions produce their own historians, the story of the hunt would glorify only the hunter. (African proverb)*

Claim your space



*The hand that gives is
always on top*

(Ahmadu Hampate Ba)

Own your space



No one should enter his house through another man's gate.

(Chinua Achebe)

Reaffirm your space



We prefer self-government with danger to servitude in tranquility. . . . We face neither east nor west; we face forward.

(Kwame Nkrumah)

Failure Is an Opportunity to Envision Your Next Space



*You may encounter
defeat but you must
not be defeated.*

(Maya Angelou)

Failure Is an Opportunity to Envision Your Next Space



The size of your dreams must always exceed your current capacity to achieve them. If your dreams do not scare you, they are not big enough.

**President Ellen Johnson
Sirleaf of Liberia**

Thank you!

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