

#### Developing and Retaining the Next Generation of African Academics: Excellence, Retention and Sustainability

# The APHRC and CARTA Experience on **Excellence**

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- Why we need excellence in PG training in Africa
- The CARTA experience and contribution
- Reflections

What we mean by excellence



- A universal concept...
- Therefore the question: What "excellence" means in an African context is a misnomer
  - African researchers/academics compete in a global context
- Ways excellence in postgraduate training can be attained in Africa under prevailing circumstances

### Why Excellence in PG Training?



- Globally, sub-Saharan Africa has some of the worst health and development indicators
- Excellence in research is key to understanding the drivers of, and potential solutions to the many challenges facing the region
- Yet, the continent clearly lacks centers of research excellence that can generate the evidence base to address the region's development and health problems.

### Role of PG Training in Building Research Excellence



- Universities mandated to build the human resource capacity needed to drive high-quality research on the continent currently face challenges that make this difficult
- Yet, we can no longer afford overseas training
  - High and escalating costs
  - Low rates of return of overseas-trained PhDs
  - Those who return often drift away from teaching/research
- Some implications:
  - Africa employs up to 150,000 expatriate professionals at a cost of US\$4B a year to fill the human resource gap created by brain drain (African Partnership Forum (2007):
  - The continent's share of global scientific output fell from 0.5% in mid-1980s to 0.3% in the mid-1990s

## Why CARTA?

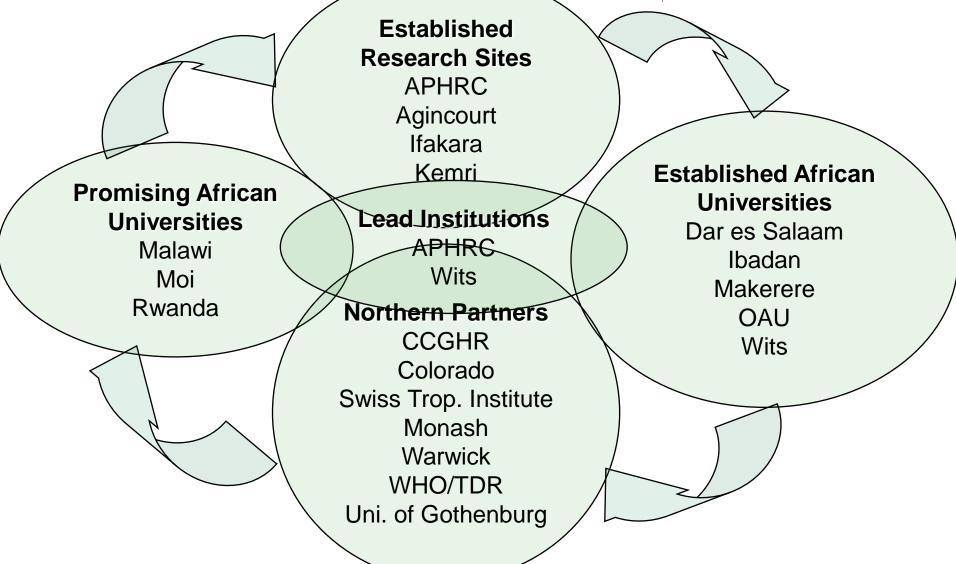


 No individual African university or country has the human resource capacity to mount globally-competitive doctoral programmes

• Hence... CARTA!

## **CARTA Member-institutions**





## Key Elements of CARTA



Build and retain a vibrant African academy able to lead world- class multidisciplinary research that impacts positively on public & population health

#### BUILD THE NEXT GENERATION

Model doctoral training program

Strong supervision and mentoring

Joint Advanced Seminars DEVELOP INSTITUTIONAL CAPACITY

Strengthen research infrastructure

Faculty & staff training

Development of vibrant research hubs



- Strengthening doctoral training
  - Registration in other universities
  - Exemption from teaching responsibilities
  - Three supervisors home, training, external
  - Joint Advanced Seminar Series
  - Strong online support Learning portal
  - Participation in international conferences
  - Targeted sandwich/internship at a Northern/Southern univ.
  - Research grants for student-initiated projects
  - Library support to students
  - Monthly stipend to facilitate fulltime studentship
  - Post-doctoral components currently unfunded

## **JAS** seminars



#### 1. Introduction to critical thinking and research

Build critical thinking, essential concepts and seminal literature, conceptualising research projects, research design, developing instruments, literature & data resources, research ethics

#### 2. Data management and analysis

Mixed-methods approaches, identifying appropriate analytical models, model assumptions, common errors in data analysis, from basic analysis to complex modelling

#### 3. Interpretation & presentation of research findings

Communicating research to policy makers, presentation skills, scientific writing, identifying appropriate journals

#### 4. Life beyond PhD

Proposal writing, budgeting, managing research grants and partnerships, research ethics, developing course outlines and teaching materials, research and policy linkages

## Inter-JAS



- Implement research skills learned in previous JAS
- Keep students actively engaged with research process, mentors and peers
- Use CARTA website to complete tasks
  - Reading materials, links to online resources
  - Interactive communication among fellows, enhance supervision and information exchange
  - Virtual list-serve, chat room, internet library links
- Regular assignments with feedback
- Online courses
- Promote on-time graduation
- Students & supervisors present research training seminars at home institutions for other graduate students

## Institutional strengthening

- Consortium for Advanced Research Training in Africa
- Training for administrators, Librarians, Bursars
  - Post-graduate training administration
  - Research management including grant reporting
  - E-resources, Retention strategies, etc.
- Training of faculty
  - Project management
  - Mentoring of PhD supervisors; enhancing of skills
- Development of University-wide systems
  - Coherent research agendas
  - Research policy including ethical reviews, etc.
- Research Infrastructure
  - Internet connectivity
  - Graduate seminar rooms
  - Computer labs, etc
- Other support
  - Access to JAS materials
  - Relief teaching support, etc

## **Current Funding**



- Expected program cost:
  - About US\$20M over initial 5-8 years
- Secured:
  - Wellcome Trust:
  - Carnegie Corporation of NY:
  - Gates Foundation:
  - Ford Foundation:
  - British Council

### Potential

- MacArthur Foundations:
- European Union
- Other Foundations, Bilateral funders
- African governments and philanthropists
- Individual philanthropists

\$5.8m/5yrs \$1m/18 months \$200K \$1m/2 years £105K/3years

\$1m/3years (submitted) €2m/5years (submitted)

## Reflections...



#### Retention

- We must think outside the box!
  - Buy out time
  - Redefine parameters for salary negotiations
  - Apply limited research funds to productive faculty
- Consider flexible appointments
  - Existing expertise outside the university
  - Research appointments (non/limited teaching)
  - If accounts/bursary is a problem, outsource!
- Sustainability
  - Excellence is sustainable anywhere in the world!
  - The only thing that is not sustainable is mediocrity



# Thank you

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