Building capacity for GHR in resource constrained settings: context experiences

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Outline

- Background
- Overview of key challenges
- Lessons Learnt & Key areas for reflection
- Successes stories
- Remaining challenges
- Opportunities
MALAWI IN CONTEXT

Population: 17.2 million
Area: 118,480Km²
Life expectancy: 58/61
Infant mortality: 66/1000
MMR 675/100,000
Why research is needed

- Develop context specific evidence
- Support decision making
- Support efficient use of limited resources
- Conduit for economic development
Overview of Key Challenges

- Low Critical mass - competing priorities
- Limited research output from Universities
- Lack of Conducive research environment/retention
- Lack of absorption platform for research findings
- Lack of funds allocated to research/retention
Lessons Learnt & Key Areas for reflection
Approach

- Research
- Research Capacity

Disseminate
Use findings
Varied Capacity Strengthening Needs

- Research Leaders
  - Graduate Fellowships
  - Small grants
  - Interns
  - Postdoctoral

- Research
  - Multidisciplinary
  - Senior
  - Junior

- Institutions
  - Infrastructure
  - Grants management

- Individual
  - Graduate Fellowships
  - Small grants
  - Interns
  - Postdoctoral

- Dissemination
- Governance
- Ethics
- Research Agenda
Career progression & Leadership

- Graduate
- Internship/Postgraduate studies
- Post-doc/Junior Researchers
- Senior Researchers
- PI & Mentors
Effective and strategic capacity building for GHR can help Malawi optimize current *health research*

<table>
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<tr>
<th>The problem</th>
<th>How capacity building helps</th>
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<tr>
<td>Lack of adequate personnel and facilities for research - issues of access to HE</td>
<td>Level of expertise in critical areas is developed - collaborative work made possible - preparedness for emerging PH issues</td>
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<td>Parallel initiatives are sometimes duplicative and working in silos</td>
<td>Centers of excellence - collaborative and shared resources - research studies create learning opportunities</td>
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<td>Lack of conducive environment - graduates ill prepared and lack confidence - research translation and absorption platform lacking</td>
<td>Critical mass capable to win grants, do research and engage policy makers and diaspora involvement made possible</td>
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Role of Universities

- University education should be the anchor of a broad-based development strategy

- In addition to teaching – produce competent graduates and assess the needs and aspirations of the society

- Universities acting as effective agents of change – community engagement more responsive to the emerging needs

- Universities to increase research focus and provide research leadership
Role of Universities (cont.)

- promote impact-oriented research, based on a platform of effective teaching and learning systems.
- Retention enhanced with access to centers of excellency and funding mechanisms
  - create opportunities for postdoctoral researchers and research career posts
- Promote joint degree programs to improve access to facilities
SUCCESS STORIES
**Background:** BSc. Biology- UNIMA; MSc in Medical Molecular Biology - Bangor University in the UK. **Thesis:** Characterisation of anti-RNP autoantibodies. Looking at cancer cells and how they are linked to development of certain autoimmune diseases.

**Publications:** submitted a manuscript to Journal of Antimicrobial Chemotherapy; Poster presentation at the UNIMA conference

**Post:** CoM as a Lecturer in the Biomedical Sciences Dept.

**Affiliation:** Belongs to the TB research group at CoM and MLW
Collaborations: Dr. Niel Hall University of Liverpool and Mike Barer at University of Leicester.

- **Area of current research:** TB.

- Looking at persistent (not resistant) TB cells which have been found to be responsible for disease relapses since they go reversibly dormant during treatment and are therefore tolerant to antibiotics.

- interested in molecular mechanisms that underlie this reversible shutdown.

“I believe my research career is really taking off.”
Fanuel Lampiao - PhD. Lecturer, Associate Professor of Physiology

**Background:** BSc in Biological Sciences UNIMA; Hons, MSc and PhD in medical physiology Stellenbosch university; Junior grant: Antifertility effects of Malawian medicinal herbs.

**AU Young Scientist Award 2012**

Able to secure more grants from other organizations.

Currently hold a Scottish Government grant worth 275 000 British Pounds.

**Current research:** in the field of herbal medicine used for reproductive purposes.

**Leadership:** supervising both undergraduate and postgraduate research projects. Currently have 3 PhD students working in his laboratory; Hosting Interns Deputy Head of Department, Deputy Dean of Faculty, Dean of Students.
Collaboration: Carol Clemets, and Ai Gray, Strathclyde University, UK; Dr SS du Plessis, Division of Medical Physiology, Stellenbosch University, South Africa; Dr Guillaume Aboua, Department of Biomedical Technology, Cape Peninsula University of Technology, South Africa.; Dr D Kamadyaapa, Walter Sisulu University, South Africa; Forest Research Institute of Malawi, and the National Botanical Gardens.

“Capacity building grant allowed me to grow into an independent researcher. It gave me confidence to try other sources of funding.”

Grant allowed publications of 2 papers:


Remaining challenges

- Research still carried out in Silos
- Mapping of research activities and context usage
- Limited community engagement to capture and address contextual issues
- Limited skills in program implementation
- Training opportunities beyond PhD limited
- Most Training institutions not well equipped
Remaining challenges (cont.)

- Abuja (March, 2006), Accra (June, 2006); Algiers (June 2008); and Bamako (November 2008) Health Ministers’ declarations - unimplemented.

- Research studies aligned to national health priorities in line with Paris Declaration on Aid Effectiveness (2005)

- Strengthen local Ethics Committees whose functions are to support research and not hinder
Opportunities

- Use of existing pockets of excellency and new centers of excellency - NGOs establishing expertise

- Strengthen research management and leadership

- Encourage role models to provide mentorship and create opportunities for skills exchange

- Government commitment - implementation of policies and international agreements
THANK YOU