# Malaria Research Capability Strengthening in an Emerging Medical Education Institution: Experiences of the College of Medicine, University of Malawi

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Research Support Centre

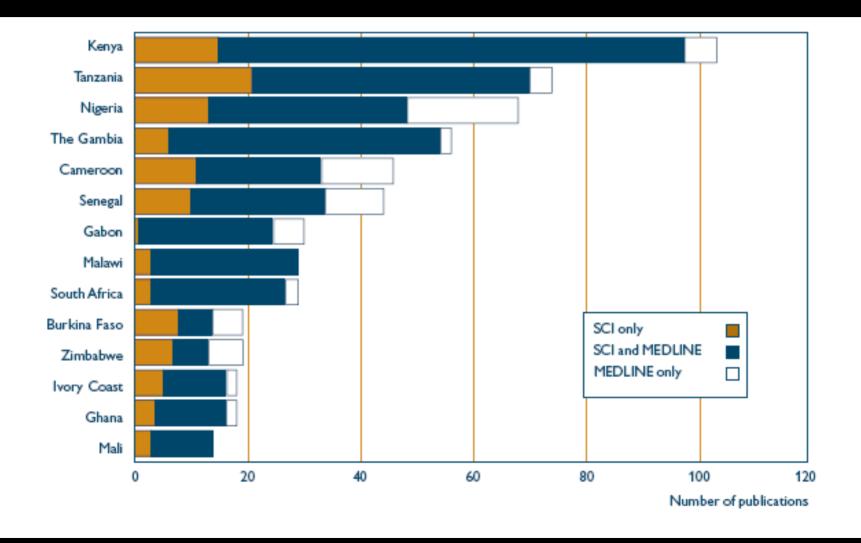
College of Medicine

**University of Malawi** 

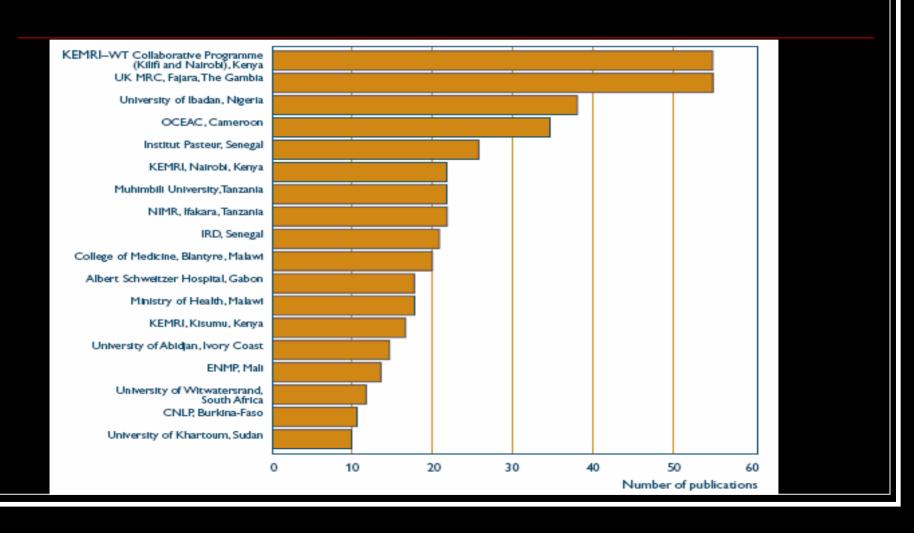
### Background

- College of Medicine established 1991
- About 67% of 100 academic staff locals
- Course
  - Graduate: -MBBS, Pharmacy, Medical Laboratory Technology
  - Postgraduate: MPH, MMed
- High quality research in Research affiliates
  - Malawi-Liverpool-Wellcome Trust (Malaria)
  - Johns Hopkins Project (HIV/AIDS)
  - Malaria Alert Centre (Malaria)
  - Blantyre Malaria Project (Malaria)
  - Mostly driven by foreign researchers
- Limited research in departments hence need for capacity building
- Predominantly clinical research

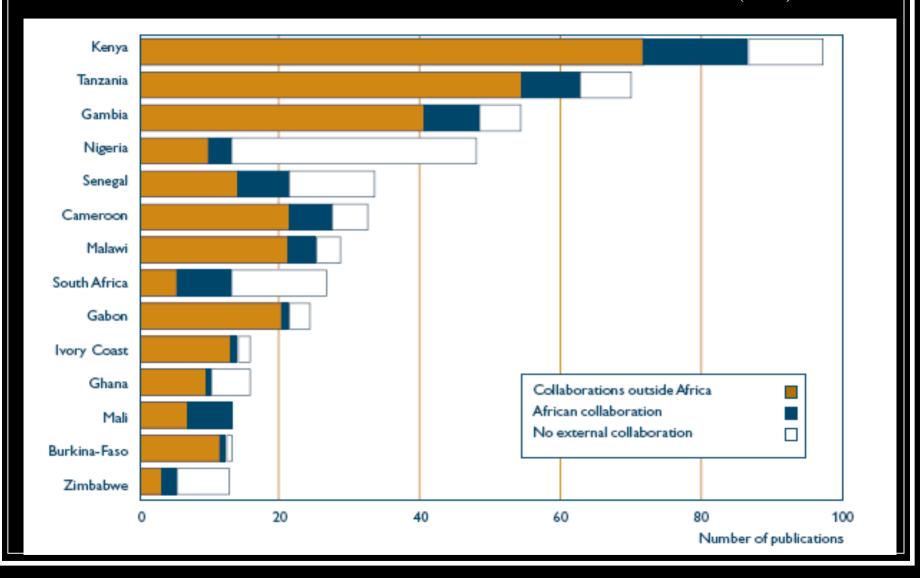
#### Top African countries publishing in malaria research 1995–97

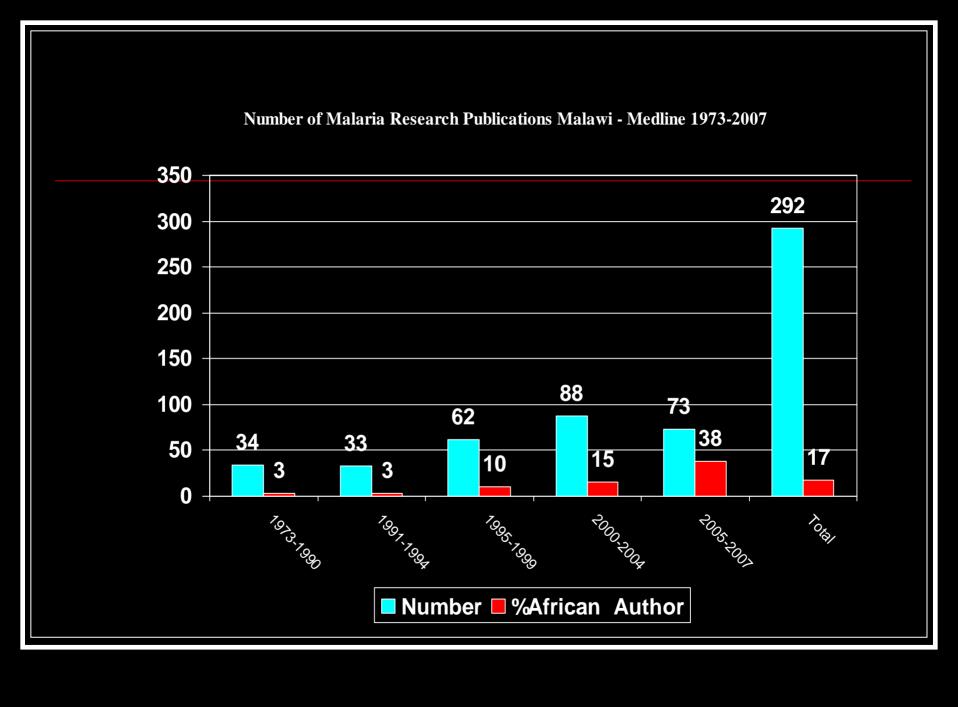


#### Highest publishing malaria research centres in Africa, 1995–97



#### Collaborations of African countries in malaria research 1995–97 (SCI)





## **Malaria Research Strengthening Initiatives at CoM** 1991-2000

- 43% of 134 MBBS graduates received postgraduate training abroad in various discipline
  - Clinical medicine, epidemiology, pharmacology, pathology
- PhD 7
- $\overline{\phantom{m}}$  MPH/MSc -14
- $\blacksquare$  MRCP etc -20
- Other -16

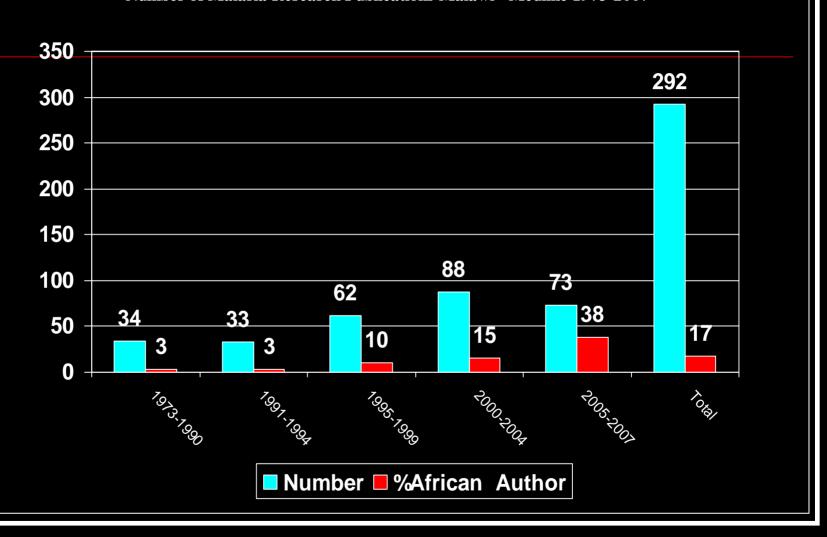


## Malaria Research Strengthening Initiatives at CoM 2001-2005

- Gates Malaria Partnership Malaria
   Research Capacity strengthening 2001-2005
  - 9 PhDs completed by 2007
  - 6 MSc, Diploma, Other
  - Diverse malaria topics
    - Prophylaxis, Drug resistance, Vector biology,
       Pathogenesis, Immunology, Adolescent malaria
  - Increased publication
  - Impact on health care delivery
  - Re-entry grants



#### Number of Malaria Research Publications Malawi - Medline 1973-2007





#### **Lessons Learnt**

- Researcher driven strengthening
  - fragmented and does not necessarily address institutional needs and priorities
  - No institutionalized recognition of achievement and hence career advancement
  - Limited utilization of skills development in
    - applying results due to lack of institutionally backed communication with policy makers
    - Creation of an appropriate environment for conduct of research
    - Reproduction of local capacity



#### **Lessons Learnt**

- Need for an institutionally driven and coordinated research capability strengthening programme that address sustainability of motivation and reproduction of local capacity
- Creating an enabling and supportive research environment for development of local research capacity and leadership is critical for sustainability



# **Institutionalization of Research Management at CoM**

- Creation of an enabling environment requires institutionalisation of research management to interface individual driven skills development and institutional research support environment.
- CoM established Research Management Function in Office of Postgraduate Studies and Research
- Tasks
  - Implementation of Research Policy
  - Coordination of research activities
  - Designing programme of research training courses



# **Institutionalization of Research Management at CoM**

- Individualised research support
- Introducing ICH-GCP and providing clinical monitoring services
- Providing research information services
- Grants administration comprehensive support for researchers
- Provide data management services



#### **Achievements**

- RSC established 2006
- Staff
  - Director, epidemiologist/statistician, CRA (3), Data Manager, Data Officer,
     Administrative assistant, Finance Officer
- Courses implemented
  - GCP (4 courses) -40+ research staff trained including senior scientists
  - Grant writing (1)
- Courses developed and planned for 2007
  - Clinical Trial Methodology
  - Basic Research methodology
  - Data Management
  - Clinical Trial Monitoring
  - Writing a scientific manuscript



#### **Achievements**

- Coordination of research strengthening efforts
  - Involvement of RSC in capacity building grant applications
  - Participation of RSC in strategic planning for research capability strengthening
  - Facilitation of development of research governance draft research policy
  - Support for junior researchers in developing and submitting grant applications
- Clinical Trial Monitoring
  - 2 full time CRAs and 1 part time intern CRA
  - Monitoring two clinical trials
  - Continued training of CRAs identifying internationally recognised trainers
- Information services
  - Website www.medcol.mw/rsc
- Strengthening research governance



## Challenges

- Researcher apathy
- Fear of change
- Fear of responsibility
- Perceived to increase bureaucracy
- Fear of loss of position and income
- Fear oh the unknown



#### **Discussion & Conclusions**

- Institutionalising research management
  - provides more a comprehensive research training and support programme
  - ensures sustainability through institutional commitment and support
  - Enhances institutional capacity for grants administration, an essential function for research capability strengthening
- Sustainable research capability strengthening is dependent on an appropriate and supportive research governance framework and institutional mechanisms for research management
- Research capability strengthening grants in specific disciplines must include support for research management capacity development
- Research institutions should adopt a business approach to research
- Building bridges between individual and institutional efforts to strengthen research in Africa is key to sustainability

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