

Enhanced Advanced Biomedical Research Training for Mozambique (EABRTM)

**Emilia Virgínia Noormahomed-Full Professor, Human Parasitology
MEPI & D43 Mozambique PI
AFREhealth PI Council Member**

**Durban, International Conventional Centre
August 4th, 2018**

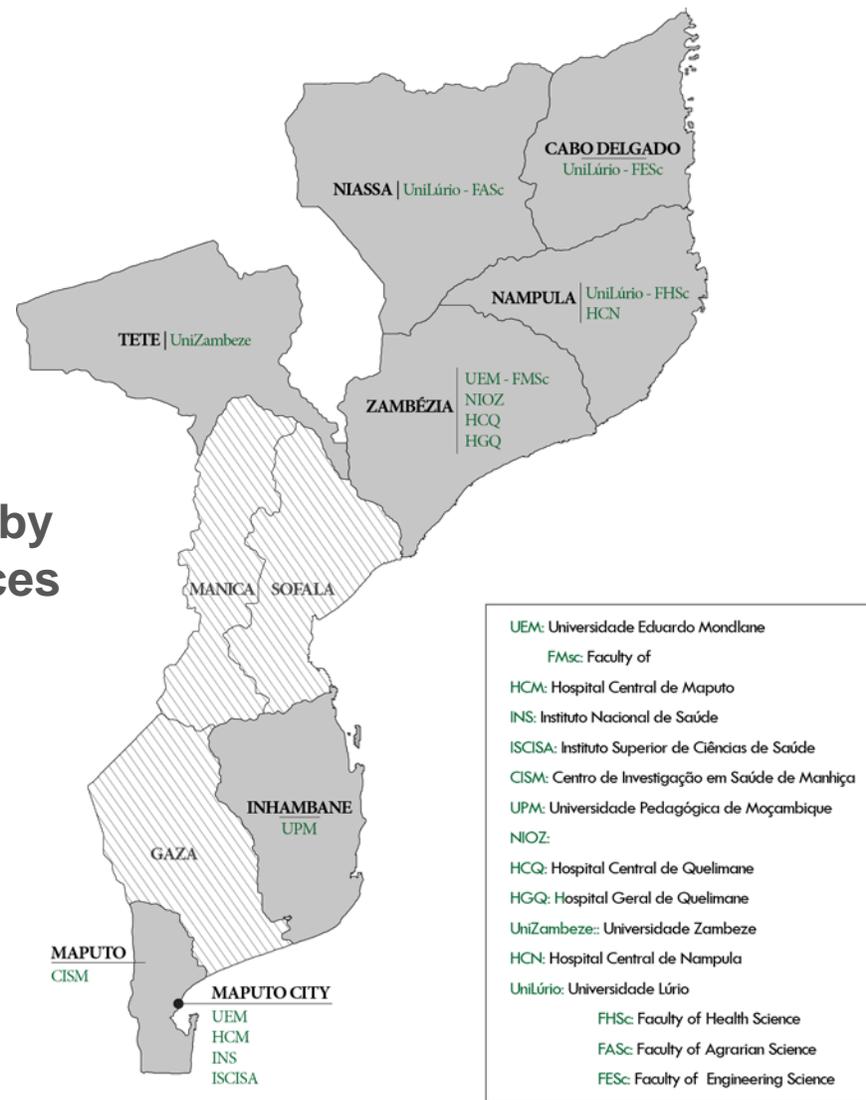
PRESENTATION OUTLINE

1. INTRODUCTION
2. OBJECTIVES
3. HIGHLIGHTS OF PROGRESS
4. CHALLENGES
5. EXPECTED OUTCOMES
6. SUCCESS STORIES
7. COLLABORATION OPPORTUNITIES

INTRODUCTION

- It is intended to support and sustaining MEPI goals achievements by creating a critical mass of researchers to address the most pressing problems in the country and promote faculty development among others.
 - It includes de UEM FoM, the INS (NIOZ), MCH and UniLurio to train research leaders in Mozambique.
- 

The map shows provinces covered by MEPI and D53 activities. the provinces



Program Objectives (D43-TW 010135)

Main Objective:
**Enhance
Biomedical
Research in
Mozambique**

Specific Aim 1:
Masters and
PhD level
curriculum
development.

Specific Aim 2:
Training the
next
generation of
Mozambican
Biomedical
Researchers.

Specific Aim 3:
Strengthening
Research
Administration
Capacity within
Mozambique.

HIGHLIGHTS OF PROGRESS

1. Courses on grant and manuscript writing, human subjects, biomedical laboratory skills training are organized on regular basis with support of visiting faculties from the USA, Portugal and Spain.
 2. 15 junior faculties and researchers are mentored and financially supported to develop their research work.
 3. The UEM master program on Bioscience with the 3 brands (Neurosciences, Parasitology and Microbiology), the first in its kind in the country is at the final stage for approval by University Board and will initiate later this year with enrollment of 30 students.
 4. The PhD program on Bioscience and Public Health from UEM is recruiting additional 5 students starting next month, **totalizing 9.**
- 

Program Activities and Outcomes

Courses	N° of courses (2017)	Total trainees (2017)	N° of courses (2018)	Total trainees (2018)
Scientific manuscript writing	4	73	6	105
Quantitative Research Methods	2	63	4	94
Qualitative Research Methods	2	19	3	32
Good Clinical Practices	2	30	5	105
Grant writing and management	3	40	4	60
Laboratory biosafety	2	20	2	20
Laboratory Skills training			2	10

HIGHLIGHTS OF PROGRESS

- Two junior & researcher have published in international journals and 3 manuscripts are ready for submission, and several are underwriting.
 - Trough MEPI and D43 grants, UEM Faculties are developing their careers and gaining international reputation and credibility as illustred by:
 - The invitation made to the PI to be part of 2 doctoral thesis oral examination panel in Global Health and a panel for promotion to Full Professor of one Faculty in Portugal.
 - Other Mozambican Faculty have been invited to give some lectures in Pathology in Portugal.
 - More than 10 UEM faculties trained in mentorship.
- 

EABRTM TRAINEES

N.	Name	Institution	Research Project	Coursework status
Reporting Period: Year 3 (2017 – 2018)				
1	Zavale, B.	HCM-Maputo	Evaluation of the technical competencies of medical trainees in Internal Medicine department at MCH	Enrolling patients
2	Joaquim, C	MIHER-Maputo	Quality of life in children with hydrocephalus (TBN)	Designing research protocol
3	Nhantave, C.	HCM-Maputo	Interventions to improve antibiotic prescribing practices 1234 in HIV infected patients at Maputo Central Hospital	Research under implementation
4	Kassim, H.	INS-NIOZ - Maputo	The epidemiology of <i>T. solium</i> in epileptic patients from Mocuba and risk factors	Under implementation
5	Dobe, I.	INS-Maputo	Laboratory characterization of stroke patients hospitalized in the HGM Medicine ward	Submitted for IRB approval
6	Langa, I.	Parasitology- UEM-Maputo	Prevalence of <i>Taenia solium</i> cysticercose in Mocuba District - Zambeze	Research under implementation
7	De Sousa, I.	Parasitology UEM-Maputo	Epidemiology of the Taeniasis – Cysticercosis in epileptic patients and their relatives from Mavalvane	Submitted for IRB approval
8	Comia, I.	UniLurio-Nampula	The prevalence of Leptospirose in rodents from Ilha de Mozambique	Manuscript under writing
9	Mufume, J.	UEM-Maputo	(1st project): Evaluation of the risk factors associated with neurocognitive disorders in PLHIV followed in the HAART service of the Alto Maé Health Center. (2nd project: PhD): Neuroimaging features of patients with epilepsy and Neurocisticercosis	Under implementation Designing
10	Cherene, L.	UEM-Maputo	(1st project): Medicinal plants (2nd project: PhD): Study of the genetic diversity toxoplasma gundi:	Manuscript under writing Designing

			immunopathogenic mechanism and its association with neuropsychiatric effects in HIV positive patients in HCM	
11	Barros, L.	ISCISA-Maputo	Impact of intestinal parasitoses on cognitive performance	Dropped out
12	Banze, L.	Parasitology-UEM-Maputo	(1st project): Immunogenetic variation in shistosomiasis and hiv-co-infection (2nd project): The epidemiology and pathomechanisms of <i>Taenia solium</i> cysticercosis and Neurocisticercosis	Manuscript under writing Research Project approved
13	Ali, M.	UniLurio-Nampula	Use of a database in an institution of higher education in Mozambique: case study of the Faculty of Health Sciences in the Lurio University.	Research under implementation
14	Lumbandale, N.	INS-Maputo	Characterization of epidemiological profile of stroke	Research protocol waiting for IRB approval
15	Miambo, R.	UKZN-KwaZulu-Natal	Echinococcus infection in livestock and dogs in southern Mozambique.	Manuscript under writing
Reporting Period: Year 4 (2018- 2019)				
16	*Mugabe, A.	UniLurio-Nampula	The Role of Lurio University Faculty of Health Sciences at Muatala district, in Nampula city	Finished Master program
17	*Saide, A.	UniLurio-Nampula	An Evaluation of the Dentistry Internship Program at Lurio University: Lessons Learned and the way forward	Finished Master program
18	*Chipako, P.	UniLurio-Nampula	Integration of Information Technology into the Health Science Education: Faculty of Health Sciences, Lurio University	Designing

CHALLENGES

1. Shortage of skilled mentors.
 2. Absence of infrastructural support for health professionals to mentor.
 3. Written and spoken English language fluency.
 4. Low salaries in the fields of research, academia, and healthcare, thus requiring multiple means of employment.
 5. Significant delays in the ethical clearance.
- 

EXPECTED OUTCOMES

Sustain the development of post graduate courses and research capacity

Train a pool of senior faculties and researchers in different areas

Increasing:

- (i) Career development**
- (ii) Improvement of working environment**
- (iii) Retention of health professionals**

Thus scaling up training of health professionals

SUCCESS STORIES AND COLLABORATION OPPORTUNITIES

1. Monthly mentorship sessions at UEM were established resulting in:
 - a. increased interest in research: more junior researchers and faculty members seek support for supervision and mentorship;
 - b. reinforced support system for mentees that facilitates collaborative work among mentees, thus increasing confidence to complete the work and a greater diversity of knowledge among mentees.
 2. The increased use of distance learning and other electronic platforms for mentorship for research project development and implementation are resulting in more collaboration within different institutions in Mozambique, and other continents.
- 

ACKNOWLEDGMENTS

- This work was done thanks to the Medical Education Partnership Initiative (MEPI) support which provided financial resources to create master program courses at Universidade Lúrio, Mozambique, Grant Number R24TW008908.
- The Participation in this meeting is supported by the Fogarty International Center of the National Institutes of Health (Office of the Director, National Institutes of Health), Eunice Kennedy Shriver National Institute of Child Health & Human Development (NICHD) National Institute of Neurological Disorders and Stroke (NINDS) under Award Number D43TW010135