

Center Title and Acronym: Pharmbiotechnology and Traditional Medicine (PHARMBIOTRAC)

Host University and Country: Mbarara University of Science and Technology, Uganda

Center Website Address: Under development and yet to be completed

Center Director and email address: Dr. Casim Umba Tolo, Email: tolocas@must.ac.ug or tolocas2000@yahoo.co.uk

Primary Thematic Discipline of Center: Pharmaceutical Biotechnology and Herbal Medicines

Brief Description of Center:

Pharmbiotechnology and Traditional Medicine Centre is based at Mbarara University of Science and Technology in South Western Uganda about 270Km from the capital, Kampala. The aim of the centre is to train and raise a critical mass of specialized and skilled human capital that can use multidisciplinary and transdisciplinary approach to advance traditional medicine and pharmaceutical biotechnology in Africa.

Key Objectives and Expected Outcomes:

Key Objectives

1. To strengthen the existing MUST and partner Institutions' capacity to train highly skilled and specialized professionals and academicians in Pharmbiotechnology and Traditional Medicine.
2. To strengthen the existing national and regional partners capacity to engage in collaborative multidisciplinary and transdisciplinary cutting-edge research.
3. To develop models and frameworks for strengthening university-industry linkages to translate research products to national, regional and international markets.
4. To advance Traditional Medicine in communities through students and community/Traditional Medicine practitioner engagements.

Expected Outcomes

1. Adequate mass of Highly skilled post graduate human resource in Pharmbiotechnology and traditional medicine
2. Transformed traditional medicine sector in the region
3. Growth in research based industry outputs in the region in the field drugs for major health conditions
4. Growth in university-Industry linkages and joint projects in the region
5. Improved international ranking of universities in the region

Major Accomplishments to Date:

1. Recruiting 24 PhDs and achieving above the regional students target of 20%
2. Recruiting 15 Msc in Pharmacology
3. Attracting one applied research grant in collaboration with Action for Natural Medicines (ANAMED) based in Germany.
4. Signing MoUs with partner institutions in Uganda, regional and global
5. Putting in PHARMBIOTRAC staff
6. Attracting faculty from USA

Primary Regional and Global Partners:

Regional Partners

1. Dr. Festus M. Tolo (Principal Research Scientist/ Head, Natural Products Research and Drug Development Programme (NAPREDA), Kenya Medical Research Institute, Nairobi, Kenya.
2. Prof Hassan Omari Kaya (IKS Director DST-NRF Centre in Indigenous Knowledge Systems University of Kwazulu-Natal (UKZN), Durban South Africa)
3. Dr. Mai Abdalla (Biochemistry and Molecular Biology Department, University of Gezira, Sudan)

4. Dr. Kornad Steidel (Pediatria Director Pedagógico Faculdade de Ciências de Saúde Universidade Católica de Moçambiqu)
5. Prof Dominic Byarugaba (Professor of Botany/Deputy Executive Director, Executive Director's Office, African Institute for Capacity Development (AICAD), Nairobi, KENYA)

Global partners

1. Prof Pamela Weathers, Prof of Plant biology and Biotechnology, University of Worcester, USA
2. Prof Cheong-Hee Change, Prof of microbiology and Immunology, Michigan state university, USA
3. Dr Prakash BN, Assistant prof, Ayurveda, Transdisciplinary University, Inda
4. Dr Tamukong Robert, Prof, Clinical Pharmacy, University of Minnesota, USA

Senior Faculty

Senior Faculty	Email Address	Research Area
PROF AGABA AMON	aagaba@must.ac.ug	Pharmacology/cardiovascular
PROF CELESTINO OBUA	cobua@must.ac.ug	Pharmacology/Pharmacokinetics
ASSOC PROF ALELE PAUL	paulalele@must.ac.ug	Pharmacology/Neuropharmacology
ASSOC PROF OLET EUNICE	euniceolet@yahoo.com	Botany/systematics
PROF SIMON LEJJU	ilejju@must.ac.ug	Botany/Paleontology
ASSOC PROF GERTRUDE KIWANUKA	gekiwa2001@yahoo.co.uk	Biochemistry
DR CASIM UMBA TOLO	tolocas@must.ac.ug	Biology/Conservation
DR OGWANG PATRICK ENGEU	Pogwang@must.ac.ug	Pharmacology/Natural Products for malaria
DR DUNCAN SESAZI	dsesaazi@yahoo.com	Chemistry/endophytes
DR JONANS TUSIIME	jonanstusiimire@must.ac.ug	Pharmaceutical Analysis
DR GRACE BIRUNGI	gbirungi@must.ac.ug	Chemistry/Analytical
DR JOEL BAZIRA	jbazira@must.ac.ug	Medical microbiology
DR ESTHER ATUKUNDA	estheratukunda@gmail.com	Clinical trials/Epidemiology
PROF ROBERT TAMUKONG	tamuk001@umn.edu	Clinical pharmacy/Public Health
DR DEUS TUSUBIRA	dtusubira@must.ac.ug	Biochemistry/ metabolism in cancers
ROF PAMELA WEATHERS	weathers@wpi.edu	Plant biology/Biotechnology
PROF CHEONG-HEE CHANG	heechang@umich.edu	Microbiologist/Immunology
DR PRAKASH BN	bn.prakash@tdu.edu.in	Ayurveda/malariology
DR LAMWAKA ALICE	lamwakaalicev@yahoo.com	Clinical pharmacy