#### Short professional courses:

- Certificate in Traditional/Herbal Medicine
   Other trainings services
- Tailor made in house trainings
- Internship and student exchange
- Staff professional development
- Research and teaching collaboration
- Community outreach



# **Key Professional Services**

- Analytical Laboratory
- Bioprospecting and Ethnobotanical documentation
- Contract research
- Hosting visiting Researchers
- Contract processing
- Developing quality standards
- Business planning, Innovation incubation
- Value chain development
- Market introduction and promotion

# **Key partner types**

- Universities and Tertiary Institutions
- Research Institutions



Community based herbal medicine development

- Pharmaceutical and cosmetic Industries
- Small scale enterprises
- Traditional Medical Practitioner Organisations
- Professional and Academic Forums
- Subject Matter Specialists
- Regulatory and Fiscal Institutions
- Non Governmental Institutions
- Community Based Organisations



# For more information contact us

Pharm-Bio Technology and Traditional Medicine Centre (PHARMBIOTRAC), Faculty of Medicine, Mbarara University of Science and Technology (MUST) P.O. Box 1410 Mbarara, Uganda, http://www.must.ac.ug



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Mbarara University of Science and Technology

# Pharm-Biotechnology and Traditional Medicine Centre (PHARMBIOTRAC)

African Centre of Excellence
ACE II (44)





## **Background:**

Mbarara University of Science and Technology (MUST), is the second oldest public University in Uganda established by an Act of Parliament of the Republic of Uganda in 1989.

The Pharm-Biotechnology and Traditional Medicine Centre (PHARMBIOTRAC) at MUST is providing a regional platform for innovative drug development, including exploring the use of traditional medicine in the region.

The goal of PHARMBIOTRAC is "to build a critical mass of specialized and skilled human resource that can advance traditional medicine and Pharm-Biotechnology for socio-economic development of Africa".

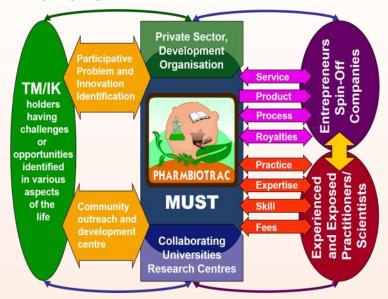
**Vision** is "to be a leading African Centre of Excellence for training and research in traditional medicine and pharm-biotechnology",

**Mission** "to contribute to documentation, validation and value chain development of traditional medicine, and biotechnology products for use in pharmaceutical and nutraceuticals industries in the region through training, research, and community services for sustainable development".

PHARMBIOTRAC provides technical and financial support to selected, research-focused and qualified candidates to pursue their MSc, PhD and innovation incubation Programmes aimed at achieving the goal of the centre.

Teaching and supervision will be provided by a joint team of faculty from MUST, faculty from partner Universities as well as senior technical personnel of industries and research institutes coming from India, Kenya, Mozambique, South Africa, Sudan, Uganda, USA, etc.

#### **Framework**



# **Objectives**

The main objective of PHARMBIOTRAC is to build a critical mass of specialized and skilled human resource that can advance traditional medicine and Pharm-Biotechnology for socio-economic development of Africa, and the specific objectives include to;

- Strengthen capacity in the region to train highly skilled and specialized professionals in traditional medicine and Bio-pharmaceuticals,
- Strengthen capacity in the region to engage in cutting edge research in TM and systems biology for health products development,
- Create capacity in collaboration with private sector industry for development, production and commercialization of TM, biopharmaceuticals and nutraceuticals from research outputs.
- To advance the practices of TM/TMK in the region and promote domestication and sustainable utilization of medicinal species.

### Thematic areas of focus:

- Understanding Traditional Medicine Philosophy of Health and Disease Prevention and Control
- ii. Traditional/Herbal Medicine Quality and Safety Standards
- iii. Herbal Medicine Production/Manufacturing and Quality Control Standards
- iv. Traditional/Herbal Medicine Knowledge and Material Conservation and Propagation - in-situ, ex situ
- v. Traditional/Herbal Medicine/ Clinical Validation Protocols and Standards
- vi. Pharmaco-Biotechnology-Application of Biotechnology to Drug Discovery, and Drug Production
- vii. Pharmaceutical Business Management/Regulation

## **Key academic programs**

**A: PhD by Research** (thematic areas above)-Duration 3 years

**B:** Current Masters programs offered (by course work and research) - Duration 2 years

- Master of Science in Pharmacognosy and Natural Medicine Sciences (M.Sc. PNMS)
- Master of Science in Pharmacy (Clinical Pharmacy) (M.Sc. Clin. Pharm.)
- Master of Science in Pharmacology (M.Pha)
- Master of Science in Pharmaceutical Analysis

