MSc: In One Health Molecular Biology - P. Wambura

Course Structure

Year 1

- Research methods
- Statistics and data management
- Advanced molecular biology
- Immunology of infectious diseases
- One Health medicine
- Comparative genomics and bioinformatics
- Techniques in molecular and cellular biology
- Pathogen evolution and emerging infectious diseases

During the second semester students will receive mentoring to develop a research proposal, which must be presented to an academic panel for approval. The research proposals will be related, as far as possible, to One Health themes identified in the main SACIDS framework, and will address:

- Pathogen biology
- Host pathogen interactions
- Detection, identification and surveillance of disease
- Biodiversity or environmental determinants of One Health

Year 2

During the second year, the learning process will be pro-active and will include a literature review, intensive laboratory work, statistical analysis and writing a dissertation

Partnerships

The curriculum has been developed in partnership with the UK’s London School of Hygiene and Tropical Medicine, the Royal Veterinary College and others, which offer world-class postgraduate programmes in health and related disciplines.

Course modules are taught by academicians from SUA and Muhimbili University for Health and Allied Sciences (MUHAS) supported by internationally recognised staff from SACIDS Partner institutions and others.

Experienced scientists from SACIDS institutions will combine strong capacity in molecular biology and One Health to provide a unique blend of professional knowledge and skills for the graduates of this innovative MSc programme.

While the SACIDS financial support targets students from the SADC region, students from other parts of Africa or elsewhere who are able to meet their own cost are also eligible.

Acknowledgement

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