

Institution: Mbarara University of Science and Technology (MUST)
Mbarara, Uganda
<http://www.must.ac.ug/must.php>

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LAB RESOURCES

Please describe the laboratory facilities available in your research institute, including the items listed below (if applicable):

Lab space and equipment (general):

- Laboratory space is limited to Clinical Laboratories which perform basic hematology, chemistry, and microbiology.

BSL-2 lab space and equipment:

N/A

BSL-3 lab space and equipment:

Present

Flow cytometry equipment:

Present

Please list the research groups in your institute, including the size and areas of expertise for each group:

- UCSF-MUST Collaboration, Harvard-MUST Collaboration, JCRC, Canada Africa Prevention Trials Network, Faculty of Medicine, Faculty of Development Studies, Faculty of Science, Public Health Department etc all with very good expertise



BIOLOGICAL SPECIMEN REPOSITORY

Please describe the biological specimens stored at your institute:

- Through the UARTO cohort, there is a rich array of serum, plasma, saliva, and peripheral blood mononuclear cells stored.

Does your institute have a database of stored samples: Yes

Please provide details on methods for biological specimen storage at your institute (e.g., are Standardized Operating Procedures used?):

- Biological specimen processing is done at the Infectious Diseases Institute in Kampala where several SOPs are used.

Please describe the equipment/facilities available for sample storage at your institute, including items listed below (if applicable):

- A -80 freezer is available. There are no facilities for PBMC processing or storage.

TRAINING AND EDUCATION

Please describe the training initiatives your institution has in place for individuals prior to working in clinical studies?

- Short course training by JCRC CORHE Program

Please describe the training initiatives your institution has in place for individuals prior to working in the laboratory?

- Short course training by JCRC CORHE Program

What assays/techniques do you excel in at your institute?

- Community-based research

What training could you provide to visiting scientists?

- Interview techniques

What rank are the majority of your trainees? (e.g., approximate numbers of undergraduate students, Masters, PhD, post-doc, MDs)

- Masters students (10)

Do you offer training classes/courses for any of the following?

- Presentation skills

Does your institute receive funds to support training initiatives? No

Does your institution send trainees abroad for additional training?

- Yes - two individuals are currently at UCSF for intensive training in clinical research.

Please indicate the number of trainees sent abroad per year, the source of funding, the location of training, and the type of training received.

- Three, to UCSF and Harvard

What Masters and/or Doctoral programs does your institution offer?

- Master's Internal Medicine, Masters in Paediatrics, Masters in Surgery, Masters in Obstetrics and Gynaecology, Masters in Public Health, and more in the Faculties of Science and Faculty of Development Studies

COLLABORATIONS

Please list and briefly describe your current collaboration with any African institutions for either research or training purposes.

- Mbarara University collaborates with other universities in Uganda, e.g. Makerere University and other institutions like Infectious Diseases Institute (IDI), Joint Clinical Research Centre (JCRC), Uganda Virology Research Institute (UVRI), etc.
- Epicenter

Please list your institution's plans for future collaborations within African (additional groups, sites, countries, etc.)

- The Institution continues to seek collaborations within Africa.

Please list and briefly describe your institution's collaborations and/or partnerships with entities outside of Africa (e.g., organizations and networks in the USA, Europe, etc. – including CFARS, NIH clinical trials networks, HPTN, HVTN, AMC, IeDEA, USAID, PEPFAR, etc.)

- Mbarara University collaborates with CFAR, leDEA, CAPT-N, and both PEPFAR and USAID.

CLINICAL COHORTS

Do you have access to existing clinical cohorts in Africa or USA? **Yes**

Please describe each existing clinical cohort that you have access to, including specifics like “HIV-TB infected HAART naïve adults”, sample size, sample type, sex, age, and whether clinical samples are currently being collected and/or stored (specify which samples):

1. UARTO Cohort. UARTO refers to Uganda AIDS Rural Treatment Outcomes. The NIH-funded UARTO Cohort consists of a consecutive volunteer sample of 650 HIV-infected adults who are about to initiate antiretroviral therapy at the Immune Suppression Syndrome (ISS Clinic) in Mbarara, Uganda. Approximately 65% of the subjects are women, and the median age at cohort outset is 34 years old. Subjects are examined at 4 month intervals with questionnaires investigating a variety of domains including medication use and adherence, physical symptoms, physical and psychosocial quality of life, mental health, substance abuse, and food security. In addition to real-time plasma HIV RNA levels and CD4+ T cell counts, there is robust biological specimen collection including storage of serum, plasma, saliva, and peripheral blood mononuclear cells. To date, the median follow-up is over 4 years with several subjects contributing more than 6 years.

2. leDEA cohort. leDEA refers to the NIH-funded International Epidemiologic Databases to Evaluate AIDS consortium. It is a collection of clinic-based cohorts from HIV treatment sites throughout East Africa. At MUST, all patients who have ever been attended to at the Immune Suppression Syndrome (ISS) Clinic are captured in leDEA. All data collected during the course of clinical care at the ISS Clinic and stored in the clinic’s administrative electronic medical record form the leDEA database. The leDEA award assists in maintaining and enhancing the quality of these data. Over 19,000 patients at the ISS Clinic have contributed data to the leDEA database to date.

Are you planning to establish any new clinical cohorts over the next 5 years?

- Yes

Please describe the clinical cohorts that you are planning to establish, including specifics such as “HIV-TB infected HAART naïve adults”, sample type, sex, and age.

- HIV-uninfected adults, to serve as a comparator to UARTO
- HIV-hepatitis B virus co-infected patients on ART

DATA MANAGEMENT

Please describe the DATA MANAGEMENT FACILITIES available in research institute, including the items listed below (if applicable):

Data management expertise, including staff complement (general):

- There is expertise with Microsoft Access and OpenMRS

On-site database design, implementation and trouble-shooting:

- There is expertise with Microsoft Access and OpenMRS

Details of off-site support (by whom):

- IeDEA Consortium, UCSF, Harvard, and Indiana University

BIostatistical Support

Please describe the BIostatistical Support available in your research institute, including the items listed below (if applicable):

Biostatistical expertise, including staff complement/composition of PhD and Masters level biostatisticians:

- Limited

Specific areas of biostatistical expertise/excellence:

- Limited

Details of off-site support (by whom):

- UCSF and Harvard