



plus

Makerere University / UVRI Centre of Excellence  
in Infection and Immunity

# Quality Assurance Procedures

## Version 1

16<sup>th</sup> November 2019

Approved:

A handwritten signature in black ink, appearing to read 'Alison Elliott', is positioned above the printed name.

Alison Elliott  
Director

## About MUII-plus

### MUII-plus objectives

**Our goal** as the Makerere University – UVRI Centre of Excellence for Infection and Immunity research and training (MUII-plus) is to drive Africa-relevant Infection and Immunity (I&I) science in Uganda by bringing together scientists from the foremost health research institute (the Uganda Virus Research Institute, UVRI), and foremost university (Makerere), with their world-class, external collaborators, to support excellence in I&I research and training.

**Our “Vision 2040”** is Africa leading advances in Infection and Immunity research, with transformative impact on African health.

**Our specific aims** align with DELTAS Africa’s strategy [shown in square brackets]. MUII-plus aims, as set out in our proposal, are as follows.

#### **Aim 1. To promote Africa-relevant I&I scientific excellence [*Scientific Quality*].**

Transitioning from the MUII training programme, the MUII-plus Centre of Excellence will comprise senior Ugandan I&I scientists and young, emerging leaders, their research groups, trainees, and international collaborators: a mutually-supportive platform for world-class Africa-relevant science and training.

#### **Aim 2. To provide career training for African I&I research leaders [*Research Training*]**

Strategies include

- Career-pathway fellowships: Uganda-based, with international collaboration and co-supervision
- Focus on bioinformatics: ring-fenced bioinformatics fellowships and project grants; short courses integrated with partner-network opportunities
- Focus on emerging & re-emerging infectious diseases: ring-fenced PhD opportunities at College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB)
- Improved efficiency and quality in I&I Masters training: coordination of courses across Makerere colleges; expert input from Uganda partners, and video-conferencing from Cambridge
- Professional development and citizenship: mentored leadership experience; curriculum of workshops
- Planning for sustainability and succession

**Aim 3. To utilise and enhance the UVRI-Makerere I&I research environment [*Management & Environment*]:**

- Drive research in new laboratories developed during phase 1 (MUII-1), in new COVAB Biosecurity laboratories, in the MRC-funded Uganda Medical Informatics Centre
- Strengthen research support at lead institution, UVRI

**Aim 4. Engage in outreach [*Citizenship*]:**

Develop communication skills; raise public awareness, network scientists and trainees, share resources and research findings, interact with policy makers, promote research implementation.

# Quality Assurance Guidelines

## 1. Introduction and Aim

MUII-plus Quality Assurance Guidelines are processes and procedures that set out to ensure our fellows, staff, alumni and centre members conduct high quality research in accordance with national and international standards and guidelines.

## 2. Scope

The guidelines apply to all our fellows, collaborative partners and center members who carry out research at MUII-plus. We expect all our collaborative partners to be fully aware of the standard operating procedure (SOP).

## 3. How Quality Assurance is conducted at MUII-plus

### 3.1. Admission process

#### *Advertising fellowships and grants*

MUII-plus fellowships and grants are advertised using various means, depending upon the scale and nature of the fellowship or grant, and eligibility. This is in order to attract high quality candidates from backgrounds within the scope of each call. Advertisements are placed in the local and regional press for major fellowships and staff positions, e.g. PhD, post-doctoral and Group Leader fellowships, co-director, centre manager and administrative positions. Internal opportunities such as travel, visiting scientist and endeavour awards are advertised by e-mail to MUII Centre fellows, given their restricted eligibility.

#### *Shortlisting (or single phase selection) committee*

The Secretariat establishes a shortlisting committee in advance of the submission deadline. In the case of major grants, a two-stage process is usual, with shortlisting and then interview. For small grants, a single-phase selection process may be used.

For major fellowships and positions, the shortlisting committee usually includes members of the steering committee and senior MUII-plus scientists.

For internal opportunities, the shortlisting/selection committee is normally drawn from MUII Steering Committee members or Centre Members. Members are required to declare conflicts of interest and will not score applications where, in the opinion of the Centre Manager, a significant conflict of interest exists. At least two members review each proposal and provide scores against a predefined set of criteria, provided by the secretariat. Once scores have been received by the secretariat they are compiled. A meeting of the committee is arranged (this is

often done remotely); summarised scores are reviewed and the shortlist (or, for single-phase selection processes, list of awardees) is agreed.

#### *Candidates develop proposal; input may be needed on supervision and links*

For major fellowships, candidates may need help in developing their project ideas and in contacting potential supervisors and university departments. This applies particularly to PhD and above. This is coordinated by the Centre Manager supported by lead scientists including the Centre Director and Steering Committee members, particularly those from the London School of Hygiene & Tropical Medicine and the University of Cambridge when overseas co-supervisors are required. This may be done before or after the initial shortlisting of candidates. In some cases, short-listed candidates may be invited for training, or provided with funds to visit potential external collaborators, in order to optimize the quality of applications developed.

#### *Interviews*

Interview panels for Masters fellowships usually comprise MUII members and fellows at postdoctoral level and above, providing experience of the selection and interview process.

Interview panels for PhD, post-doctoral and group leader fellowships usually comprise at least two members of the steering committee, three additional members including invited experts in relevant fields (based on the short-listed applications) and one or two senior MUII alumni; whenever possible they are chaired by a member of the Scientific Advisory Committee. The Centre Manager normally acts as secretary to the committee.

Candidates are usually asked to give a 10-minute power-point presentation of their proposed work; thereafter they are asked questions about the work by two lead interviewers selected from the panel for each candidate. Finally, remaining members of the panel may ask further questions.

Applications are judged on (1) the candidate's academic background and potential (2) the scientific merit of the project and its suitability for the fellowship concerned within MUII-plus (3) the proposed arrangements for supervision and training.

When interviews are complete the scores are compiled and a list of awardees agreed by the panel. Feedback is provided to candidates to further optimize their projects – for implementation (if selected) or to support applications to other funders (if unsuccessful).

#### *Conflicts of interest*

Members of any selection or interview panel are asked to declare conflicts of interest. These

include being the proposed sponsor or supervisor of the candidate or being related to the candidate. In case of doubt the Centre Manager will decide whether a significant conflict of interest exists. Being a member of staff of the candidates own institution or college does not in itself constitute a significant conflict of interest. Where conflicts of interest exist the panel member does not score the application and, in the case of interviews, is asked to leave the room during the relevant interview

### **3.2. Supervision**

MUII-plus fellows are expected to sign an agreement with their supervisors. A template for this is available. The contract covers expectations of student and supervisor, proposed timelines, expectations on the quality of work to be submitted to the supervisor, and timelines for feedback.

Fellows are obliged to keep a supervision log for every time they meet their supervisors. The logs are filed in the fellows monitoring files and reviewed by the monitors/secretariat.

MUII provides training of supervision for fellows and their supervisors at relevant timepoints in the MUII lifecycle – close to the recruitment of major PhD and Masters fellowships.

### **3.3. Training workshops and logs**

MUII-plus ensures that all the fellows undertake various training courses both scientific and professional development to enable them conduct research appropriately and effectively. MUII-plus fellows are mandated to undertake a minimum number of both technical and professional development training courses throughout their fellowships (some mandatory). The fellows maintain training logs that are kept in fellows monitoring files

### **3.4. Fellows progress meetings**

MUII-plus fellows have face to face quarterly, group progress meetings. The meetings are quite engaging with the supervisors and colleagues giving peer review. The fellows present their academic research milestones, challenges and pave a way forward to enable them graduate in time.

In addition, the PhDs have a review of their progress in the first year. This is an interactive session with supervisors both local and international. These meetings serve as doctoral committee meetings for those fellows who wish to take them as such.

### **3.5. Monitoring of study sites**

To assure adequate protection of the rights of human subjects and the safety of all participants involved in study investigations and the quality and integrity of the resulting data submitted,

all our fellows are monitored throughout their study timelines (usually thrice during the project) in accordance with our monitoring Standard Operating Procedure. The monitors carry out Initiation visits before the studies commence, first monitoring visits-three months after the studies commence, second interim visit-approximately six months after the studies commence and the close out visits at the end of the studies.

A feedback session with the fellows and any key staff is held at the end of each monitoring visit to summarize the findings and observations made by the monitors during the visit. When errors are identified from monitoring visits, corrective measures are taken to prevent similar errors in future and reinforced procedures are discussed with appropriate staff. All findings discussed during the debrief meeting are documented in the monitoring report.

A monitoring report is written by the monitor and reviewed by the Principle Investigator(PI) after each visit.

### **3.6. Plagiarism checks**

MUII-plus has annual subscription for iThenticate plagiarism check software. All our fellows' proposals are reviewed at the first annual review. These are reviewed through iThenticate before defense. Our alumni and centre members as well take advantage of the software to enhance the quality of their students' proposals and theses.

## **4. Tracking Career progression of the fellows**

All our fellows are included on an active list serve of alumni and centre members. Here opportunities for funding, research jobs, collaborations, mentorships are advertised. These are as well advertised on our interactive website.

A number of post graduate fellows become primary supervisors of masters and PhD fellows.

## **5. Mentorship**

Group and individual mentorship has been undertaken throughout MUII's progress in various formats. In February 2018, the mentorship implementation team was formalised and launched with a mission to inspire, build and transform careers of MUII scientists to their maximum potential. The MUII website hosts the mentorship portal- a fun and interactive page where mentees are matched to mentors for mentorship sessions. Our mentors include both local and international supervisors and collaborators who are renowned experts in their individual fields of scientific research.

## **6. Annual data collection and feedback**

MUII-plus collects annual data from fellows, alumni and centre members regarding scientific

progress, career progression, publications, new funding new collaborations, challenges and way forward. The data is summarized in an annual report that is disseminated to the different stakeholders and feedback is received on the different aspects in the AGM and the SAB meeting.

## **7. How research misconduct is handled at MUII-plus**

All MUII fellows, students and center members are obliged to comply with local and institutional research regulatory policies including up to date certification in responsible conduct of research, Good Clinical practice or any equivalent certification as required. Most of our research fellows are Ugandans registered at Makerere University and collaborate with international universities such as University of Cambridge and London School of Hygiene and Tropical Medicine. Actions against cases of research misconduct, shall follow the Makerere Academic Integrity policy, Uganda National Council for Science and Technology (UNCST) policy for research on human subjects and the Uganda Virus Research Institute bribery and fraud policy.

Research misconduct by MUII staff and fellows will be addressed (a) by the senior members of the executive (director, co-director and centre manager) and (b) by referral to the relevant institutional committees.

Any disciplinary actions against research misconduct will take into account the severity of the misconduct and the level of seniority of the individual concerned. Responses may include and range from discussion with the individual and requirement for verified corrective action (for example, if plagiarism is detected early in a fellow's career, for example in a PhD proposal), to withdrawal of funding or dismissal.