

Mid-term evaluation report

NACCAP programmes first call

INTERACT

October 2008

## Foreword

In 2004, the Dutch Ministry of Foreign Affairs (DGIS) made available € 20 M to contribute to EDCTP through the Netherland African Partnership for Capacity Development and Clinical Interventions against Poverty related Diseases (NACCAP) programme. The general aim of NACCAP is to support investment in strengthened research and development capacity of multiple locally owned and controlled health research centres in sub-Saharan Africa, capable of clinical testing of new interventions against poverty related diseases and contributing to the EDCTP objectives.

In 2005, NACCAP funded two partnership programmes (CoMMAL and INTERACT) for an initial two and a half years, with funding to continue up to 2009/ 2010 if the results of a mid-term review (MTR) to assess if the partnership programmes are indeed contributing to the objectives of NACCAP was favourable. In June 2008, a MTR was executed by NACCAP and the results of the review are presented in this report.

The MTR-committee comprised a member with expertise in the field of research and university governance structures (Prof. Jan Borleffs), a member with expertise in the field of capacity strengthening of African research institutes (Dr. Andrew Kitua); a member of the NACCAP programme committee with expertise on translating research into health policy (Dr. Irene Agyepong) as chair; and two members of the NACCAP secretariat (Dr. Judith de Kroon & Dr. Eva Rijkers) for administrative support. Written reports of CoMMAL and INTERACT were assessed, and site visits were paid to Malawi and Uganda. The time frame of the MTR unfortunately did not allow a site visit to Rwanda but fortunately, members of the INTERACT Rwandan team came to meet the MTR committee in Uganda.

The MTR committee observed that on the whole both programmes appear to be generally moving in the right direction towards strengthening research and development capacity of health research centres in Malawi, Uganda and Rwanda, capable of clinical testing of new interventions against poverty related diseases and contributing to the EDCTP objectives. However, the funded programmes also have variable levels of challenge in making sure that the direction is completely right and the objectives are fully achieved if funding is extended to 2010. The MTR committee concluded that none of the challenges are insurmountable such that the programmes need to be terminated. The challenges do however need to be addressed to make sure that NACCAP objectives are fully achieved with continued funding. The MTR committee therefore recommends the programme be funded up to 2010 but on the condition that the recommended suggestions for modifications to improve the alignment between the programmes and NACCAP objectives arising out of the MTR are implemented.

In summary, the INTERACT programme's development of a new diploma level research course embedded within the university is excellent ongoing work and should be seen through to the accreditation and offering of the course as a regular programme within the universities in both Uganda and Rwanda. The INTERACT Pharmacokinetic project has also done well with its efforts to link research evidence to pharmaceutical policies and programmes development in Uganda and should continue to strengthen these efforts. The INTERACT programme is more or less on track with its scientific activities and its bigger challenges appear to be in the area of sustainable local health research capacity development and embedding of the programme in a strong local research environment. Creative approaches need to be explored and more efforts put into creating an environment that is better supportive of clinical research career development and institutional strengthening.

The INTERACT programmes also need to better engage stakeholders outside the core partnership, especially within the Ministries of Health and Education in the countries in which they work and get a better buy in from these stakeholders into the work they are doing. These are stakeholders who are essential for the long term development of sustainable national research capacity and effective utilization of research for development. INTERACT therefore is advised to discuss in a workshop of all partners and stakeholders issues relating to research capacity building, including capacity building objectives, PhD standards, opportunities for south-south networking and data management and governance issues.

The MTR committee however, agrees with the remark of the INTERACT coordinator that a number of the problems that the committee identifies are structural in nature. Examples are the orientation of universities towards education rather than research, the distance between university boards and faculties of medicine or schools of public health, the lack of career opportunities for scientists, and the absence of a defined research policy at ministerial level. Although creative solutions should be sought, it may not be realistic to expect that the INTERACT program can have the leverage to address these deficits in national governance of research.

Furthermore, the MTR committee would like to share some lessons learnt from the MTR site visits with the NACCAP Steering Committee: both partnership programmes thought the communication with the MTR committee very valuable. They wondered if it could be possible for NACCAP to visit the programmes more often to discuss progress and exchange views on improvements. In addition, they informed the MTR committee that it might be even more effective if NACCAP visited its funded programmes already within one year after the start of the programmes. Secondly, the MTR noted that in general there seems to be a lack of African senior scientists (capable of supervising PhD students). Therefore, the MTR committee would like to propose to NACCAP to consider pro-actively creating possibilities for (expatriated) African senior scientists (including post docs) to return to their home-countries. Thirdly, the MTR committee expects that the (two) NACCAP programmes also stand to benefit by visiting and learning from each other. Therefore, the MTR would like to advise NACCAP to organise a joint meeting with all partnership programmes funded by NACCAP.

Finally, the MTR committee would like the NACCAP Steering Committee and the WOTRO board to take into account some very relevant remarks of the INTERACT coordinator since they concern dilemma's in funding of partnership programmes that aim at both capacity strengthening and research in Africa in general.

The first dilemma is the short-term project-period which asks for clear timelines, targets and milestones while at the same time sustainability and local ownership is important. The latter requires trust-building which is a long-term process.

The second dilemma includes different research agenda's, Ministries of Health, either directly or through their respective disease control programs, have research agenda's (or should have them). However, those research agendas are generally of operational or programmatic nature, i.e. geared towards addressing operational problems in disease control and healthcare. The primary objective of the INTERACT program is to build capacity for trials of clinical and public health interventions. There is room for compromise if not synergy between the two, and INTERACT will definitely pursue opportunities to expand operational research as suggested in the committee's recommendations. Nonetheless, there is a dilemma here that we think deserves acknowledgement."

Last, but not least, the MTR committee wishes to express its appreciation to the INTERACT teams in Uganda and Rwanda for their hospitality, welcome, cooperation and open discussions and interactions with the committee. Without the efforts they put into facilitating the MTR, it would not have been possible to achieve so much in so short a time. The MTR committee commends the teams for the work already done, and looks

forward to seeing continuously growing and improving international standard, strong health research and development capacity and institutions within the three countries.

Yours sincerely,

Irene Agyepong,  
Chair of the MTR committee

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## **PART A: GENERAL INTRODUCTION**

### **1. Background information: EDCTP**

In 2002, the Member States (MS) of the European Union, Norway and the Developing Countries (DCs), particularly sub-Saharan Africa, came together to establish a sustained partnership to reinforce research into the development of new clinical interventions to fight HIV/AIDS, malaria and tuberculosis. This resulted in 2004 in the European & Developing Countries Clinical Trial Partnership (EDCTP), the first programme financed by the instrument of Article 169 of the 6th Framework Programme of the European Commission. The mission of EDCTP is to accelerate the development of new clinical interventions to fight HIV/AIDS malaria and tuberculosis in, particularly, sub-Saharan Africa and to improve generally the quality of research in relation to these diseases. The main objective of EDCTP is to contribute to the integration of European research in these fields. Within its mission, EDCTP aims at the establishment of a sustained research partnership between Europe and DCs in the fight against the three diseases.

In 2004, the Dutch Ministry of Foreign Affairs (DGIS) made available € 20 M to contribute to EDCTP. Because at that time the implementation strategy of EDCTP was not clear, the Dutch ministry decided to contribute to EDCTP through the NACCAP programme; the Netherlands-African partnership on Capacity strengthening and Clinical trials against Poverty-related diseases; a research and capacity strengthening programme managed by NWO/WOTRO.

### **2. Background information: NACCAP**

The general aim of NACCAP is to provide an impulse to the investment in, and development of, **African owned** and controlled health research centres aimed and **capable of clinical testing** of new interventions against poverty related diseases. As a result, the position and contribution of African institutes in EDCTP will be strengthened, supporting **partnerships** in **joint R&D** activities to fight poverty related diseases in Africa. NACCAP aims at **transferring responsibilities** for sustained developments to the supported African centres: for this, the centres (2-5) strengthened should become **part of an African Network of R&D centres** capable of **collaborating with EDCTP** in clinical trials.

In 2004 EDCTP took of as a research-funding organisation that awarded separate, small grants, focussing on collaborative EU-African research rather than on capacity strengthening<sup>1</sup>. However, the NACCAP Steering Committee (SCO) thought this was not the optimal way to achieve the objectives and therefore decided to announce a call for proposals on its own, with the aim to fund African-Dutch partnerships consisting of integrated multidisciplinary R&D projects which contribute to institutional capacity development of African research centres. In addition, because NACCAP aims at strengthening centres that can collaborate with EDCTP in clinical trials, preferably the awarded partnerships included researchers from other European countries (N-N networking).

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<sup>1</sup> During the course of 2005 the interpretation of article 169 was further developed and in 2006 EDCTP changed its strategy into a strategy more in line with the NACCAP approach.

### 3. Goal of the midterm review

As a result of this first call, three partnership programmes (INTERACT, CoMMAL, APRIORI) were selected for funding for 2,5 year and funding will continue up to august 2009-2010 on the condition that the results of a mid-term review are favourable.

Two of the partnership programmes, INTERACT and CoMMAL started December 2005 and were reviewed in June 2008. The third one (APRIORI) started in October 2006 and will therefore be reviewed in December 2008.

The **goal** of the mid-term review is to assess if the partnership programmes are indeed contributing to the objectives of NACCAP and specifically to the objective of the first NACCAP call, i.e:

- Strengthened research & development capacity of multiple, locally-owned health research centres in Sub-Saharan Africa contributing to the EDCTP objectives.

Since the funded partnership proposals were selected on the basis of the quality of capacity strengthening, scientific quality and governance (including equality of the partnership and African ownership), progress with regard to these aspects are specifically being reviewed.

### 4. Methodology of the Mid Term Review

For the mid term review, a specific Mid Term Review (MTR) committee is composed, consisting of 2 experts, one in the field of research and university governance structures and one in the field of capacity strengthening of African research institutes. The MTR committee is chaired by an expert on translating research into health policy, and assisted by the NACCAP secretariat.



*MTR-committee: from left: Irene Agyepong, Andrew Kitua and Jan Borleffs*

#### *Composition of the MTR committee:*

Chair: Dr. Irene Agyepong (NACCAP Programme Committee, Director Ghana Health Service  
Greater Accra Regional Health Directorate, Accra, Ghana;

Members: *Capacity Strengthening:* Dr. Andrew Kitua, Director General, National Institute for Medical  
Research, Dar es Salaam, Tanzania;

Science: Prof. Dr. Jan Borleffs, Dean Education and Director Post-Graduate School of  
Medicine, University Medical Centre Groningen, The Netherlands;

Secretariaat: Dr. Judith de Kroon & Dr. Eva Rijkers, NACCAP secretariat.

Met opmaak: Nederlands  
(standaard)

**Tasks of the MTR committee:**

The tasks of the MTR committee are:

*Prepare MTR:*

- 1 Take note of the background documents:
  - original NACCAP background document;
  - first call text;
  - the original partnership proposals;
  - site assessments (before start of the partnership programmes) reports;
  - annual reports of the partnership programmes 2006 and 2007;
  - overview of the NACCAP comments on the annual reports;
  - MTR form, including testable goals;
  - preliminary SWOT (by NACCAP).
- 2 If necessary, adjust testable goals that will also serve as the programme outlines for presentations to be held by partnerships;
- 3 Discuss testable goals with programme co-ordinators of partnership programmes;
- 4 If necessary, adjust testable goals and ask programme co-ordinators to complete the MTR form;
- 5 Formulate specific review questions;
- 6 Propose a list of participants / stakeholders whom the MTR committee would like to interview during the site-visit;

*Visit the partnership programmes:*

- 7 Take note of the MTR testable goals form, completed by the co-ordinators of the partnership programmes and formulate review questions;
- 8 Visit the partnership programme sites in Africa and meet with the main African participants of the partnership programmes. For this a meeting will be organised by the partnerships;
- 9 Interview individuals (programme participants, other stakeholders) to answer specific questions of the committee<sup>2</sup>;

*Contribute to the report:*

- 10 Write a report and formulate conclusions, including recommendations for improvements/ future activities;
- 11 Discuss the report with the coordinators of the partnership programmes for comments and if relevant, adjust the report accordingly;
- 12 Present the (adjusted) report to the NACCAP Programme Committee.

Based on the report, the NACCAP Programme Committee will formulate recommendations with regard to improvements to be made and continuation of funding to the NACCAP Steering Committee who will decide.

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<sup>2</sup> Since some important African stakeholders were not available during the site visit, a teleconference was organised with the MTR committee and these stakeholders after the site visit had taken place. In addition, interviews took place with the Dutch coordinator and main applicant, in the Netherlands

## 5. Contents of the report

The reportage of the MTR of INTERACT (Part B) is composed as follows:

**Chapter 1** of each reportage includes a short summary of the conclusions and recommendations of the MTR committee. In **chapter 2**, a short description of the partnership programme and the environment in which it operates is described, followed by **chapter 3** that provides the results of the site MTR including the progress of the partnership programme. For this, the testable goals are taken as a lead. Progress with regard to each testable goal is followed by a preliminary conclusion of the MTR committee and its recommendations. **Chapter 4** includes some bottlenecks for the future identified by the partnership programmes. Furthermore, the annexes provide some detailed information on the partnership site visit programmes (annex 1: INTERACT) and abbreviations used (annex 2).

## **PART B: INTERACT**

### **Reportage of the MTR of the Infectious Diseases Network for Treatment and Research in Africa (INTERACT)**

#### **1. Summary**

INTERACT is a research and capacity strengthening programme focussing on the interaction of the three infectious diseases malaria, tuberculosis and HIV and on interactions between the treatments against these infections. Within INTERACT, Ugandan, Rwandan and European (mainly Dutch) scientists work together. Faculties of Medicine, national disease programmes as well as peripheral clinics are involved in the programme. The partners are committed, scientifically strong and generally well equipped. Together, the partners are creating an impressive and very valuable database (from the public health point of view and from the scientific point of view) and already show a promising ability to raise additional funding from international donor organisations. INTERACT is well integrated in EDCTP as is shown by the additional funding by EDCTP grants.

The programme had a slow start and patient enrolment will probably only be completed in 2010. Underlying the delay could be INTERACT's underestimation of the need for strong supportive local senior scientists to supervise PhD candidates, and the time available for PhD's to focus on their research activities, especially in Rwanda. This still might threaten the progress of the research activities of INTERACT in the future. The commitment of PhDs could also be threatened partly by the absence of clear scientific career paths and the current relatively low commitment of the university and MoH towards research (-education), given their other challenges of high workload and low staffing. In addition, given the huge competition for senior supervisors by the many research projects funded by international donors, the workload for the few senior scientists that are available for the INTERACT activities is high.

Collaboration with universities in Uganda and Rwanda have taken place at the Dean's level, who are member of the INTERACT Executive Board. However, this does not seem to have yet resulted in a clear strategy for relieving the constraints of PhD's. In addition, the active actual involvement of the MoH is weak although the Uganda Ministry of Health has been involved from the proposal stage through its National Tuberculosis and Leprosy Control Program, the research agenda of INTERACT in Uganda was aligned with the operational research priorities of the NTLP, and INTERACT co-operates with health services and national programmes. In Rwanda, there was a strong commitment and active engagement by the Deputy-Minister of Health for HIV/AIDS, malaria and TB from the proposal stage. The fact that this government position was recently abolished was out of control of the INTERACT team which is now working on regaining commitment.

All these factors if not addressed are potential threats to sustainable long term research capacity strengthening of Makerere University/FoM and TRAC/university of Rwanda and to developing a strong, African owned centre of excellence capable of performing clinical trials contributing to the regional research agenda. One of the African partners, IDI, already is a strong node for excellent research but seems to be somewhat isolated from university (and may therefore be geared less towards a national research policy). However, ample opportunities exist for INTERACT to contribute to strengthen this centre and the other partners of INTERACT. For this, the MTR committee recommends INTERACT to invest in gaining a clear commitment of both the universities and MoH's for the objectives of INTERACT. This might be encouraged by involvement of the MoH's and the university research policy departments in the governance structure of INTERACT, by communicating the added value of research for improving quality of care and by improving communication on the fund-raising possibilities of research and the value of the database being set-up by INTERACT.

Furthermore, successful S-S collaboration needs strong leadership from the Southern partners. Makerere/IDI already has much to offer to assist Rwanda in strengthening clinical research capacity and as such gain recognition in the region as a regional centre of excellence. A truly shared ownership and management of the database might provide a good starting point for this. The MTR committee observes that therefore locating the overall management of the database in Amsterdam<sup>3</sup> might not be optimal in terms of African ownership and could put up unnecessary barriers for African accessibility and strengthening data management and analysis capacity. Similarly, although the MTR committee understands the wish to make financial and procurement systems more efficient, the committee is not sure if AMC-CPCD pursuing legal status in both countries will contribute to African ownership of INTERACT. The MTR committee would like to advise INTERACT to look for possibilities to share such ownership with the University of Uganda and Rwanda and possibly with IDI or other already existing structures at the campus.



*The INTERACT team and MTR committee at the INTERACT office in Kampala*

Already, INTERACT noted that the governance structure was weak and therefore is revising its governance structure. This momentum may be used to organise a workshop with all stakeholders including the MoH's and university departments to discuss a comprehensive strategy on capacity strengthening for research for health

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<sup>3</sup> Remark of INTERACT: "(...) at the moment no database in Amsterdam exists. Databases run locally only. The only thing that is done in Amsterdam is the software programming of the project-specific databases. INTERACT tried for 2 years to do that locally but failed to find staff sufficiently capable of doing this. Because of the resulting delays in execution of the research projects, INTERACT decided to first program the databases, and then train the local data management staff in programming."

and for (the shared governance of) INTERACT in specific. <sup>4</sup>The NACCAP budget for INTERACT leaves room for organising such a workshop. In addition, the CoMMAL programme in Malawi / Blantyre might be able to share some best practices on governance with INTERACT. NACCAP should consider facilitating a meeting between both programmes and possibly other NACCAP programmes.

Upon request of the African partners, the MTR committee would like to advise NACCAP to visit Rwanda within one year to discuss the progress made with respect to the recommendations mentioned in this report.

## 2. The partnership programme

### Description of the partnership programme

The INTERACT programme focuses on establishing and consolidating the infrastructure for conducting clinical chemotherapeutic intervention trials for HIV/AIDS, malaria and tuberculosis. The scientific approach of INTERACT is characterized by several dimensions. Firstly, INTERACT concentrates on strategic issues surrounding chemotherapy of these three diseases. Secondly, a comprehensive palette of research methodologies is used, in order to lay down an infrastructure for conducting studies surrounding clinical trials. Thirdly, based on the infrastructure for studies in adults, INTERACT initiates studies in two vulnerable but little studied populations, children and pregnant women. Lastly, using the established research facilities as a springboard, INTERACT reaches out from the setting of the dedicated referral clinics to primary health facilities and the general population, to assess the outcomes of clinical trials against a real life background. The capacity building approach of INTERACT is to build individual research capacity in the form of PhD researcher training as well as short courses in GCP, GLP, etc. and institutional strengthening in the form of the set up of data systems.

The programme consists of the following 10 projects:

- A Building sustainable clinical trial capacity;
- B Building and implementation of high quality data-systems;
- C Implementation research: operational aspects of diagnosis and treatment of HIV-infection and tuberculosis at the district level;
- D Assessing the impact of HAART on reproductive health of Rwandan women;
- E Incidence of and risk factors for selected adverse effects of HAART treatment in HIV-1 infected adults without a clinical suspicion of TB co-infection;
- F Immune Reconstitution Inflammatory Syndrome (IRIS) and other selected adverse effects of therapy in TB HIV co-infected patients first commencing HAART;
- G Surveillance of HIV-1 drug resistance in HAART treated patients and in the general population;
- H Malaria treatment and Intermittent Preventive Treatment in pregnancy, with and without HIV infection;
- I The optimization of chemotherapy for HIV/AIDS, tuberculosis and malaria in adults, pregnant women and children by studying the pharmacology of drugs (I);
- J HAART in Rwandan children 0-15 years: incidence, severity, risk factors and long term outcome of adverse effects.

The main applicant of the proposal is prof. Dr J.M.A. Lange (Academic Medical Centre AMC/CPCD, Amsterdam, the Netherlands). Main partners in the partnership include prof. Dr E. Katabira (Makerere University, Faculty of Medicine/FoM including the Infectious Diseases Institute/IDI, Uganda) and prof. Dr M. Kramer (Ministry of

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<sup>4</sup> Remark of INTERACT: *"We wonder whether a workshop, as meant in the recommendation here, is the appropriate and effective platform to discuss issues of program governance. Moreover, some modesty if not realism may be warranted with regard to the broad workshop goals phrased here."*

Health, Treatment and Research for AIDS Center (TRAC), Rwanda). Furthermore, several European partners are involved, including (*The Netherlands*): IATEC, Royal Tropical Institute, KNCV Tuberculosis Foundation, University Medical Center Rotterdam, University Medical Center Utrecht, PharmAccess Foundation; (*Belgium*): Institute for Tropical Medicine. The programme runs from 15-12-2005 tot 15-08-2010 with a budget of € 4,793,000.



*The INTERACT office in Kampala*

### **Environment**

The presentations for the MTR visit as well as individual interviews (for programme and interviewed individuals see annex 2) took place at the INTERACT office in Kampala. The office is located in Kampala city, at a small distance from the campus of Makerere University. The INTERACT office is fully fledged with all relevant office materials and equipment, computers, internet and Skype systems in place. In Rwanda, similar office facilities are available at TRAC.

At Mulago National Referral Hospital, the teaching hospital for Makerere University, the care capacity within the existing staffing levels is stretched to the limit and not adequate to support the surging numbers of patients. The main collaborator of INTERACT, the Infectious Disease Institute (IDI) is located at the hospital campus. IDI is a result of a unique partnership initiated by nine infectious disease experts from Makerere University (FoM) and their counterparts in the USA, Canada and Europe. In 2002, IDI joined hands with Mulago National referral hospital to begin offering services at this hospital; and in 2004, the clinic was transferred to the IDI building. Apart from an adult ward, IDI has a special ward for children. IDI is now an impressive Centre of Excellence, with funding from Pfizer pharmaceuticals, the Global Aids Foundation and the Bill & Melinda Gates Foundation (BMGF). IDI has capacity for 50.000 patient visits per year and treats around 3000 with ARV's. However, many more patients seek care and therefore, health services have been decentralised to selected Kampala City Council clinics (KCC). At the moment 10 KCC's exist but the number of patients in need for services (and mainly ARV treatment) is still increasing. One of the KCC's (Kisenyi) that co-operates with INTERACT was visited by the MTR committee. Kisenyi KCC is located in the middle of one of the poorest neighbourhoods of Kampala but mainly attracts patients from outside town. Services at Kisenyi KCC include a primary health clinic for pregnant women and mother-child care, a pharmacy and a Voluntary Counselling and Testing facility, including a youth & HIV

sensitisation programme. For INTERACT research activities, three containers have been furnished that serve as consultation room, office/archive and a storage room. Some very basic tests can be executed at the KCC and patients that fulfil the requirements are assigned to the treatment programmes of IDI and recruited for the research activities of INTERACT.



*The Kampala City Council Clinic in Kisenyi*

### **3. Progress of the INTERACT programme**

- **Testable goals**

In order to measure progress, several testable goals and related review questions were formulated by the MTR committee and approved of by INTERACT. In summary, the testable goals are:

- Relevance (with regard to individual, institutional and environmental capacity strengthening, and with regard to science);
- Governance (contributing to equal partnership and/or African ownership and embedding while safeguarding transparency and accountability);
- Efficiency (is progress on schedule);
- Effectiveness

In addition, the partnership identified some challenges for the future of INTERACT.

- **Results**

#### **1. Relevance**

***a) contributing to strengthened research & development capacity of a locally-owned health research centre in Sub-Saharan Africa.***

Projects A and B of INTERACT aim at strengthening research capacity at the individual level (training) as well as at the institutional level. The other (research) projects focus on research training on the job with the aim of delivering 9 PhD's.

#### Individual level

INTERACT has trained 90 individuals in office software, ICG-GCP, SOP, HIV resistance, neuropathology assessment and pelvic examination. Six PhD candidates attended courses in epidemiology and statistics in the Netherlands and 2 staff members received a Master of Public Health training. Furthermore, the students and staff attended critical appraisal courses of IDI. Training opportunities were only provided for students and staff

participating in INTERACT. All courses are closed by an exam and the acquired knowledge is used within the research projects of INTERACT.

Scientific "learning by doing" for PhD's is done within the eight research projects. Each PhD student (9 in total) is jointly supervised by a senior researcher of Makerere (Uganda) or TRAC (Rwanda) and by a senior researcher from one of the Europe-based partner institutes. In Uganda, PhD's (from IDI and FoM) are nominated and have to compete for a PhD trajectory. In Rwanda, PhD's are assigned by TRAC.

Institutional level

At the start of the programme, INTERACT performed a needs-assessment on training and it was concluded that there is a demand for GCP/GLP training, for training in applied clinical research and for short courses on epidemiology, bio-statistics and ethics. In addition, there was a need to unite all different courses available within Makerere/affiliated partners and to include GCP training into the university curriculum. At the moment two courses have been developed by INTERACT, one on applied clinical research and one on advanced clinical research (and include proposal writing and manuscript writing). The AMC, Amsterdam will provide an attendance certificate. In the future, the courses will be embedded into masters of clinical epidemiology or the Masters on Public Health courses with certification of the courses by the university of Makerere in Uganda. In Rwanda, the Faculty of Health, school of Public Health (National University Rwanda) will host and certify the courses. The courses will start in 2008 and will be open for BSc, MSc and PhD students already working in research activities. The students will be assessed by the use of exams. Sixteen students (eight from INTERACT and eight from other affiliated organisations) have been identified for attending the courses. In addition, a training database is being built that gives insight in what courses are available, and have been attended by whom.

Within project B, an impressive data management system is being built; computers have been installed and data management staff assisted by temporary staff for data entry have been recruited in both Uganda and Rwanda. It is anticipated that a local database is set up in Rwanda and one in Uganda. The database format allows for linking by internet if needed. Perceived problems are the variety in data, the high workload and the various ideas of each participant on what system serves best. It was decided that the three programme coordinators decide together on the final approach. No plans exist to set up a central database in Africa or to embed a central database within the universities and Rwanda and Uganda do not have direct access to each others databases. The main reason is that the African partners lack the expertise to set up such a system. In addition, African partners seem to prefer an independent organisation to govern the central database because this might optimally ensure equal access to the data for all.

Up to now, the capacity strengthening activities have led to an upgrade in the level of the African clinical trial capacity, which at the moment is as indicated in tables 1a (Uganda) and 1b (Rwanda).

<b>Table 1a: Level of Ugandan site at this moment:</b> level at the review moment is printed <b>bold</b>				
<i>Level</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<b>Components</b>	<i>Epidemiological relevant population and interested investigators</i>	<i>Identified cohort and follow-up capability</i>	<i>Sites with some clinical trial capacity (indicate phase)</i>	<i>Fully capable site for phase I-III trials</i>
<b>1. Investigators</b>	Lacks GCP	GCP exposure	<b>GCP qualified with limited experience</b>	GCP qualified with experience
<b>2. Subjects</b>	Target population Identified	Demonstrated ability to follow-up. Community involvement	<b>Demonstrated ability to follow-up. Community involvement formalis</b>	Demonstrated ability to follow-up. Community development Programme

<b>3. Ethics</b>	IRB not yet Established	IRB National ethics committee exists	IRB National guidelines for clinical trials exist	<b>IRB National guidelines for clinical trials exist</b>
<b>4. Laboratories</b>	Access to laboratory Facilities	<b>GLP exposure</b>	GLP qualified with limited experience	GLP qualified with Experience
<b>5. Clinical facilities</b>	Ability to measure clinical outcomes	Access to facilities with staff	<b>Adequate facilities and qualified staff</b>	Excellent facilities with qualified staff
<b>6. Data management</b>	Data collection field staff	Some computer infrastructure and basic data-processing skills	<b>Sufficient computer hardware and software Experienced data-processing staff.</b>	Biostatistics, sufficient computer hardware and software. Experienced data-processing staff
<b>7. Sample repository</b>	Absent	Some, but temporary/ sporadic	<b>Part of laboratory</b>	Available (cold) chain
<b>8. IPR skills</b>	<b>Absent</b>	External qualified advisor available	Some internal qualified skills available	Experienced qualified personnel available within centre
<b>9. Administration</b>	Basic administrative Capability	Basic administrative capability	<b>Accounting and administrative systems available</b>	Well established and audited accounting and admin systems

<b>Table 1b: Level of Rwandan site at this moment: level at the review moment is printed bold</b>				
<i>Level</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Components</b>	<i>Epidemiological relevant population and interested investigators</i>	<i>Identified cohort and follow-up capability</i>	<i>Sites with some clinical trial capacity (indicate phase)</i>	<i>Fully capable site for phase I-III trials</i>
<b>1. Investigators</b>	Lacks GCP	<b>GCP exposure</b>	GCP qualified with limited experience	GCP qualified with experience
<b>2. Subjects</b>	Target population Identified	<b>Demonstrated ability to follow-up Community involvement</b>	Demonstrated ability to follow-up. Community involvement formalised	Demonstrated ability to follow-up. Community development Programme
<b>3. Ethics</b>	IRB not yet Established	IRB National ethics committee exists	IRB National guidelines for clinical trials exist	<b>IRB National guidelines for clinical trials exist</b>
<b>4. Laboratories</b>	Access to laboratory Facilities	<b>GLP exposure</b>	GLP qualified with limited experience	GLP qualified with Experience
<b>5. Clinical facilities</b>	Ability to measure clinical outcomes	Access to facilities with staff	Adequate facilities and qualified staff	Excellent facilities with qualified staff
<b>6. Data management</b>	Data collection field staff	<b>Some computer infrastructure and basic data-processing skills</b>	Sufficient computer hardware and software. Experienced data-processing staff.	Biostatistics, sufficient computer hardware and software. Experienced data-processing staff
<b>7. Sample</b>	Absent	<b>Some, but</b>	Part of laboratory	Available (cold) chain

repository		temporary/ sporad		
8. IPR skills	Absent	External qualified advisor available	Some internal qualified skills available	Experienced qualified personnel available within centre
9. Administration	Basic administrative Capability	Basic administrative capability	<b>Accounting and administrative systems available</b>	Well established and audited accounting and admin systems

**GCP/GLP**= Good Clinical Practice/Good Laboratory Practice; international quality standards for clinical/laboratory practice.

**IRB**= Ethical review Board; independent committee of (local) stakeholders and experts who review proposed work plans for ethical implications and whose approval is required prior to start

#### Staff turnover

In Uganda 5 senior employees left and were replaced while in Rwanda 6 were replaced. This high turn-over of key persons in the programme may be coincidental, but it might also indicate major competing demands for senior staff and or some lack of commitment to the programme. Although the current team seems to be very enthusiastic and committed, INTERACT needs to carefully analyze the reasons for the high turnover and formulated a clear plan -based on the analysis of the high turn over in the past, to retain staff in the future.



Archives of different INTERACT partners: the archive facilities of the 'old Mulago' HIV-TB clinic (left) and of the KCCC in Kisenyi (right)

#### Environmental level

The contribution of INTERACT to a sustainable encouraging *research environment* by embedding of the scientific capacity strengthening and research projects within the university in both Uganda and Rwanda is unclear.

In Uganda, INTERACT works closely together with IDI that has a very well equipped laboratory mainly financed by BMGF and Pfizer. Some additional high tech infrastructure is provided by INTERACT. IDI however operates at somewhat of a distance of the university of Makerere; and mainly co-operates with Mulago Hospital/FoM (which has official but weak links with university) and Kampala City Council Clinics. In Rwanda, the main partner (TRAC) is affiliated with the MoH, also somewhat distanced from the university. In both countries, the (faculties of medicine of the) universities are mainly focussed at education and PhD's have to fulfil clinical tasks, which are considered more important for their education (as MD) than research. Research career possibilities hardly exist nor do the universities have a clear post-doc trajectory. In Uganda, recently special possibilities for PhD's to take a leave from clinical tasks have been organised (on advice of SIDA) but only in

the last years of the PhD trajectory. Resources for research mainly come from international donors, but capacity for grant writing is low and thus European/USA scientists take the lead in grant writing. In general, although INTERACT contributes to the scientific environment of IDI, the contribution towards a broader scientific environment and local sustainable international level research capacity building in terms of the ability to independently write proposals, attract research funding and implement and manage research is less clear.

Embedding into international and regional research networks may help in strengthening a favourable scientific environment. Therefore, South-South (S-S) networking, i.e. between Rwanda and Uganda, should be a very important added value of INTERACT. S-S networking is being implemented by sharing of Standard Operational Procedures (SOPs, for example for the use of Coartem), by parallel capacity strengthening activities (project A and B) while another project shares a supervisor. PhD students from Rwanda once visited Uganda to discuss progress. However, in general, communication between Uganda and Rwanda mainly seems to be channelled through the Dutch partners and few direct links exist between Uganda and Rwanda. Uganda being the more experienced African scientific partner, is willing to assist their Rwandan partners but notes that the language barrier (English in Uganda, French in Rwanda) is a severe hindrance. Vice versa, Rwanda has ample expertise in co-operation with MoH and might be able to share best practices with Uganda. The involvement of South African partners in the PK study (project I) adds to S-S interaction and strengthening of IDI. IDI also has experience in inviting high-level outside visitors that, by showing a role model, can motivate PhD's for research. According to Rwandan partners, the NACCAP budget leaves few possibilities for scientists to visit international meetings.

With regard to creating a favourable public health environment, INTERACT has close connections with TRAC and the National TB and HIV programmes of Rwanda, which directly fall under the auspices of the MoH. TB projects contribute to the analysis for evaluating current performance of health centres with regard to TB and HIV treatment and adherence. Dutch students perform quantitative and qualitative studies of health systems components, including quality of care. Involvement of African students in these undergraduate studies is difficult because of differences in the level of MSc's of Dutch and African students.

In Uganda INTERACT co-operates closely with the KCC clinics, that were set up to lower the workload of Mulago hospital and the IDI treatment programme. At the KCC clinics, patients are recruited for studies and INTERACT contributes to the improvement of health services by capacity strengthening of data management, GCP training of staff and by motivating staff by personal interaction between clinical research staff and medical staff.

The final aim of the pharmacokinetic studies, performed in collaboration with IDI and Mulago hospital is to develop treatment guidelines. In the long term, IDI aims at developing into a health information centre on HIV treatment that could advise the ministry on HIV treatment policies in general.

The Ugandan MoH is familiar with the INTERACT programme and considers research very important in order to improve health policy. However, the MoH seems not to have been engaged directly in defining the research agenda of the INTERACT programme, although the NTLP was and the operational research project followed NTLPs priorities for Kampala. The MoH however expresses its severe interest in being involved more closely. Unfortunately, the MoH hardly has any capacity on research. An office within the MoH, responsible for translation of research results into policy would be very much welcomed by the MoH.

**Conclusion and recommendations of the MTR committee:**

*With regard to capacity strengthening, the MTR committee concludes that INTERACT operates in a national environment that provides few scientific career opportunities. This might explain why INTERACT's activities for capacity strengthening focus on individuals within its programme, with limited contribution towards sustainable strengthening of the national research systems/universities. Also project B that offers a data management*

infrastructure is aimed at the management of INTERACT projects only with less attention on supporting the scientific and public health environment as a whole. In addition, closer involvement of the MoH in research activities and definition of the research agenda should be encouraged. To improve the embedding of INTERACT activities within the broader environment, both national and international, the MTR committee recommends to

- gain high level commitment of both the universities of Rwanda and Uganda. For this, INTERACT could
- include high level representatives of universities in the governance structure of INTERACT;
- share the ownership of the PhD and post-doc training courses with the universities. A first step for this already has been made by INTERACT by embedding the clinical research courses into the university curriculum and by organising accreditation for these courses;
- ensure that databases are equally accessible to all partners<sup>5</sup> and preferably embedded in African owned institutions. The MTR committee advises INTERACT to avoid putting up barriers that might hinder access to data after the programme has ended<sup>6</sup>. For this, already now an independent, African owned organisation who can govern the databases after the programme has ended should be identified and if necessary trained;
- improve the S-S networking activities. Makerere/IDI has a huge potential to become a regional Node of Excellence for clinical research. These Ugandan partners could already act as a role model for Rwanda and assist Rwanda in strengthening their clinical research capacity. For this, direct communication and interaction between Ugandan and Rwandan partners should be encouraged while the European partners could play a more facilitating role;
- explore the possibilities to staff the MoH with a research policy advisor that is shared with the university;
- make sure all the partners at all levels understand the possibilities that are offered by INTERACT and by other international donors to attend international conferences and meetings. For this, INTERACT could include supportive information services on international grants, conferences and training opportunities etc. in their communication channels (web-site, newsletter).

In general, the MTR committee advises the INTERACT partners to organise a workshop where all partners, at all levels, discuss the partnership again, including the responsibilities of and opportunities for each partner.

#### **b) Relevance with regard to science**

The scientific part of the programme focuses on improving treatment of HIV, TB and malaria and the interactions between those. As such, the projects are very relevant for the scientific objectives of EDCTP that aim at acceleration of the development of clinical interventions to these three diseases and the quality of research thereof in general. The close co-operation with Belgian partners (in Rwanda) contributes to the objective of EDCTP to integrate research programmes of European member states. This is confirmed by the additional grants obtained from EDCTP for (parts of) INTERACT (see effectiveness).

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<sup>5</sup> Remark from INTERACT: "At the moment Ugandan scientists cannot freely access Rwandan data, but that seems a fair starting point in a new research collaboration since it requires building up mutual trust first."

<sup>6</sup> Remark from INTERACT: "There are no hindrances whatsoever, now or in the future. Partners have full ownership of, and access to, their data. The only limitations are of technical nature. In order to have GCP compliant databases (i.e. acceptable as databases for regulatory trials) there need to be technical safeguards against errors. Therefore extracting data is done by the designated data manager (who is stationed locally) in a defined way. So every scientist can get his/her data at any time, but the way this is done is protocolized. This is an essential element of building clinical trials capacity so can hardly be considered a hindrance."



*The pharmacy of the Kampala City Council Clinic in Kisenyi*

The research projects are operating fairly autonomously but share patient populations and databases, laboratory facilities (with affiliated) partners. One research project is executed in Rwanda as well as in Uganda while two research projects share one project co-ordinator. Projects A and B are supportive for all research projects and as such contribute to some integration of projects with regard to capacity strengthening and data management. Multidisciplinary approaches are scarce; although in the separate projects several disciplines (from epidemiology to bio-medical sciences) are present, co-operation between disciplines is unclear. Social sciences research is almost absent. Operational research was mentioned in the original proposal (see for example project D) as an important advantage of the proposal with science feeding into the improvement of health care. This objective was previewed to be obtained by working closely together with health services. Co-operation with health services indeed exists, but at the moment this seems to be mainly focusing on patient recruitment for scientific studies and less on research aimed at improvement of health services or public health policy although some Dutch undergraduate students perform studies on the quality of services.

With regard to research topics, the MoH does not seem to be involved in setting the research agenda for INTERACT, while some of the operational questions the MoH is asking in relation to the management and control of HIV/AIDS, TB and Malaria (monitoring toxicity, adherence, resistance and infant feeding of HIV-positive mothers, the effects of research on the quality of care, including the effects on (motivation of) human resources for care) are questions that researchers within the INTERACT programme could easily assist them to find answers to as part of the programme. Thus, existing activities in social and operational research were not very obvious for the MTR committee nor are they visible for the MoH. This is a missed opportunity that is not too late to correct. Closer dialogue between the INTERACT programme and the HIV/AIDS, TB and Malaria control programmes in the MoH to get an understanding of their issues and which of them the INTERACT research programme can assist with, is essential.

***Conclusion and recommendations MTR committee***

*The partnership programme is relevant with regard to scientific focus. Scientific co-operation between projects could be improved by a more integrated and multidisciplinary approach and as such might result in added value of the research for health policy.*

*The MTR committee recommends INTERACT to*

- *provide a platform where the MoH can discuss its research needs and where the policy relevance of research results from current projects can be discussed (see governance);*
- *improve the integration of the different research projects by providing the possibility for all participating researchers to meet and discuss their plans and results and to translate them for policymakers and practitioners in health (site personnel, MoH and national programmes);*
- *twin Dutch undergraduate research with African (social sciences) students and expand operational research activities<sup>7</sup>.*

## **2) Efficiency**

The programme had a severe delay mainly because senior staff changed jobs and replacement took some time. For the research projects, regulatory, scientific and ethical clearance took more time than expected and PhD's are heavily loaded with their clinical tasks. At the moment all study protocols have been approved and recruitment of patients has started. In general, the data management system is crucial for the efficiency of the scientific output but has a severe delay in implementation. It is previewed that enrolment will be completed in 2010 and with the data management system now in order, INTERACT expects to be able to gather enough data for the delivery of 9 PHD theses (although for Rwandan PhD's it is still unclear from which university (European, Rwandan) they will obtain their degree from). For one project (PK), the PhD already has published a scientific article while two articles on treatment option in developing countries have been accepted for publication. Presentations have been held at national (2) and international HIV/AIDS conferences (1).

### **Conclusion and Recommendations MTR committee**

*Although the partnership had a slow start resulting in a severe (1 year?) delay of the programme, it now seems to be up and running with respect to scientific objectives. An important threat remains the time PhD's can dedicate to their research tasks and the availability and commitment of senior supervisors. (see recommendations capacity strengthening). The MTR advises INTERACT to*

- *Engage in better dialogue and advocacy efforts with the universities and the ministries of health to increase the commitment to research training and the career opportunities after PhD research training that would make it more urgent and attractive for PhD candidates to focus on completing training in a timely fashion;*
- *be cautious with accepting more grants since the workload for supervisors then will become even more heavy while at the same time competition for patients will grow;*
- *increase efficiency of enrolment by a pre-selection procedure of patients and recruit out-reach staff for timely enrolment of patients.*

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<sup>7</sup> End 2008, NWO/WOTRO will announce a call on health systems and policy research. This call might provide an opportunity to link health systems research (for example on human resources, equal access to services etc.)



*Technician at work in a lab of the Infectious Diseases Institute*

### **3) Effectiveness**

In total 90 individuals have been receiving training in (clinical research) and all use these newly acquired skills in practice. With regard to institutional capacity strengthening INTERACT has developed courses for clinical research that might be integrated in the university curriculum. The learning by doing approach of PhD's, in both Rwanda and Uganda, has not been very efficient yet with PhD students contributing too little time to their research tasks. Also the lack of senior supervisors is a huge challenge for INTERACT. This still might impair the quality of the PhD education. The scientific responsibility of the PhD trajectory is with the university that will confer the PhD degree, a choice that is made together with the PhD's themselves. Most Rwandan PhD's have indicated that they prefer a degree of a European university. However, standards and requirements /outputs for PhD degrees to be awarded by the European universities are not yet clear to Rwandan partners.

The effectiveness of INTERACT with regard to the environmental capacity strengthening that is essential for long term research sustainability within Africa is still doubtful. However, INTERACT has been able to raise the attention of international funding organisations, resulting in a EuropeAid grant of € 4,9 M aimed at capacity strengthening of EDCTP sites. In addition a European grant (€ 2.5 M) from FP6 was awarded to the INTERACT partners, based on the cohort study of INTERACT. EDCTP also awarded a proposal of AMC and Ubuzima, both partners of INTERACT, providing matching funds for Ubuzima in Rwanda (€ 2M). Two grants are still pending, an EDCTP grant on malaria and pregnancy and a USAID grant for clinical trials of treatment of multi-drug resistant TB. This shows that the partnership is effective in gaining additional grants and in integrating INTERACT in EDCTP.

Effectiveness of scientific projects in terms of products or new interventions cannot yet be measured as can be expected after 2,5 years.

#### ***Conclusions and recommendations of the MTR committee***

*The INTERACT partnership has not yet shown to be effective in institutional and environmental capacity strengthening although financial sustainability of the partnership itself seems to be promising with already awarded grants of more than € 9 M total from other international funding organisations. In addition, INTERACT is very effective in integrating its research within EDCTP. The MTR committee advises INTERACT to*

- *make sure that the quality of PhD education meets international standards. For this, both MoH and the universities should recognise the added value of a scientific career path and develop a policy for this together. INTERACT might encourage such a policy dialogue by providing the platform mentioned above and CPCD/AMC might assist in formulating international recognised quality standards for PhD's where they do not exist yet or are unclear;*
- *use grants awarded to convince the university of the importance of research activities and to show students that a career in research is an attractive option.*

#### **4) Governance, administrative & financial aspects**

INTERACT is governed by an executive committee consisting of the director of IDI, TRAC-plus, Makerere University, faculty of medicine and CPCD, AMC. The Programme is co-ordinated by CPCD, AMC, advised by a scientific team (PI's country co-ordinators) which in turn are advised by the project teams. Thus, in general, scientific progress and expertise is steering the executive committee. Within the national structures, the first responsibility of the African members of the executive committee however is to provide education for medical students (demand MoH Uganda) and/or public health deliverables (demand MoH Rwanda). Only weak connections exist between the governance of INTERACT and the university policy decisive bodies of the African partners. INTERACT already noticed that governance structure and responsibility were not very well defined and therefore is revising the organisational chart.

The financial accountability is carried forward into the country projects where the country coordinator is budget holder of the management line. Main decisions with monetary consequences can only be taken by the Executive Committee in a consultation driven decision making process, i.e. such a decision is made after the different levels have been consulted. Decisions are administered through the use of financial track sheets which register who was consulted on a certain decision and who and when the decision was approved. The decision making process and the administration are separated by a system of checks and balances. Purchases are approved of and administered by two different persons: a supervisor approves and the executive officer makes the payment. Money transfers are requested for by the partners and country offices and sent to the financial department in Amsterdam. The financial department verifies the details and need of request and the programme manager approves after which the financial director makes the transfer. All involved partners have separate bank accounts. The African partners which are government state institutions are audited internal by the Audit General of the Government. In the Netherlands, Deloitte and Touche audits the CPCD. Transfer of accountability is possible to the African partners because they all have a proven track record of implementation and accounting for large scale international research projects. However, financial management is complex and the procurement of equipment and supplies through government agencies are complex and slow and take a lot of time from local office staff. In addition, projects get delayed. In order to be able to procure directly, AMC/CPCD is pursuing legal status in both countries.

At all governance levels, responsibility is shared by European and African individuals although scientifically the European so far have provided most input for protocols, proposals and additional grant writing. Ugandan partners have been active as well and are increasingly contributing.

#### ***Conclusion and recommendations MTR committee:***

*The weak link of the governance structure of INTERACT with the university policy decisive bodies might explain the observations that INTERACT has difficulties with embedding the scientific capacity strengthening activities into the university system. On the other hand, INTERACT suffers from the slow and complex financial management and procurement of the government bodies and therefore is pursuing legal status. The MTR committee wonders if this will not further isolate INTERACT from the national research environment.*

Therefore, the MTR committee recommends INTERACT to

- invest in closer links of the INTERACT executive committee with the research policy dept. or comparable representative of the universities;
- combine efficiency of (financial) procurement with integration into national owned systems by looking for possibilities to integrate INTERACT's into IDI or comparable (efficient) legal departments of the universities/MoH to;
- train African financial capacity .

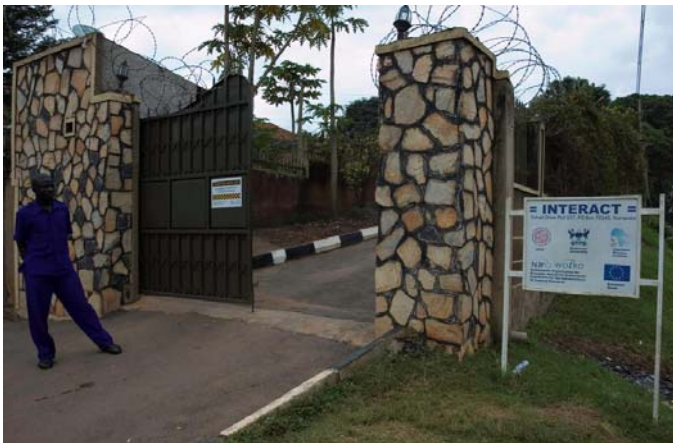
## 5) Communication and dissemination

The start of INTERACT was communicated by the official opening of the INTERACT programme for which medical, political, diplomatic communities and donors as well as the general community were invited. Press releases accompanied the meeting. Other communication is mainly geared towards the scientific community, affiliated partner institutes where monthly programme meetings provide a platform for internal communication together with annual joint research meetings In Rwanda, the MoH by TRAC is informed. No regular communication towards universities or Ugandan MoH exists. A newsletter and a website are being developed which targets the participating partners.

### **Conclusion and recommendations of the MTR committee**

*The communication and dissemination activities of INTERACT focus on the scientific partners. This is done through INTERACT specific communication means with limited access to broader scientific or public health communities outside INTERACT. Although research results are not yet available, policymakers (both scientific and public health) might already be interested in the goals and approach of INTERACT. It is also in the interest of INTERACT to make these activities known by and gain commitment from policy makers, students, health workers and patients. This does not necessarily have to be done by INTERACT specific communication means. Therefore, the MTR committee advises INTERACT to*

- develop a detailed communication and dissemination strategy especially with regard to communication outside the participating institutes. For this, INTERACT could try to incorporate its communication into existing communication means of, for example those of the universities, MoH, etc.



Sign and guard outside the INTERACT office in Kampala

#### **4. Future of INTERACT**

Upon request, INTERACT prepared a SWOT analysis and proposed some improvements of INTERACT for the future. As specific strengths of the programme INTERACT named, amongst others, the strong commitment of collaborative partners, the integration of the treatment studies on the three different diseases, the co-operation with national disease control programmes, strong laboratory facilities and expertise in GCP and GLP and well established IRB procedures.

Weaker points included time available for PhD's and supervisors and, as a consequence, delay of the programme. Furthermore, complex financial and procurement systems, less well-defined governance, weak communication and the limited exchange between Rwanda and Uganda should be improved.

The progress of the scientific programme still is worrisome when no solution is found to provide more room and supervision for PhD's in an environment that is competing for scientific expertise because of international funding opportunities favoured by (inter-)national treatment programmes and good organisation of clinical care for patients. INTERACT tries to solve this problem by hiring additional senior staff for the programme.

#### **Conclusions and recommendations MTR committee**

*The self-evaluation of INTERACT is in line with the observations of the MTR committee. However, the committee recommends INTERACT not to focus too much on European expertise for solving drawbacks in progress. This may be an attractive solution with regard to progress in the short term, but will hardly contribute to a favourable research environment in the long term. Another option may be to look for Ugandan and Rwandan highly qualified researchers, working abroad. The Malawi partnership, CoMMAL, funded by NACCAP as well, might provide an interesting example for this.*

*Therefore, the MTR committee recommends INTERACT to*

- invent possibilities to attract African senior scientists to Makerere/IDI/ INTERACT and also to TRAC, University of Rwanda as senior supervisors. For example, the EuropAid grant might be used to attract expatriated African supervisors back to Africa (instead of hiring additional European supervisors). Other international donors provide opportunities for re-entry grants and application for these should be considered;*
- visit the CoMMAL partnership in Malawi and exchange best practices.*

### Annex 1: INTERACT: MTR programme

Date	Time	Activity	Presenter	Venue
<b>Wed 4 June</b>	7:15pm	Arrival at Entebbe Airport (All Committee Members)		Entebbe Airport
<b>Thu 5 June</b>	9:00-10:30	Presentation of the general INTERACT programme + SWOT	Dr Harriet Mayanja, Dr Michel Gasana	INTERACT OFFICE
	<b>Break Coffee/Tea</b>			INTERACT OFFICE
	10:45-11:15	Governance, communication and finance	Mrs Lilian Namboze, Mr Andrew Musemakweli	INTERACT OFFICE
	11:15-11:45	Capacity strengthening: Project A - Training	Dr Harriet Mayanja	
	11:45-12:15	Capacity strengthening: Project B - Data management, GCP/GLP	Dr Nadine Pakker	
	12:15-12:45	INTERACT Project D/E - Search (Rwanda)	Dr Joseph Vyankandondera	
	<b>Lunch 12:45-14:00</b>			Seascalope Restaurant
	14:00-14:30	INTERACT Project C (Uganda)	Prof Joseph Konde Lule	INTERACT OFFICE
	14:30-15:00	INTERACT Project F (Uganda)	Dr William Worodria	
	15:00-15:30	INTERACT Project I (Uganda)	Dr Pauline Byakika	
	<b>Break Coffee/Tea</b>			INTERACT OFFICE
	16:00-17:00	Open discussion	MTR Committee and others to be suggested	
<b>Fri 6 June</b>	9:00-10:00	Site Visit	Prof Roy Mugerwa, Dr William Worodria	Faculty of Medicine, TB Ward 5 & 6 Mulago Hospital
	10:00-10:30	Site Visit	Dr Andrew Kambugu, Dr Pauline Byakika	Infectious Disease Institute
	11:00-12:00	Site Visit	Dr Mesach Mubiru, Dr Ibrahim Sendagire, Dr Deus Lukoye	Kampala City Council (KCC) Health centre Kisenyi
	<b>Lunch 12:30-14:00</b>			Venue to be communicated

	14:00-17:00	Individual interviews*	1. Dr Elizabeth Namagalaa (MoH), 2. Dr Andrew Kambugu (IDI), 3. Dr Michel Gasana (TRAC+/MoH), 4. Dr Joseph Vyankandondera (CHK), 5. Dr Ceppie Mery (IDI)	INTERACT OFFICE
<b>The Netherlands</b>				
13 June		Interview by MTR member Dr. Andrew Kitua	Prof. Dr. Joep Lange, Dr. Frank Cobelens	AMC/CPCD, Amsterdam
20 June		Teleconference MTR committee	Prof Elly Katabira (Makerere University, Uganda), Dr. Michael Kremer (Director TRAC, Rwanda)	

## Annex 2. Abbreviations

<b>AMC/CPCD</b>	Academical Medical Centre / Centre for Poverty Related Diseases
<b>BMGF</b>	Bill and Melinda Gates Foundation
<b>BMP</b>	Blantyre Malaria Project
<b>CoM</b>	College of Medicine
<b>CoMMAL</b>	Partnership programme between College of Medicine, AMC/Emma hospital and Liverpool School of Tropical medicine
<b>CRA</b>	Clinical research assistant
<b>CRO</b>	Clinical research officer
<b>DC</b>	Developing Country
<b>DGIS</b>	Directorate General International Cooperation (ministry of Foreign Affairs, The Netherlands)
<b>EDCTP</b>	European Developing Countries Clinical Trials Partnership
<b>EU</b>	European Union
<b>FoM</b>	Faculty of Medicine
<b>GCP</b>	Good Clinical Practice
<b>GLP</b>	Good Laboratory Practice
<b>GSK</b>	Glaxo-Smith-Kline
<b>HAART</b>	Highly active anti-retroviral therapy
<b>ICH</b>	International Conference on Harmonisation (WHO)
<b>ICT</b>	Information and Communication Technology
<b>IDI</b>	Infectious Disease Institute
<b>INTERACT</b>	Partnership programme AMC/CPCD, Makerere University, TRAC
<b>IPT-pd</b>	Intermittent Preventive Therapy- post discharge
<b>IPR</b>	Intellectual Property Rights
<b>KCC</b>	Kampala City Council Clinics
<b>LSHTM</b>	London School of Hygiene and Tropical medicine
<b>LSTM</b>	Liverpool School of Tropical Medicine
<b>MAC</b>	Malaria Alert Centre
<b>MLW</b>	Malawi Liverpool Wellcome Trust research programme
<b>MS</b>	European Member States
<b>MSc</b>	Master of Science
<b>MTR</b>	Mid-Term Review
<b>NACCAP</b>	Netherlands-African partnership for Capacity strengthening and Clinical trials Against Poverty related diseases
<b>NGO</b>	Non-Governmental Organisation
<b>NTP</b>	National Tuberculosis and Leprosy Control programme (Uganda)
<b>N-N</b>	Nord-Nord (networking)
<b>NWO/WOTRO</b>	Netherlands Organisation for Scientific Research/ Science for Global development
<b>PfPR</b>	Post Graduate Institute
<b>R&amp;D</b>	Research and Development
<b>RSC</b>	Research Support Centre
<b>SC</b>	Steering Committee (NACCAP)
<b>SIDA</b>	Swedish International Development Cooperation Agency
<b>SOP</b>	Standard Operational Procedure
<b>S-S</b>	South-South (networking)
<b>SWAP</b>	Sector Wide Approach Policy
<b>SWOT</b>	Strengths, Weaknesses, Opportunities, Threats
<b>TB</b>	Tuberculosis
<b>TRAC</b>	Treatment and Research Aids Centre