

MESAU COBERS Evaluation: A Consortium Approach to Assessing the Impact of Medical Education on Society

By the MESAU COBERS Evaluation Team

Setting the stage

One of MESAU's aims is to improve the quality and relevance of medical education and service training in Uganda, in order to produce more motivated health workers with the competencies to deliver locally

relevant services capable of meeting the needs of the population. MESAU is using several approaches to achieve this: alongside the integration of the competencies into the curricula, MESAU has standardized the selection of community-based platforms for education, service training and research and has

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The process of determining COBERS aims was participatory and practical, involving all MESAU partner institutions



Mbarara University of Science and Technology Students get a say in Curriculum Review

By: Comfort Elisha WMR (Bpharm III), Rita Kageni (MbChB I), Joyce Kalungi (MbChB IV), Lokiri Peter K. Y (BNC II) and Victor (MLS II)

The sun's rays tenderly kissed the sky as day light bid farewell to the night. It was Friday the 9th March 2012. The letters of invitation from the Associate Dean Undergraduates had been received the week before and had elicited an atmosphere of anxiety. This time round, the administrators had come to the realization that students had a critical role to play in curriculum review.

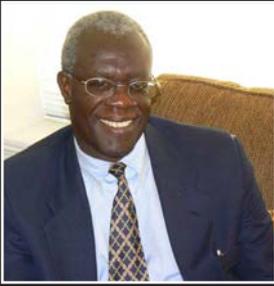
The bus was already parked at the main gate by 8:00 am. Each professional students' association, i.e. pharmacy, nursing, medicine and

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MESAU Director's Message



Dear Reader,

"Alone we can do so little, together we can do so much." - Helen Keller (1880-1968)

In this newsletter we focus on a thematic area of "Working together to ensure equitable health services for all Ugandans". We look forward to participation and enhancing partnerships in the MESAU consortium, in the MEPI network of institutions and in the MEPI technical working groups. A number of essays in this issue address MEPI technical working group focus themes. Mahatma Gandhi (1869-1948) said "Unity to be real must stand the severest strain without breaking." On the other hand Robert Filghum had this to say 'We could learn a lot about crayons, some are sharp, some are pretty, some are dull, while others bright, some have weird names, but they all have learned to live together in the same box.'

This week a Makerere College of Health Sciences academic staff member made the following inspirational remark to a colleague: "Being part of the MESAU COBERS evaluation team has been one of the most enriching moments of my career. It has been a team where the word commitment is spelt correctly by members representing the participating institutions and where those that we look up to lead

us have not let us down". Although we are in the formative years of MESAU's existence the above statement has been very gratifying and extremely reassuring that we may be able to realize Mahatma Gandhi's vision sooner than one may have imagined.

MESAU consortium holds promise as a hub of excellence for scholarly thinking, research and collaborations that will galvanise innovations and changes in medical education across Uganda, the African region and the world at large. We have a social conscience that as we pursue scholarly excellence it must be for the benefit of our people, improving the health system and population health. This is in line with the work of Dr. Ronald Bisaso of School of Education who recently completed his PhD on the topic: "Utilising the Learning Organization for Management Capacity Building at Makerere University."

We are gradually taking one giant step at a time working towards building strong linkages between the country's medical education system and the health system into one partnership that has a shared vision, mission and plan and answering to peoples' needs. As we do so the country will shift emphasis from curative services to primary care and yet the population will be able to realize health gains and improve life expectancy. It is our children and our children's children that will judge the goodness of our actions to-day.

Northern Uganda Districts Embrace MESAU-MEPI

By Emilio Ovuga

Access to healthcare in Uganda is far from optimal due to poor staffing levels in Ugandan health facilities. Since the establishment of the Faculty of Medicine at Gulu University in 2004, access to healthcare has intermittently improved in areas where students have been posted during their community attachments. Within the framework of MESAU- MEPI and other projects, the faculty has sought to engage its stakeholders to participate in health sciences education at Gulu University. One group of these stakeholders is the districts within which students receive community-based education during their attachments.

On February 6, 2012 the Faculty of Medicine conducted a half-day sensitization seminar for political and civic leaders from the districts of Adjumani, Agago, Amuru, Gulu, Kitgum, Lamwo, Nwoya and Pader. During the seminar the MESAU-MEPI Institutional Implementation Committee (IIC) presented the MESAU-MEPI initiative



that aims to transform medical education and research in Uganda, promote universal access to basic health care to

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Gulu University Medical Students Establish Family Medicine Club to Promote Retention of Doctors in Rural Northern Uganda

By Lule Herman and John Paul Bagala, Gulu University

Following encouragement from the faculty Dean a cohort of 30 medical students from first to fifth year met the Dean for a briefing about family medicine. The students have since then formed the Gulu University Family

Medicine Club (GUFMEC) under their umbrella medical students' association, Gulu University Medical Students' Association (GUMSA). The family medicine club members have attended family medicine scientific conferences, workshops, and have established contacts with family physicians within the country and abroad. GUFMEC

now has 80 members. The club is intended to create an environment for Gulu University medical students to actively participate in community based research and primary health care provision during their community attachments and electives. The club hopes that through its activities doctors graduating from Gulu University will be



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transitioned from community-based education and service (COBES) to community-based education, research and service (COBERS) in order for students to undertake operational research during their community placements. MESAU is also expanding and strengthening decentralized learning at COBERS sites by integrating clinical clerkships into COBERS and harnessing communications technology and distance learning approaches. These efforts are underpinned by enhanced facilitation of and support to students during COBERS placements by preceptor (site tutor/student supervisor) and faculty training. In addition, MESAU-wide general aims of COBERS have been agreed on.

Why evaluate the impact of COBERS

In view of the considerable investment in COBERS and its potential to influence primary health care provision, MESAU made a decision to evaluate the impact of COBERS on society. The justification for this is very persuasive: this is the first time that a nation-wide approach to addressing the challenges of medical education has been undertaken in Uganda, with COBERS being one of the major performance areas. It is thus important to establish the effectiveness and societal relevance of COBERS in order to be socially accountable,

and to establish the credibility of COBERS to stakeholders and to the wider medical education community. Equally or even more important is the need to document the broader impact of COBERS on communities. Furthermore the evaluation will enable MESAU gain insight into the different approaches used by MESAU institutions and provides an opportunity for mutual learning within MESAU by documenting best practices and if necessary suggesting alternative strategies. Thus, the overall aim of the evaluation is to assess the impact of COBERS on the health system and service delivery, health facility staff, students and communities. The specific objectives are to describe the effect of COBERS on:

1. The range and scope of services provided at the COBERS sites
2. Utilisation of formal health services by the community
3. Community decision-making and participation for health
4. Professional practice and motivation of COBERS site facility staff
5. Students' attitude, willingness and intention to work in underserved settings
6. The perceptions and practices of MESAU faculty regarding health professionals education

The evaluation uses a pre-post quasi-

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Mbarara University of Science and Technology Students get a say in Curriculum Review

medical laboratory science had a representative on board before the 'M.U.S.T road jet' could set off for Hotel Brovad in Masaka; the venue of the exciting competency-based curriculum review meeting.

The departure from M.U.S.T further elicited episodes of anxiety and provoked a series of imaginations of what would become of this long awaited event.

"What shall we say? Will they (the lecturers) be accommodative enough to take the students' views? Would there be freedom of expression? Where shall we sleep?" Such were the silently asked questions and thoughts that kept popping up in our heads, but no one dared to ask as contentment lay in the knowledge that time would gradually avail the answers.

Finally the journey came to an end. The lingering questions in our minds had been at irregular intervals interrupted by the beautiful scenery of hills and valleys neatly and brightly covered with freshly rain-fed grass and shrubs. The zebras and few kobs seen near Lake Mburo National park further brightened up the view. The arrival at Hotel Brovad marked the timely unwrapping of the long awaited answers. We now had an idea of where we would sleep. The place had a mild African touch well blended in a rich exotic setting. "It at least feels better than M.U.S.T." exclaimed one of our colleagues stimulating an almost inaudible laughter submerged in glamorous smiles on our faces. We stretched out to release some of the tension and reluctantly moved out of the bus to the registration section where each of us was availed a key to his or her room. We all agreed the rooms were exotic! They were at least the exact opposite of our rooms back at campus, no wonder one of us on arrival was captivated by sleep only to be awakened by a 'disturbing call' to join the rest of the team in conference room 5.

The discussion of the curriculum set off with a brainstorming session. It was interesting. Everyone had issues to raise including lecturers. Our points

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Gulu University Medical Students Establish Family Medicine

encouraged to stay in rural areas such as post-conflict northern Uganda after the completion of their training. This possibility is supported by the fact that more and more students remain in rural hospitals in northern and the West Nile Region during holidays. The club has developed some proposals and projects including "safe youth, safe generations" aimed at promoting adolescent sexual

and reproductive health education in secondary schools, PMTCT rollout in rural areas, and pre-hospital care for trauma victims. The club has initiated discussions with the Administration of the Faculty of Medicine to develop the relevant curriculum and policy document on family medicine and students' led projects in the undergraduate medical curriculum.

TRANSFORMING HEALTH PROFESSIONALS TRAINING INTO A COMPETENCY-BASED MODEL IN UGANDA: A MESAU- MEPI INITIATIVE

By Competence Based Education Coordinating Team

A major transformative opportunity for improving health among diverse communities worldwide is to reform the vision, programmes, and systems of educational institutions to train health professionals who can meet people's needs, empower communities, and enhance human wellbeing. One argument advanced by Butha and others is that too often forgotten is that the production of health is knowledge-based and socially driven, and health professionals as knowledge brokers are key drivers of health advance. The past five years have seen acceleration in the development of competencies in different health professional fields driven by the professional organizations themselves and major global trends in health professions education in an attempt to define expected knowledge, skills and behaviors of graduate practitioners who will ably address the current needs in society.

It is this urgent need to re-align health professions education in Uganda that gave birth to the MESAU consortium, a body of five health professions training institutions in Uganda. With aid from the bigger umbrella of MEPI, MESAU tasked itself to transform teaching and learning into competency-based education amongst the consortium members that include Makerere University College of Health Sciences (MakCHS),



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experimental study design in which COBERS sites will be stratified by MESAU institution, and matched with comparison sites that have similar populations and health services, but do not have COBERS involvement.

The Consortium approach to COBERS impact evaluation

The MESAU COBERS Evaluation Team (MCET) was born during the MESAU Joint Planning meeting for 2011/2012 hosted by MUST in October 2011. MCET includes faculty from all MESAU institutions with Professor James Tumwine of Makerere University College of Health Sciences (MakCHS) as PI and Prof David Peters of Johns Hopkins University (JHU) as Co-PI. MCET has worked intensively since October 2011 to ensure that the baseline study takes place in April/May 2012 before students on the revised curricula go for their COBERS placements. MCET has applied a truly Consortium approach through the collaborative

meetings summarised below:

Internet-based meeting: The initial evaluation framework was discussed through a Skype-based conference with participants at JHU in Baltimore, in Mbarara, Ishaka, Gulu and several locations in Kampala.

The 'Land of Milk and Honey' meeting: This was a 3-day meeting which started on 3rd November 2011 in Kampala and ended on 5th November at Mbarara University of Science and Technology (MUST). The MCET members from MakCHS and Gulu developed several data collection instruments en-route to Mbarara with David Peters (whose body clock was in a different time zone having arrived in Uganda from Baltimore on the night of 2nd November) ensuring that no one used the opportunity of the 5-hour journey to catch up on their sleep. Work continued at MUST till about



Pre-testing the students attitudes tool amongst MUST students



A MESAU COBERS Evaluation Team Planning meeting in Mbarara

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7.00 pm and over dinner at the Lake View Hotel. The following day, the Students' Attitudes tool was pre-tested amongst the MUST students, one of whom memorably observed, "Whyswim in body fluids when I can sit at a desk and still earn an even better income?" The health facility services instrument, site tutors instrument and site selection instrument were pre-tested at Mitooma and Rugazi Health Centres. Following the pre-test, MCET members worked till about 8.30 pm to revise the instruments, at which point even David Peters' body clock needed re-winding.

Kampala meeting: At a meeting hosted by MakCHS in Kampala in January 2012 the MESAU COBERS Evaluation protocol was finalised for submission for ethical approval. Bob Bollinger (JHU), who attended this meeting, observed that MESAU is too modest and needs to flaunt its achievements a lot more.

The 'Non-Porcine Pasted Chicken' meeting: On March 15-16, 2012 the MCET met in Gulu to fine-tune interviewers' and supervisors' manuals and to make detailed plans for fieldwork. The instrument to assess the perceptions of MESAU faculty towards COBERS was pre-tested. The opportunity was used to provide some training in qualitative research methods, during which the idea of doing an ethnographic study on the role of COBERS in community empowerment as part of the evaluation was conceived.

The MCET acknowledges that real commitment by all partners (including Ministries of Education and of Health and the Local Governments) and considerable resources will be required for the evaluation to be done well. To maximise returns on these investments calls for early planning for how the data generated will

be used to impact policy and practice and to produce reports and publications. MESAU also needs to have a clear communication plan for sharing its experiences nationally and beyond.

Lessons learned about the consortium approach

- The Consortium approach is the way to go in resource-limited

countries because it enhances synergies with respect to expertise and resources. The wealth of experience in the Consortium is brought together to work towards a common goal.

- Ownership is essential to the success of an undertaking like the MESAU COBERS impact evaluation. All the

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Northern Uganda Districts Embrace MESAU-MEPI

all Ugandans, improve the quality of health care at Ugandan health facilities and contribute to the retention of health care providers in rural areas throughout Uganda.

In response, the district leaders observed that student attachment at rural health units improved access to, and the quality of healthcare. However, the districts observed that student discipline is a serious problem that requires the combined efforts of the faculty and the districts to handle in order to ensure that students attain the spirit of voluntarism and long-term professionalism in their future careers. The district leaders unanimously committed to supporting medical education in their respective districts and pledged to offer free accommodation and provide for students welfare during community

attachment. The districts pledged to provide employment opportunities for doctors graduating from Gulu University and recommended that regular review meetings with the faculty be conducted to monitor the quality of medical education and address potential problems that would otherwise interfere with community-based medical education. To seal the spirit of joint efforts in medical education, the districts discussed and approved a Memorandum of Understanding that the IIC presented to them to serve as a basis for collaboration with the districts. The function ended with Dean Gulu University Faculty of Medicine, Professor Emilio Ovuga, handing over a set of 35 bicycles, donated to the Faculty by Save the Children in Uganda, to support outreach activities at the 11 health units where students receive community-based medical education.



Prof. Emilio Ovuga (1st left) handing over a bicycle

Development of Research Support Centers at MESAU institutions

Research Support Coordinating Team

MESAU is focusing great attention and emphasis on enhancing research capacity of the partner institutions so as to be better equipped to undertake research that is relevant to Uganda's health and health professional education needs. The 2004 report of the Global Forum for Health Research, defined research capacity strengthening as the 'process by which individuals, organizations and societies develop abilities (individually and collectively) to perform functions effectively, efficiently and in a sustainable manner to define problems, set objectives and priorities, build sustainable institutions and bring solutions to key national problems'. Our institutions have planned to strengthen or develop Research Support Centers (RSCs) and MEPI is making important contributions in this direction. MESAU's interest in developing RSCs arose from the concern that our institutions were unable to maximally harness the available national and global research opportunities because institutional research administrative procedures were not well harmonized. Inevitably this situation leads to inefficiencies in the research enterprise and low attraction of educational and research grants, inadequacies in managing contracts, identifying funding opportunities, proposal development, IRB functions, project implementation, data analysis, publication, knowledge translation and intellectual property management. Makerere University College of Health Sciences (MakCHS) and Mbarara University of Science and Technology (MUST) have each developed research priorities for their respective institutions.

MESAU institutions wish to join hands with other MEPI institutions and the MEPI Coordinating Center in the realization of a community of practice as a technical working group to share ideas, innovations and best practices regarding RSCs. Indeed we have taken the initial steps in this direction. On 31 January 2012 and after months of background preparation MakCHS hosted a one day workshop ,to share experiences and strategize on the way forward for developing strong institutional RSCs. All Ugandan MESAU institutions and JHU were represented at the workshop. In the spirit of working together and learning from other regional experiences there were two presentations from non-MESAU institutions. Prof. Exnevia Gomo who started the University of Malawi RSC and has now moved to University of Zimbabwe where he is again involved in setting up an RSC, attended the workshop and shared his experiences while at the College of

Medicine, Malawi Center. Dr. Jandouwe Villinger from the International Center for Insect Physiology and Ecology (ICIPE) reviewed how research support is organized and managed at this very successful 40 year old international research institute located in Kenya. Mr Henry Tumwijukye, a research administrator from MUJHU shared his findings from his study tour about RSCs that took him to the Universities of Malawi, Zimbabwe and Kwa-Zulu Natal. All the Universities visited have dedicated space for the Research Support function, the RSCs are led by senior academic staff; have very close and knit links between the Colleges of Medicine, the central University administration and the College research affiliates. The RSCs are fully embedded within the College structures and have dedicated Human resources. Planning for the MakCHS center is in advanced stages. It will have the following functions: a grants function, finance management, the clinical trials function, IRB functions, bioethics unit, student and faculty Support, writing clinic, procurement function, information technology (IT), data analysis, continuing education (CE), legal support, communication, innovation and knowledge translation, research policies and guidelines.

MUST established a grants office and a Faculty of Medicine research and grants committee to identify research and grants opportunities, encourage formation of research teams and act as link between researchers and potential mentors or collaborators. The committee will also conduct trainings and convene meetings for research teams or dissemination. There are a number of functions that need to come together under a research support center namely epidemiological and biostatistics support to researchers, compliance to research policies. KIU and Gulu are also in the process of strengthening their research support systems.

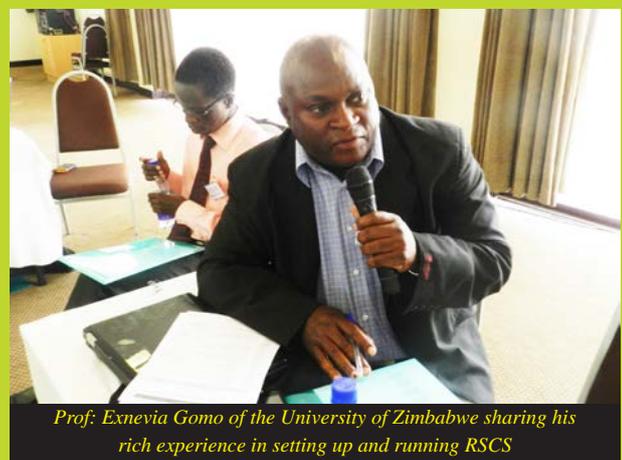
MESAU institutions submitted a joint application to the National Institutes of Health Fogarty International Center



Prof: Nelson Sewankambo, Principal College of Health Sciences speaking at the internal stakeholder consultation meeting



A cross section of stake holders at the workshop



Prof: Exnevia Gomo of the University of Zimbabwe sharing his rich experience in setting up and running RSCS

in response to a call for proposals for administrative supplements for the initiative on research and innovation management (iRIM). If successful our institutions will be facilitated to develop centralized institutional research and innovations management offices. Of relevance to the RSC is a new course on responsible conduct of research. Though separately funded, this course will in future be based at the RSC and attended by participants from all MESAU institutions. The first 3 day course with 40 participants was conducted in March this year, 2012. We must work together to realize the dream of having strong RSCs at all MESAU institutions.

The MESAU Partnership and the Role of Johns Hopkins University: **Responding to Strategic Priorities**

By Bob Bollinger, MD, MPH
Professor of Medicine, Public Health and Nursing, Johns Hopkins University

“Coming together is a beginning, staying together is progress, and working together is success.”

Henry Ford

Over the past year, the MESAU program has built new bridges, fostered new collaborations and led to new synergies among the Ugandan medical school partners. MESAU has really helped to define and promote the concept of “consortium”, which has led to a new way for the individual institutions to think about their roles in their own communities, as well as how they can truly work together to address Uganda’s national health priorities. MESAU has also helped to define and promote a new role and vision for how foreign institutions like Johns Hopkins University (JHU) can also contribute to this mission. (JHU) and other US universities have engaged in health research and education partnerships in Uganda for more than two decades. These partnerships have led to groundbreaking advances in public health and research, over that time. For many of these partnerships, funded by the US government, the US university partners have taken a leading role in the science and administration of the programs. The MESAU program has a different Uganda-US partnership model. While the MEPI program is also funded by US taxpayers, an essential requirement for the success and sustainability of MESAU is Ugandan leadership, Ugandan ownership and Ugandan management.

Thus, the Hopkins team is required to be particularly sensitive and responsive to the strategic needs and priorities defined by the MESAU leadership. This has resulted in a number of “success stories” and helped to ensure that Hopkins will optimize our institutional contribution to this partnership. Over the past year, JHU was asked by MESAU to provide technical assistance regarding IRB strengthening. A great success story has been the design and deployment of



The e-IRB training participants during a class section

an electronic institutional review board (eIRB) system, to facilitate and track the ethical review and approval of health research projects in Makerere University College of Health Sciences (MakCHS). The College eIRB system is designed to align with and be part of the country’s tracking system which has been put in place by the Uganda National Council for Science and Technology (UNCST). This new centralized national system is also designed to ensure that Ugandan participants in health research projects are consistently provided the highest levels of protection of their human rights and application of international research ethics standards. Assistance with the establishment of an eIRB system and a new Bioethics Center at Makerere University was one of the strategic requests to Hopkins from MESAU over this past year. A team of Ugandan scientists were provided an opportunity to visit and engage with Hopkins experts in eIRB systems at the School of Medicine and the School of Public Health. They were given in-depth exposure to the limitations and benefits of various eIRB systems, in order to inform their decision about what system would be best for Uganda. They also received specific training in research ethics at the Johns Hopkins Berman Ethics Institute and some time at the NIH campus. Since returning to Uganda, the MESAU team has contributed significantly to the recent design of the eIRB system, which will eventually be a benefit to all of the Ugandan MESAU institutions and the communities they serve. In addition, the

new Bioethics Center at MakCHS will be launched later this year, and will provide bioethics training, organize debates on challenging bioethics issues relevant to Uganda and promote research in bioethics at all of the MESAU institutions.

Hopkins was also requested to provide strategic technical assistance to the MESAU Monitoring and Evaluation Program. This team has established a number of initiatives to document the impact of MESAU on improvements in health education and its linkage with the national health system. A major MESAU initiative in this regard is the plan to evaluate the impact of the community-based education, research and service (COBERS) inter-professional learning programs. The MESAU COBERS Evaluation Team, led by Prof James Tumwine and Ms. Rhona Baingana, with input from Hopkins experts such as Dr. David Peters, will launch a comprehensive, nation-wide COBERS assessment in April/May this year. This ambitious and important assessment is uniquely positioned to demonstrate the impact of COBERS over time on student and community satisfaction, health improvements, intra-professional education, as well as decisions of graduates to practice in rural, underserved communities.

Another area where Hopkins has been asked to contribute is in support of research capacity building. Dr. Yuka Manabe has led the technical support for this effort and has leveraged her role

ENGAGING MAKERERE UNIVERSITY COLLEGE OF HEALTH SCIENCES LIBRARIANS AND STUDENTS IN MESAU-MEPI ACTIVITIES

By Alison Annet Kinengyere,
Librarian, Albert Cook Library

More than ever before, librarians at the Makerere University College of Health Sciences are working closely with MESAU-MEPI and teaching staff to enhance student learning. As they engage more and more with the Library, the students are finding answers to questions regarding health information: sources, access, searching, retrieval, evaluation and use. They are becoming information literate, a lifelong learning skill that they will continue to exploit even after their study at the College.

With support from MESAU-MEPI, the Library has been conducting training for students, (both graduate and undergraduate), in finding, organising and using health information, and how to manage references when they engage in scholarly writing. The training sessions are meant to provide students with competencies to enable them to learn the best ways to search, access and use quality health information, and to do better research, based on existing evidence. An instruction manual which was developed by the Network of African Medical Librarians (NAML), and is freely available to all users, has been a very useful resource in supporting these trainings.

The training sessions at MakCHS are divided into three categories:

Literature searching which involves introduction to databases available to the College, such as HINARI, PubMed, the Cochrane Library, Cambridge Journals, Oxford Journals and other resources accessible through the University of Toronto Library collaboration with Albert Cook Library (Ovid, EMBASE, PsycINFO, Up-To-Date and Dynamed), and other open access resources.



Ms. Alison Kinengyere (front in red top) taking the students through the training in Sir Albert Cook Medical Library



Evaluating health information on the Internet where students are introduced to various ways of evaluating internet sources before they are used, using simple criteria such as website authority, authenticity, logos, affiliation to

renowned institutions, domain name endings and disclaimers. The students who have attended the training are able to differentiate between academic/scholarly and commercial websites.

MEPI-CVD: Engaging National and Global Partners to tackle the Cardiovascular Disease Epidemic in Uganda

By CVD Coordinating Team

Cardiovascular disease (CVD) is by far the leading cause of mortality responsible for about 17.5 million deaths, and 43% of global mortality and morbidity. Even with the underestimates, CVD accounts for 11% of total death in Africa, making it the second most common cause of death. By 2015, 41 of 64 million deaths will be due to chronic diseases, and 80% of deaths from chronic diseases will occur in low- and middle-income countries. In sub-Saharan Africa, death and disability occurs in younger age-groups (30-69 years) and the economic impact is felt both as a cost to the country's health system as well as the loss of income and production of those affected.

Despite these grim statistics, there has been delay in formulating appropriate policy for prevention and control of cardiovascular disease. The Uganda Ministry of Health recently added non-communicable disease to its list of priorities and is developing a program for these conditions. Because of competing priorities in the healthcare domain in Uganda, different stakeholders have been tasked to contribute to cardiovascular policy development. It is important that development of this policy must proceed under a comprehensive framework that recognizes the full range of cardiovascular disorders in sub-Saharan Africa whose pattern may be different from those existing in the developed world (e.g., dilated cardiomyopathy, endomyocardial fibrosis, hypertension, pericardial disease, stroke, vascular dementia) and the need to establish strategic links with both national and global partners to spearhead these prevention efforts. For maximum impact, community-wide interventions must address appropriate settings, all opportunities throughout the life span, with added emphasis on populations at high risk which calls for the need to document CVD in different settings.

The Medical Education Partnership Initiative-Cardiovascular disease (MEPI-CVD) program in collaboration with international partners (Case Western Reserve University, Cleveland and Yale University, New Haven) is contributing to the national efforts to prevent and control cardiovascular disease. A comprehensive public health strategy must focus on documentation and prevention of major risk factors and assuring services (human resource and facilities) to detect and control them once they develop. The Ugandan Ministry of Health cites the lack of comprehensive data on NCDs and their risk factors as the main barrier to formulation of national policies, strategic plan, standards and guidelines. Indeed, a status review done by the Ministry of Health in collaboration with Makerere University College of Health Sciences revealed paucity of data on cardiovascular disease despite its contribution to a 25% of all deaths in the surveyed health units. The lack of trained health workers who can manage cardiovascular disease at peripheral health centers further complicates these efforts.

The MEPI – CVD partners are keen on building capacity for cardiovascular disease control in addition to and providing baseline data which will help to address some of the core priorities of the government. This strategy aims to support efforts to formulate and implement guidelines for prevention, early identification and treatment of CVD. While this seems like an unmanageable task for the Ugandan system which is already overwhelmed by the burden of infectious disease, the successful development of both national and global partnerships should, as with infectious diseases, advance the agenda for cardiovascular disease control. Building these efforts on existing partnerships has increased the net investment of effort and resources, and

has drawn on the strengths of prior engagement.

In order to develop baseline and preliminary data to stimulate further research in CVD and to assess the magnitude of the CVD problem in Uganda, a survey is being conducted in Wakiso district of central Uganda. The results from this survey will provide baseline epidemiological data to complement existing data from the rural areas on CVD prevalence and risk factors and will facilitate PhD training. The success of this program has been pegged on strengthening existing strategic partnerships and engaging the community where the survey is being done. Case Western Reserve University faculty have been instrumental in developing the protocol for the CVD survey. In addition, the involvement of the various political and civil leaders in the enumeration and mapping exercise for the survey has laid the foundation for future community engagement.

The MEPI-CVD partners recognise that an agenda for cardiovascular disease prevention presents opportunities for research throughout the life span. Conditions that lead to CVD development (e.g., atherosclerosis, high blood pressure, streptococcal sore throat, alcoholism) can result from exposures during childhood, adolescence, or even gestation. Risk factor levels generally progress throughout adulthood and many people remain at high risk for continued progression to cardiovascular disease. Indeed, there has been another joint effort with Case Western Reserve University to develop a protocol focusing on the prevention of Rheumatic fever. The partners therefore hope to continually engage in research to identify and evaluate current and proposed interventions which have rarely been investigated. The current efforts therefore seem to be only a tip of the iceberg!

ENGAGING MAKERERE UNIVERSITY COLLEGE OF HEALTH SCIENCES LIBRARIANS

Reference management using EndNote which is focused on graduate students before they start doing research. The session introduces the students to the EndNote reference management software, creating EndNote libraries, populating the libraries, setting library preferences and using the Cite While You Write

(CWYW) features. By the end of the session, the students are aware of the importance, and are able to create references in a uniform output style.

Since September 2011, fifty nine (59) undergraduates and twenty one (21) graduate students have been trained

in literature searching, while 37 graduate students and researchers have benefited from the reference management sessions.

Albert Cook Library will continue to partner with MESAU-MEPI to develop information-literate learners who can discover, access, and use information effectively for academic success, research, and lifelong learning.

LOOKING FORWARD: A CALL FOR TRACKING GRADUATE HEALTH PROFESSIONALS RECRUITMENT AND RETENTION IN RURAL HARD TO REACH DISTRICTS

By Staff Development Coordinating Team

It has been shown that for decades the role of medical schools did not hold them accountable for producing outcomes aligned with priority health workforce and health system needs. These out comes include recruitment, practices, and retention of medical graduates in hard- to- reach and underserved areas, which are seldom or not tracked at all. In many African countries there has been a substantial

retention gap of the graduate health professional. A case in point is that of South Africa, where research shows that between 2002 and 2010 there has been a retention gap of 62% graduate health professionals in public health facilities.

Uganda may not yet have conducted a health workforce gap study however; that there is a critical shortage of health professionals especially doctors in rural areas of Uganda is no news. The

problem of attracting and retaining graduate health professionals to rural and hard- to- reach areas is multifaceted. Some of the perceived factors that might influence retention in rural areas include the local context of work environment, support from family and friends, availability of continuing professional training for career development and support of co-workers and the community. But we owe the Ugandan communities and policy makers proposed solutions to these factors, some of which are a direct responsibility of the medical training institutions, while others are the responsibilities of the key ministries such as of Health, Education and Sports, Local Government and the communities themselves. As medical training institutions, it is imperative that we begin the process of tracking our graduates especially in public medical institutions and especially those recruited and retained in the rural underserved districts.

The process of graduate tracking invariably begins with the type of students we admit for the medical training. A study conducted among newly recruited undergraduate students at Makerere University College of Health Sciences found that over 75% completed their pre-university training (high school) from urban areas, and most of these students had no idea or exposure to rural health facilities, with many concerns about eventually working in



Many graduate from Uganda's medical training institutions, but few remain in towrk especially in remote under-serviced areas.



TRANSFORMING HEALTH PROFESSIONALS TRAINING

Mbarara University of Science and Technology (MUST), Gulu University, Busitema University and Kampala International University (KIU). In doing this, MESAU wanted to revolutionize medical education in Uganda by moving away from education that focuses on what academics believe graduates need to know (teacher-focused) to what students need to know and be able to do in varying and complex situations (student and/or workplace focused).

Therefore, MESAU focused on outcomes (competencies) that are linked to workforce needs, as defined by employers, the professions and the general population. Parry defines a competency as a cluster of related knowledge, skills, and attitudes that affect a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well accepted standards, and can be improved via training and development. Therefore, competency-based education is a framework for designing and implementing education that focuses on the desired performance characteristics of health care professionals. This is what MESAU set out to do with assistance from MEPI. Stakeholders' meetings were held involving all MESAU consortia members, MEPI representatives, professional bodies, political representatives as well as representatives of the general population at large, to suggest, agree and finally adopt the minimum competencies required of our health professionals. A final consensus was reached by all stakeholders that identified nine (9) competency domains that should be adopted by all training institutions in Uganda under MESAU. Subsequently, all

undergraduate curricular in the MESAU-MEPI consortium had to be revised to incorporate the new competencies identified. The nine competency domains identified and agreed upon included:

1. Medical Knowledge
2. Clinical Skills and Patient Care
3. Critical Inquiry and Scientific Method
4. Professionalism and Ethical Practice
5. Interpersonal and Communication Skills
6. Leadership and Management Skills
7. Population Health
8. Continuous Improvement of Care through Reflective Practice
9. Health Systems Management

Each of the aforementioned competency domains has detailed sub-competencies that were also identified. Having identified the desired graduate competencies, MESAU consortium institutions reviewed their undergraduate curricular to incorporate the competencies that are now part of the current training. Below are some experiences from MESAU consortium institutions regarding competency based training:

Makerere University, College of Health Sciences (MaKCHS): Using a participatory approach involving all faculty, the College embarked on the process of curriculum review for all undergraduate curricular in the College. This was a great benefit from MESAU-

MEPI as the initial focus was only on Medicine & Surgery (MBChB) programme. However, there was a spillover effect in which four other undergraduate programs benefited from this review. These were; radiography, nursing, pharmacy and dentistry. The overall effect was to have five health professionals curricular at the College being transformed onto competency-based models. MaKCHS established a special committee to spearhead this exercise called the Teaching and Learning Committee. The committee engaged all faculty very actively during the whole process until all curricular had been transformed into competency-based models. The new competency-based curricular at MaKCHS went through all the approval channels successfully and the College started implementing competency-based education in the 2011/2012 academic year for all first year students. The major success therefore at MaKCHS is that competency-based training has commenced and is running smoothly. The key challenge still remains in faculty development regarding all parameters of competency-based education including continued improvement and quality assurance as well as assessment of defined competencies.

Kampala International University (KIU): This could be referred to as a golden opportunity offered by MESAU-MEPI that stimulated the need for establishing a curriculum development committee that initially was not in place. This committee, referred to as MESAU-MEPI Curriculum Development Committee, is comprised of five Deans and a curriculum expert in the University. The Deans

TRANSFORMING HEALTH PROFESSIONALS

are from School of Nursing Sciences, School of Allied Health, School of Biomedicals, School of Pharmacy, Faculty of Clinical Medicine and Dentistry. Four main undergraduate programs were identified by the committee for review. These included: Nursing Science, Pharmacy, Medical Laboratory Sciences & Medicine and Surgery. Other programs that benefited included Bachelor of Sciences (Anatomy, Physiology, Microbiology, and Pharmacology). Competencies identified were disseminated to the schools and faculty through the Dean to the Heads of Department, who then worked with their team members to review the curricular in relation to the competencies. A feedback was then given to the Curriculum Development Committee. This feedback generated faculty training on how to incorporate

the competencies in the curricular. The Curriculum Development Committee has subsequently identified four resourceful persons trained in the Six- Step Approach to curriculum development from the University, plus additional persons from Mbarara University of Science and Technology who are scheduled to train and support the faculty in the review process. The reviewed competency-based curriculum is then to be presented to the school boards by the end of March 2012 for approval. This has been an enlightening and reflective moment for KIU regarding what competencies are, with regards to training health professionals. It has also led to the realisation of the need for staff capacity building and strengthening in curriculum development and review as well as the need for a curriculum review committee in the University.

Busitema University: Busitema University has plans to start the Bachelor of Medicine and Bachelor of Surgery degree program together with the Bachelor of Nursing Science. These two programs will be taught at Mbale Regional Referral Hospital. Through the MEPI support the University has improved the programs curricula that had earlier been developed and oriented them to the competences that have been developed by the MESAU- MEPI consortium. The programs have been submitted to the National Council for Higher Education for accreditation. This process however awaits final clearance by the Ministry of Health and Ministry of Education and Sports with reference to the training facilities at Mbale Regional Referral Hospital. Mean while, planning for the implementation of a competence-based curriculum is on-going.

The MESAU Partnership and the Role of Johns Hopkins University: Responding to Strategic Priorities

as Director of Research at the Infectious Diseases Institute (IDI). Dr. Manabe has been engaged in a number of important MESAU initiatives, including the process for defining MakCHS research priorities and revising the PhD guide book, the MakCHS research committee and mentorship of a number of students engaged in health research. She has also contributed to the design of the Research Resource Center, which will harmonize research administrative procedures and streamline the efficient conduct of research (proposal development, IRB review, project initiation, data collection, analysis, publication and dissemination).

In 2010, Hopkins was also asked to provide MESAU technical support for capacity building in Curriculum Development and e-Learning. In response, JHU helped to establish the MESAU Curriculum Development Committee, led by Dr. Sara Kiguli and the MESAU Distance Education Committee, led by Dr. Ian Munabi. Each of these committees have established a number

of capacity building initiatives, including comprehensive IT needs assessments for each of the MESAU partners and the Grand Rounds distance learning program, described by the E-learning Coordinating Team in an article in this newsletter. A great example of MESAU synergies, capacity building and strategic support from Hopkins is illustrated by the story of the Gulu University surgery course for 3rd year medical students (Surgery311), led by Dr. David Kitara. In July 2011, Hopkins was asked to conduct an intensive curriculum development workshop for MESAU partner institutions. The goal of this workshop was to identify and train a core team of faculty curriculum development experts at each of the MESAU partners, who would ultimately serve as a resource for their institution and help train and support other faculty. A team of 5-6 faculty leaders from each of the MESAU institutions participated in this hands-on workshop. Each team selected a high priority course curriculum from their institution

to use as a model to apply the 6-step curriculum development principals. Dr. Kitara and the Gulu team selected the Surgery 311 course to work on during the workshop. They revised this course curriculum, including application of a new competency-based design. The 5-member Gulu team has subsequently conducted two of their own curriculum development workshops for members of the Gulu University Faculty of Medicine. Since revision of the Surgery 311 course, Dr. Kitara has also requested assistance from Hopkins with creation of distance and e-learning tools to improve the delivery of the course to his own Gulu students, as well as to share components of his course with students at other MESAU institutions. Dr. Kitara is now working closely with the Hopkins Center for Clinical Global Health Education (CCGHE), a leader in use of distance learning technologies, as well as Dr. Abdulla Fizan, Director of the Hopkins Surgical Training Program to create these tools. Dr. Kitara has chosen his course competencies focused on acute trauma



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The MESAU Partnership and the Role of Johns Hopkins University: **Responding to Strategic Priorities**

management for the first set of distance learning tools. Design and production of these tools is underway, with the support of CCGHE and full engagement of IT staff at Gulu to also build local capacity in the technical and design aspects of distance education. This example of Hopkins training-of-trainers leading to conduct of additional curriculum development training at their own institution for other faculty, optimization of a priority course curriculum and development of novel distance learning tools is also underway

at Mbarara University for their pre-COBERS course, led by Dr. Gad Ruzaaza and assisted by CCGHE and Dr. Steve Sisson at Hopkins. Finally, the Hopkins Curriculum development team has now been asked by MESAU Director, Nelson Sewankambo to conduct a follow-up training workshop, scheduled for July 2012. In addition to the Hopkins faculty, this course will be co-taught by faculty who participated in last year's initial training workshop. In summary, over the past year, MESAU

has demonstrated great progress towards its important objectives to improve medical education for all Ugandans. The Hopkins team has embraced our important role, to respond strategically to the needs and request of the MESAU leadership, specifically to help build and expand Ugandan institutional capacity in eIRB, Curriculum Development, Monitoring and Evaluation, Distance Education and Research Capacity. We look forward to many more success stories.

LOOKING FORWARD: A CALL FOR TRACKING GRADUATE HEALTH PROFESSIONALS



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these areas. This brand of student would find it difficult to associate with rural districts let alone seek employment in those areas. So, MakCHS carried out a curriculum change in order to produce a health workforce responsive to the needs of the communities. These new curricular have it mandatory for part of the training to occur in the rural health facilities where most of them will eventually have to work. In the MESAU-MEPI aims, this rural placement has also incorporated the component of research hence Community Based Education, Research and Service (COBERS). This takes care of the mandate of the training institution to expose the students to the real life situations they will be expected to work in upon graduation.

One of the activities that MESAU-MEPI has set out to do is tracking the medical graduates on their placement and retention especially in those districts regarded as hard- to- reach. All MESAU institutions should work together to begin to compile data on their graduates. For the beginning the institutions should compile data on all students admitted for health professional programs; then follow up with data on those who graduate at the end of a programs. MakCHS has embarked on collecting data from 2008 to date to coincide with the period when graduates of the new curriculum would have been rolled out for job opportunities. This should not be difficult to do as institutions now have capacity to electronically capture these data. The difficult task at which we must all join hands in is to track their placements, and of interest are

those graduates who are employed in the rural hard- to- reach districts, and their retention rate in those districts. The involvement of all stakeholders is crucial; importantly the district leaders, especially the District Service Commissions.

Another important stakeholder is the Ministry of Health (MoH). The MoH has data on all health workforce in the country especially their current placement even though the MoH may not directly be responsible for the recruitment of the health workforce in the districts. For purposes of funding students for specialized training by the Ministry of Health, Fifty One (51) districts were considered hard- to - reach- and -stay by September 2011. They included: Kotido, Abim, Kaabong, Moroto, Napak, Nakapiripit, Pader, Lamwo, Kitgum, Amuru, Nwoya, Gulu, Adjumani, Kalangala, Mukono including Koome Islands, Buvuma, Bundibugyo, Ntoroko, Kisoro, Kanungu, Mayuge including Islands of Malongwe Sub-County, Bukwo, Bugiri, Namayingo including Sigulu islands, Amolator, Amuria, Zombo, Nebbi, Koboko, Buliisa, Katakwi, Kaberamaido, Yumbe, Moyo, Sembabule, Kabale, Rakai, Maracha, Isingiro, Buyende, and Kiruhura.

The MESAU-MEPI project will use these listed districts sampled by the MoH as the starting point to track graduate employment and retention in the districts, while cognizant of the fact that the possibility of weak health systems and the very nature of multifaceted factors that lead to low attraction and

low retention of health professionals in rural hard- to- reach areas makes a quick fix solution near impossible.

A country like Uganda therefore has to contend with factors such as poor wages, inappropriate working conditions and environments, poor or no supervision, poorly equipped facilities and infrastructure; all of which contribute to failure to attract and retain health professionals in these areas. While it is important for all stakeholders to be involved in the planning for human resources for rural areas, the difficulty often is in getting together the concerned parties to sit at a round table and come out with a plan. More often than not the blame game takes center stage and nothing ever gets done to improve the situation in favor of attracting and retaining of the health professional. Understandably no one stakeholder has the complete solution to the problem of retention; however the training institutions must also play their role in preparing the mindset of the graduates for placement in rural areas. Thus the setting up of COBERS for all health professional students within the MESAU consortium is a plus for these institutions. This approach allows the students to experience real rural life working conditions. They get the opportunity to see how their simple yearly 6-week placement in the COBERS centers impact on the lives of the local community, and this attitudinally prepares some of them to get back and be employed there and make real changes in the lives of the rural community.

The Day Our Insight into the Medical Field was Heightened!



Emma Amadriyo and Angela Nabukalu Ssentongo

“A trip to Rakai” the name we had christened this trip was first thought of with low expectations, for Rakai was deemed to be a remote village with its health sector thought to lack sophisticated equipment.

On that lovely Monday morning we left for the Rakai Health Science Programme in Kalisizo, Rakai. At this centre, research is mainly done on HIV/AIDS treatment, management and prevention. The trip was a long one, but thanks be to God we made it safely. Lo! and Behold; a surprise awaited us! Instead of finding a building that would need a facelift, we found a well structured yellow building that housed the whole research unit. And the magnificent garden would make a good number of gardeners green with envy.

We were taken around by the Public Relations Officer and the Human Resource Officer. Looking around the laboratories, it seemed like we were in a first world country like the United States of America not in Uganda. The level of sophistication of the equipment was high and it was quite hard to believe that we did not have to get onto a plane to see this. All we needed to do was to book the next bus to Rakai. The level of

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Why Community-Based Education Is Taking A Central Role In The Training Of Health Care Workers In Uganda Today?

By COBERS Coordinating Team

Traditionally, training of medical workers in Uganda was only conducted in class and mainly Mulago hospital. This approach however, did not allow sufficient exposure to diverse clinical conditions and provided limited learning opportunities to the students. In the recent past, there has been widespread condemnation of the trainings by the health training institutions; central to the complaints is the low retention of the health workers at the districts/ hard-to-reach rural settings. This seemed to have been premised on the poor attitude the graduates had of these hard-to-reach areas. A number of the medical schools/ Colleges thus had to reorient training of the health care workers in Uganda. The demand for community education was increasing and was adopted with varying degrees of intensity. The medical schools under the umbrella of MESAU- MEPI are working as a consortium to improve community training of students under the Community-Based Education, Research and Service approach. Here-below are some of the reasons medical schools in Uganda have chosen community placements/ trainings in Uganda:

- The need to train a health worker in the environment in which he/she will work. This will eventually support informed choice of ones future work place. The presence of the students in the hard-to-reach areas in a way creates bondage between the future graduates and the local people.
- To offer a rich platform to the students of the medical schools in Uganda to motivate and acclimatize them to working conditions and challenges of the rural areas. In addition, because Uganda has such a diverse cultural orientation, it is absolutely essential for the medical students to appreciate the diversity in people's social networks which have an effect on their health and their health seeking behaviour. Thus the medical students appreciate the socioeconomic dynamics of the people.
- Under the decentralization governance approach in Uganda, most key decisions

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Makerere University College of Health Science s Students working in the community: COBERS exposes students to diverse socio-economic conditions to develop interest in working there.

It's a day at a time: Undergraduate

Students finally compete for research Funds

Ismael Kawooya (MBChB V)



Time check is 0500hrs, my fingers are gliding across the keyboard like a dancer's winning move; only they are doing it better. The mind is

concentrating as I pore over the paper on my floor to be sure of the references that I am making. One mosquito in its ill-advised mind buzzes around me in an attempt to seek my attention in vain, only to receive a fatal smack. Just as my irritating alarm went off.

Ok, so if you are wondering why I'm up this early, I should first brief you; (not the CIA or FBI nature) what this is all about. This has been a tough 2 weeks; I am at the helm of the most successful students' club in the history of the College of Health sciences at Makerere University; the Research and Writers Club.

Before I digress completely from my story; I hope you knew this was a story to start with. It has been tough; running this club. It means meeting endless deadlines for the different tasks at hand and they have been quite many. For the purposes of this article however, I will focus on the MESAU call for students' proposals within its consortium universities.

For those who aren't acquainted with the acronyms MESAU or MEPI let me brief you first. They stand for Medical Education for Equitable Services to All Ugandans (MESAU) and Medical Education Partnership Initiative respectively. This is the biggest grant ever in any Ugandan institution and it promises good things only to "nice" undergraduate students in the consortium universities (MakCHS, MUST, KIU, Gulu and Busitema).

Not that it exactly states "nice" but you know what I mean; you need to be focused. It surely is the best thing to have happened at the College of Health Sciences yet. Of course with the current Principal still around students have a lot to look up for.

This I hope is a good, albeit long,

introduction of MESAU/MEPI to those who had no idea what it is. Now, back to my story telling! The call for students' proposals promises to fund the best students' proposals with \$3000 to carry out research and publish.

The days leading to the deadline were energy draining as, since I told you who I happen to be, I had to make sure I come up with a befitting proposal. This has been one of the most fulfilling learning experiences for not only me but all those students interested in research and one that will surely be a stepping stone for the students and the research and writers' club alike.

During that short time I had to employ a bee's mercurial focus to get this done. Simply stated as the adage goes "the juice will be worth the squeeze". Quite an exhilarating experience, I should add.

Although the concept of undergraduate research at first seemed alien, at most intimidating and abhorred by students, the number that decided to participate is very encouraging.

This has been the first call for students' proposals and for a club that has been carrying out various research aid tools classes in the evenings, this is what we need to strengthen the objectives and functions of the club (Research and Writers' Club.)

It might have been a dream yesterday, but it surely is fast turning into a reality; one that can't be ignored anymore. It's now only a matter of time when the vision of the club (To be a fountain of an African generation that prides in research and publication) is no longer surreal.

For all those who participated I wish you the best and I know you are winners as the first to grab this opportunity at the College of Health Sciences.

President, Research and Writers' Club/ SEHC

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infection prevention in the labs was to the dot because we were given scrubs to put over our own clothing. There was also an emergency shower in the middle of the lab. But the highlight of the laboratory was this particular **ROBOT** that fascinated us so much. It was carrying out all these experiments on blood samples and blood extracts. A robot in Uganda! Who would have imagined. It carries out experiments meant for a whole day in four hours.

We were taught about male circumcision and how it is carried out. The most common method is the surgical approach. A new method called the Shang ring method is currently being tried out to see and gauge the public response to it.

The day was an eye opener as it showed a side of the health sector in Uganda rarely seen. Listening to what the staff had to say about research work in Uganda, a spark of interest was lit and jolted us into thinking hard about what we really want to do after our five years in medical school. Do we want to spend our entire lives in the theatre or clerking patients? Or can we join the field of research that has been left to a few who are courageous enough?

This question is not for us alone but for all the medical students out there. You can decide to specialize in a certain field of medicine. Or you can try doing research work for your elective or you can even intern at a research centre.

The mentorship provided under MESAU can really help in making the right decision.

The authors are Year 1 medical students at MakCHS

'I am Glad I Volunteered: IT is Worth Every Effort'

By Eliaililia Okello, MakCHS

MESAU COBERS evaluation team is made up of members from the six institutions in the MESAU consortium. I do not know how the other participating institutions identified the members of the team, but I know members from Makerere College of Health Sciences were asked to volunteer, so I volunteered. When I volunteered I was not sure how this was supposed to work out because the individuals making up the committee were busy individuals with multiple roles in their institutions and departments.

The team has had a number of meetings-- both teleconference and rotational face to face meetings. In these meetings members of the committee have been able to develop evaluation domains, objectives, tools and manuals. I have been privileged to participate in most of these meetings except the most recent. The most striking features of this team have been its ability to keep the consortium spirit and commitment by having members from all the institutions in the consortium participate in all the meetings and reach consensus on evaluation design, evaluation tools and implementation plan.

As an individual, being part of this team has given me an opportunity not only to work with people who have diverse wealth of knowledge and skills but also to experience the value of commitment and team work. For me, one of the most inspiring experiences has been working with people that I look up to and seeing them show not only how to share with others what you know but also how to learn from others what you do not know. I am glad I volunteered. I remember one of my mentors saying this to me "You have volunteered but remember, you may have an excuse if someone gave you an assignment but when you volunteer for an assignment you ought to do it well". For me, this was an additional lesson about commitment.

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Mbarara University of Science and Technology Students get a say in Curriculum Review

were taken in well and our opinions were equally considered as well as sought.

The lunch break came too soon. The food was great and it meticulously played its role of replenishing the ATP supply from our bodies' power houses. We resumed the workshop after a brief rest with an introduction to the **six steps** curriculum development. This concept we were to apply during the curriculum review process. Our opinions were hungrily canvassed for by all the departments both clinical and pre-clinical. Unfortunately, the demand was greater than the supply so we couldn't fully supply our 'services' to each department. We felt appreciated and valued. Indeed some lecturers even wooed us into joining their department curriculum review discussions while others made every effort within their means to ensure that we were not wooed away by other departments. It was equally gratifying to bring out the vast problems and challenges students encounter during their stay at campus.

The next two days were not any different from the first day. We would have brain storming sessions, presentations and later we would go

back to groups at department level to continue with the **six step** curriculum development process. The sessions were not only informative but also interactive. Our interaction with the lecturers improved the student-lecturer relationship which is crucial in knowledge delivery. We hope that students' participation in issues related to their training is maintained.

The end came too soon. On Sunday the Associate Dean announced that we had to check out of our hotel rooms. We hoped the session had been longer so that all issues would be extensively discussed, but especially so that we would further delay our return from the comfortable life at the hotel to the usual life back at campus. Later that evening we set off back to Mbarara after another long but interesting day which was characterized by very interesting discussions on each course reviewed and not to forget the multi-denominational Sunday service.

About 2 hours later we were warmly welcomed back in Mbarara by the usual darkness. The only consolation was that we all felt appreciated and valued, though pretty tired.



The MUST Curriculum review team which included Department Heads, Course leaders, Program Heads and Associate Deans

Makerere University – Case Western Reserve University Collaboration Strengthens Capacity to Manage Non Communicable Diseases

For over 20 years, Case Western Reserve University (CWRU), USA, has contributed significantly to capacity building efforts in Uganda at Mulago Hospital, Makerere University School of Medicine, and the Joint Clinical Research Centre. In this context, we celebrate the recent extension of the CWRU collaboration beyond HIV and infectious diseases to the important emerging area of non-communicable diseases with a focus in cardiology. This collaboration has been fostered with the support of the MEPI-CVD linked award from the NIH, but the additional contributions and efforts of the Case Western faculty beyond the scope of the grant have been transformational. Highlights of this collaboration over the past year include the following:

- In May 2011, a CWRU team led by Dr. Robert Salata (Executive Vice-Chair of the Department of Medicine and Chief of the Division of Infectious Diseases and HIV Medicine) traveled to Uganda with Dr. Daniel Simon (Chief of the Division of Cardiology), Drs. Rich Josephson and Carl Orringer (senior cardiology faculty members), and Dr. Chris Longenecker (chief cardiology fellow). In addition to visiting with members of the Makerere University faculty, they also rounded on patients in the hypertension clinic and on Ward 4C, Mulago Hospital. This experience generated much discussion of potential research projects and areas for focused capacity building. They met with the bright young MMed students to provide feedback on cardiology research projects and connected them with CWRU co-mentors, many of whom are leading experts in their field.
- This initial visit to Uganda was followed by an exchange in November 2011, jointly funded by MEPI and CWRU, in which two Ugandan physicians (Dr. James Kayima and Dr.

Noela Owarwo) visited CWRU to observe cardiovascular services and obtain hands-on training in research technologies such as carotid ultrasound imaging. Because of a productive meeting with CWRU Distinguished Professor Dr. Robert Elston, a collaboration developed with the Department of Genetics and Epidemiology that resulted in an NIH grant submission to study the genetics of hypertension in Uganda.

- In December 2011, Dr. Longenecker returned to Uganda with Dr. Salata to deliver a CX50 state-of-the-art portable cardiac ultrasound from Phillips Healthcare.

of Science and Technology.

- The MEPI cardiovascular disease survey in Wakiso District began in February 2012 with important technical assistance from the CWRU faculty. This project promises to serve as a framework for future research collaborations, including a project on rheumatic heart disease led by Dr. Babak Moini (CWRU resident physician in pediatrics and internal medicine) with the mentorship of Drs. Kayima, Mondo, Salata, and Longenecker.
- Finally, CWRU is looking forward to returning in August 2012, to help perform some of the first mitral valvuloplasties for rheumatic mitral stenosis in



The team poses for a group photo after their work in Mulago hospital

This device is currently on loan, but efforts at securing a permanent donation are progressing nicely. During this visit, Dr. Longenecker had a memorable visit to Mbarara with Dr. Kayima and Owarwo, and together they made a commitment towards building cardiovascular diagnostics capacity at Mbarara University

the new Uganda Heart Institute cardiac catheterization laboratory.

As evidenced by the efforts described above, the CWRU collaboration remains a vital contributor to capacity building efforts in Uganda. We are excited about the promise for growth that this ongoing relationship brings to Makerere and Mbarara universities.

E-LEARNING FACILITIES TAKE MAKCHS A NOTCH HIGHER IN THE DELIVERY OF KNOWLEDGE

By E-learning Coordinating Team

Grand rounds feature commonly in most medical schools where they are events for sharing recent knowledge on interesting or challenging cases/topics by different disciplines. At the Makerere University College of Health Sciences, the local grand rounds have been held from time immemorial every Tuesday and Thursday afternoon. The responsibility for organizing the grand rounds is shared by the different disciplines with the clinical disciplines of surgery, medicine, pediatrics and obstetrics taking the lead. Occasionally one of the basic science departments may take the lead though the practice is to combine all disciplines so that the knowledge from various experts is used to explain the patients' problem for local grand rounds based on an actual patient history.

For students, local grand rounds offer a wonderful opportunity to quickly gain knowledge about a particular topic from various experts in a short time. This is made possible by the fact that most of the local grand rounds are arranged to start with a case presentation complete with history and examination findings. In some unique instances, the patient will be available to answer additional questions from the panel of experts in case they think something was left out. The case presentation is followed by a series of discussions that explore different angles of management and eventual prevention. By observing the interactions of the panel of experts, the students are introduced to the norms and cultures of the medical profession. Seeing a professor thinking through an answer to a challenging question would teach the student various aspects of problem solving. Seeing a group of consultants ethically dealing with a patient would enforce the need to observe medical ethics. The level of interaction by the different panelists offers an opportunity to see teamwork in action. This is how the student later would approach the same condition in a clinical setting. This makes the local grand round a unique opportunity for mentoring the next generation of health professionals in the art of clinical practice. This makes the local



grand round a very important learning opportunity for the health professional student.

The MESAU- MEPI collaboration; a consortium of all the Ugandan health professional training institutions and John Hopkins University from USA started in 2010. One of the objectives of the consortium was to improve the training of health professional students in the country. One of the platforms for this improvement is through the use of the internet to promote e-learning. One of the approaches identified to introduce e-learning to the partner universities is through the use of international grand rounds. These international grand rounds differ from the above mentioned local grand rounds with respect to the use of the internet to bring together participants at different geographical locations and later for those that view the recordings at different times. The idea for the international grand rounds builds on the experience of Johns Hopkins University working with Ethiopia and India. In the case of Ethiopia, there are close to 300 recorded presentations each of which have been viewed over a thousand times with participants from all over the world. For these two locations, the program has matured

and is locally owned.

The introduction of the international grand rounds to the MESAU partner universities comes with many initial challenges.

From the organizers perspective it is important to ensure that the local grand rounds continued as scheduled. This has required that the international grand rounds are packaged in such a way as to be seen as both beneficial and complementary to the local grand rounds, local teaching and the development of local institutional research capacity. Initial efforts focused on setting up e-learning committees in each of the institutions followed by a period of sharing ideas on how to organize the grand rounds with heads of departments using the experience of John Hopkins University as a reference point. These communication efforts were accompanied by the identification of pilot topics to show case what could be done with the international grand round. For this particular activity, the Makerere University College of Health Sciences has led the way by taking advantage of the previously installed video conference capacity in Davies Lecture Theater. These initial topics were on

E-LEARNING FACILITIES TAKE MAKCHS A NOTCH HIGHER IN THE DELIVERY OF KNOWLEDGE



A Grand round on PMTCT between MakCHS, JHU and JIMMA University of Ethiopia

student mental health, a case series on interesting Neuro pathology, and finally PMTCT in Uganda. The session was attended by 122 Participants in the Davis Lecture Theater and recordings of these sessions are available on the John Hopkins site

(<http://webcast.jhu.edu/mediasite/SilverlightPlayer/Default.aspx?peid=290b2a6b08d84e53a8959f43ef1973131d>) and as DVD to the different partner intuitions for use by student and faculty.

The challenges with this kind of arrangement include the differences in time zones, securing band width and the need to synchronize the depth of the content so as not to lose the students.

The other challenge with the introduction of the international grand rounds has been to ensure that all the partner universities participate equally in all aspects of this activity. To put this into context one needs to note that it is only until recently that the East African nations got a fiber optic connection to the internet via the Seacom and EASY under water sea cables going around the African continent. Before the arrival of the underwater sea cables, internet based communication was expensive and slow as internet traffic from and to the region had to go via satellite to Europe to join the information super

high way. As the infrastructure to support the consumption of this new available access to the internet put up by government and the private sector there is a need to develop the local institutional capacity to ensure that there is proper use of internet access for activities relevant to the mission of the different universities. To make this possible the MESAU collaboration has carried out Information Technology needs assessments to support distance learning at each of the participating Universities. Implementation of the recommendations from the assessments should see all the partner universities taking part in the international grand rounds on an equal footing.

Three international grand rounds later, one may ask what has been the effect of introducing this e-learning activity to the partnership. There is the obvious effect seen with the institutions quickly adopting the recommendations of the needs assessment so as not to miss out in participating in the grand rounds. The other has been the innovation of student targeted international grand rounds. Early 2012 an international grand round was organized for first year undergraduate students by a visiting team of cardiothoracic surgeons. During this grand round a group of 200 first year students participated with their first year undergraduate colleagues at John Hopkins University.

This international grand round was a success in that it got the attention of the final year students who asked for the immediate arrangement of an international grand round with fellow final year students in John Hopkins University. The students also asked for setting up of communication using the social networking sites like www.facebook.com to promote further interaction. These international grand rounds, are being organized in such a way as to maintain the rigor and quality of presentation targeted for the faculty international grand rounds.

Looking forward, the introduction of international grand rounds offers the MESAU partner institutions a unique opportunity to take advantage of the opportunities offered by the internet to share and record their experiences for teaching the current and future generations of health professional students. Over time, we hope to see greater ownership and local user driven development of international grand round topics and content. This is important for the international grand round to become a sustainable and relevant activity. Finally, the international grand rounds should act as a catalyst for new research projects and cross-institutional collaborations arising from the enthusiasm we are now seeing in the students and faculty as they participate in these grand rounds.

COMMUNITY BASED EDUCATION CONTRIBUTES TO DEVELOPMENT OF SOCIAL ENTREPRENEURSHIP SKILLS

24-year old Charles Batte, Makerere University College of Health Sciences 4th year medical student did his country and university proud when he emerged winner of the stiffly-competed for 'Your Big Year Competition 2012', beating 60,000 competitors to win the "Global Ambassador for Social Entrepreneurship".

MakCHS Communications Officer Ms. Milly Nattimba talked to Charles about the award and the social entrepreneurial work he does. Below are excerpts of the interview

1. Charles, at your age, you have achieved many things that even people twice your age can only dream about. What inspires you to do the kind of things you do, that have generated this kind of exposure for you?

I was born in a slum in Kamwokya; people in that community had (and still have) challenges. Many opportunities pass by them, there are high levels of

unemployment, there is poor delivery of services and incomes levels are extremely low.

From a tender age, I developed a sense of social responsibility; a need to serve my community; to bring change in the lives of my people. After my Senior Six vacation, I decided to do something; I started working and saved some money for a small farm back in my village in Mpigi. My priority was to help my parents lift their economic burden and create jobs for the people in the village. My ambition is to see this grow bigger so that I can extend it to Kamwokya; do something relevant for the people of Kamwokya.

My goal was to create a model self-sustaining community; later on when the farm grows and the idea takes root; I want to start other initiatives. I have started fundraising money for a health centre to be established in my village; I want to see schools coming up. I am doing this fundraising with the support of friends in Europe; we are building web portals through which money can be raised. Of course the communities that are to benefit from these initiatives also

contribute to building the enterprise; their labour is critical.

2. What does it take to be a successful social entrepreneur?

It requires commitment to a particular community; drive to change that community; provision of services with a high sense of social responsibility and financial discipline.

If your sole purpose is to accumulate wealth, then you cannot succeed as a social entrepreneur. You have to keep giving back and continuously improve the conditions of the community you serve. You create a business, but your sole purpose is not only getting profit; you are changing the lives of the people your business serves.

3. What does it make you feel like, emerging winner and beating 60,000 people to the prize?

First of all, it makes me feel very happy; I won the competition. But I also feel an overwhelming sense of responsibility. I



Left; Charles Batte holding his award and right; a close up of the award

COMMUNITY BASED EDUCATION CONTRIBUTES TO DEVELOPMENT OF SOCIAL ENTREPRENEURSHIP SKILLS

have to travel around the world, inspiring young people. However, this gives me a platform to further my dream; I hope to get like-minded people to work with in other parts of the world.

4. How do you plan to balance the enormous responsibilities this gives you and your hectic study schedule as a medical student?

I have always been good at balancing multiple tasks and responsibilities; I have part time jobs that I do as I study. My most important asset is knowing how to manage my time really well. When it is study time, nothing gets in the way, when it is time to do my other things, that time is protected too! But now that this new development involves travel, I will work with management at the College of Health Sciences and the organisation I represent, Smaller Earth, to come up with a workable arrangement that does not hurt any part of my life.

5. How do you think, your medical training here at Makerere University College of Health Sciences, has contributed to the kind of person you are today?

Community Based Education and Service has helped me appreciate further the problems that exist in communities; especially those that are far from the city; their need for better services. Over the last four years of community training, my

sense of social responsibility has grown even deeper. Originally, my dream was to become a cardiothoracic surgeon and work abroad. Now, I want to stay home and help the people that brought me up.

6. Just how possible is it to balance medical practice and social entrepreneurial responsibilities?

The world today needs good managers; medical schools today should train students in these skills, so that they are able to provide medical services as well as other services that the community they serve may need. Here at CHS, we are trained to provide holistic care; care for people medically as well as caring about their socio-economic and other needs. Overall, the well being of the individual is addressed.

7. What could be the possible impact of your achievements (the award and the achievements you have registered in social entrepreneurship) to the training of health professionals in Uganda?

A sense of social responsibility should be nurtured in students in medical schools; or even earlier before they join university. They would get attached to serving the community; it would increase the number of health workers in the country and also help address the health worker retention gap, especially

in rural areas. If doctors have knowledge that they can do something else in the community that benefits them as well as the community, there would be no need to run out of the country chasing green pasture dreams. Social entrepreneurship lets you do your work as well as something else you can earn from and also benefit the community.

To read more about social entrepreneurship, please check this website <http://www.ashoka.org/social-entrepreneur>

Smaller Earth's Your Big Year is a global talent programme that gives young entrepreneurs from around the world the chance to win the unique year-long placement. This year the competition, which is run by Liverpool-based entrepreneur Chris Arnold and sponsored by Mazaars, received over 60,000 entries from 221 countries. 16 finalists from 14 countries were selected and flown to England where they took part in a week of business, media and social enterprise challenges which included pitching to the likes of Sir Richard Branson, Sir Terry Leahy and Martha Lane Fox.

Why Community-Based Education?



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and appointments are made by the districts. COBERS is therefore an excellent opportunity for bonding between the health care workers –to- be and their potential employers; the district authorities. The students are expected to always brief and debrief the district leadership about their activities, when the students implement a community health project with the aim of helping communities

solve priority health concerns.

- In the recent past, complaints have been raised about the attitude of the health care workers in the health facilities in the country, and hence a poor relationship between the facility workers and the community. COBERS is envisaged to improve this relationship and improve health seeking behaviour. Already, evaluations have shown that

patient attendance in the facilities increases at the time of student placement. This is due in part to reduced waiting time the patients take at the facilities when the COBERS students are at the sites.

- COBERS offers an opportunity for the students to participate in health care delivery through supporting the facility staff. This offers the students a platform to have hands-on learning.

That Memorable trip to Rakai Health Sciences Program

By Fahad Ntale



The name 'Rakai Health Sciences Program (RHSP)' did not sound any bit familiar as a colleague called me up on phone to inform me of the upcoming Research and Writer Club

trip slated for the 19th of December 2011. The only thing I could have told you about Rakai before the trip was of something that I had heard that "that's where the first cases of HIV were first recorded in Uganda." Feeling adventurous, I told Kenneth to sign me up for the trip. I was yet to find out that there is a lot of ground breaking research that has been done by the RHSP. For us young researchers and writers, this is the kind of inspiration we need to roll ahead.

As part of a team of 16 students; all members of the Research and Writer's Club, we made way to Rakai in our College van on a bright sunny Monday morning. I never cease to appreciate the splendid greenery Uganda boasts of; as one journeys on its highways away from the capital city, it creates a serene soothing environment. Even this time, it was ever so wonderful.

To get to Rakai from Kampala one travels to the West, through the districts of Wakiso and Mpigi, then through Masaka taking a more southerly direction this time and soon you are in Rakai. Google maps places the travel distance between Kampala and Rakai at around 191.48 km to 208.12 km. With no stops made during our journey, the trip took us close to two and a half hours to reach the research facility. Not such a bumpy ride as I had expected since the road was in a fairly good condition. Only a few final touches and the Kampala-Masaka highway will be much better than before- not world

standard, just better than before.

Standing in line as we waited to be registered before getting clearance, I appreciated the splendor of structural organization and hygiene that lay before us. One of the scenes of the art pieces hanged up within the structure depicted health professionals sensitizing and most of all carrying out circumcision community outreaches. The whole reception so far combined with the surrounding art full of science and the community would give you a feeling of being in a scientific facility that does care for the community.

We were warmly received by Mr. Balikuddembe Ambrose (Transport Coordinator), Ms. Nakawesa Goretta (Administrative Secretary) and Mr. Mugamba Steven (Supervisor; community mobilization / Health Education).

We were introduced to some of the history of the Program by Mr. Mugamba.



Members of the Research and Writer's Club and staff at the entrance to the Rakai Health Sciences Program Research Facility



The Shang Ring

He said that it was originally known as Rakai Project before being later renamed, the Rakai Health Sciences Program. It was initially started to respond to the AIDS epidemic of which the 1st recorded cases were in a place called Kansensero in Rakai district. With effect, two doctors were sent to Rakai to investigate the new disease; one of which was Professor Nelson Ssewankambo.

Mr. Mugamba went on to say that the facility is both research and service (towards the community) oriented. One of the recent research done was that circumcision gives 60% protection to HIV negative men against HIV infection, prompting circumcision to be



Demonstration of Shang Ring with a dummy penis

put among the top preventive measures against HIV contraction in Uganda. He said that among the so many things they do in the community include health education, condom promotion where they give out condoms freely to those that require them and have even stationed sales-people throughout the community to sell them at subsidized prices below 500 Uganda Shillings.

Dr. Rajab Kakaire who is in charge of the circumcision study at the facility told us a lot about the circumcision program but interesting of all was the Shang Ring study. The Shang Ring is

one of the modalities for conducting circumcision and was invented by a Chinese called Jianzhong Shang. Dr. Kakaire said that the device has been in use in China for about 6 year now. Its feasibility, safety and efficiency for use among Ugandans are currently being investigated at the facility. He said that among its advantages as compared to the conventional surgical methods of circumcision includes: the operation takes much less time, does not require suturing and it can be performed by less experienced personnel.

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MESAU COBERS Evaluation: A Consortium Approach

meetings outlined above had representatives of all Ugandan MESAU institutions. The sense of ownership and a passion for the planned COBERS evaluation has been and still is very tangible.

- When leaders lead by example by getting down and dirty in the trenches, the rest of the team is inspired and the impact on their motivation is immense.
- The participatory approach has allowed each individual make their unique contribution, and has allowed faculty of different

academic ranks from Professors to Teaching Assistants sit at the same table and discuss as colleagues. This was described by a member as *“a powerful experience”*.

- Holding meetings physically at the different campuses reflects that each institution is a valued member of the Consortium.
- Working together in the field and sharing food and drink are an important way of building a team that works across institutions. The team spirit that has been

built is very genuine.

- Providing space for mutual learning and learning from each other was very evident during the session on qualitative research in Gulu.
- With the above points it does not matter that one institution in a Consortium is nearly 90 years old, while another is just a few years; what matters is that each institutions has something to bring to the table.

Inadequate use of evidence in clinical practice; where is the problem?

To mention that dialogues should be attended by every one is rather an understatement of the year as these events that happen once every month are exceptional. They are something that all should look forward to, as for those who have attended can testify. Wednesday, the 7th March, 2012 the Research and Writers' club held its 3rd dialogue since inception; and boy was it something. Dubbed Evidence Based Medicine and Practice in Uganda, it was a revealing of so many clinical implications we have in Uganda where health professionals are acting at the switch level. At this dialogue the processors were demanded to be used as one of the presenters remarked "Family planning is so important that it has been proven that you can't die from pregnancy related causes if you are not gravid."

The cuisine of the presenters was awesome, seasoned researchers and respected members of the profession, Prof. J.K. Tumwine and Assoc. Prof. J. Lule, which increased the billing of the event.

With 48 students in attendance in Davis Lecture Theatre the majority of students arrived when we were winding up. The dialogue started with a preamble by Assoc. Prof. J. Lule who explored the scope of evidence based medicine and what it means for the practice. Indeed, after his presentation many young minds were racing in thought; this is something we hear of from our visiting friends (international students.)

In Prof. Tumwine's presentation, students got to know that actually little effort is being put in by the clinicians and the students alike to appreciate the weight of evidence. With his usual remarkable stance he went on about various evidence available that is being ignored like "onchocerciasis causing nodding head disease proven by people from the college in Sudan at

the request of UNICEF"; "Zinc reduces mortality of HIV infected children with severe pneumonia" and of course "chloroquine is a futile prophylaxis to the sickle cell children contrary to what is happening in Mulago."

Dialogues aren't complete without the input of the audience and the response from participants was overwhelming.

Questions of the afternoon included:

1. "Textbooks have enough evidence there and they are what we use. What then is the difference with the evidence based medicine being talked about?" Prof. Tumwine noted that the latest text book is using evidence of 5 years back. The question is always what the latest information is.
2. "Why is the information we have not applied and who is supposed to practice this evidence based medicine?" it was noted that the gap between researcher's data and the clinicians should be bridged so that we practice evidence based

medicine right here in Mulago and the College of Health Sciences. It is important to note that the once big gap between researchers at the universities and the Ministry of Health policy makers is now being bridged. Under the research and writers' club, I would propose a team of students aiming at reporting the latest information within and out of the College. This information should be delivered to the members of the College through the club's website and other avenues so that there is a continuance flow of information and its applicability. This shall of course, be in conjunction with all the journal clubs within the College of Health Sciences. It's still a dream at the moment, but I believe we can make use of research existing in the College of Health Sciences for better medical practice in Uganda.

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Students and some members of staff during one of the dialogues for students