

# CIME

CENTRE FOR INNOVATION IN MEDICAL EDUCATION



آغا خان یونیورسٹی

THE AGA KHAN UNIVERSITY

Newsletter | September 2017



For More Pictures: 

## The team at CIME successfully launch first clinical simulation workshop

On August 24 2017, an action-packed three-hour workshop attracted 36 applicants from whom the first 20 were selected to pilot a showcase of everything that CIME has to offer. The workshop's educational framework employed elements from the Flipped Classroom approach, team-based learning methods, group work and features of simulation-based education such as scenario writing, role play and simulated practice with debriefing. All these activities were facilitated using audiovisual, IT, and biomedical engineering expertise: all home grown and honed in CIME. Participants were from different specialties including Obstetrics and Gynecology, Pediatrics, Nursing Education Services (NES), Biological and Biomedical Sciences, Ophthalmology and Clinical Microbiology.

The overall aim was to demonstrate, through active participation and 'just-in-time' learning, how accessible simulation based and technology-enhanced education can be. The workshop enabled us to guide a group of clinical experts,

who were novices in simulation based education, to produce one technology-enhanced simulation from concept to enactment. Three more simulations are at the early stages of development and the very positive evaluations we received demonstrate that we achieved our objective. Credit goes to the participants many of whom gave as much as they got during this highly interactive afternoon.

It can be a risky strategy putting learning into the hands of learners but these risks are readily managed using the latest educational and communications technologies at CIME. No-one was injured or damaged: even the mannequin recovered from septic shock in double-quick time. We are now confident that we need only make minor adjustments before offering this workshop every month, starting in September, with more intensive workshops to follow. Tailored workshops can also be offered to individual departments and to external groups. Please refer to the flyer at the end of this newsletter for more information.

## Raising the standards of health for mothers and children in Central and South Asia

Faculty from the Division of Women and Child Health at Aga Khan University (AKU) conducted seven days of intensive training on maternal, neonatal, child health issues and nutrition concerns for health care providers from Pakistan, Tajikistan and Afghanistan from August 7 to 13, 2017. This programme has trained 154 professionals to date, at CIME, in 8 separate workshops. The course curriculum was developed after a careful needs assessment exercise and was tailored to the particular needs of each country.



Dr Sajid Soofi, associate professor at the department of paediatrics and child health is the director of this programme which is one element of our efforts under the Central Asia Health System Strengthening Project (CAHSS). This project, which is funded by the Department of Foreign Affairs and Trade Development, Canada, and the Aga Khan Foundation (AKF), is aimed at strengthening service delivery, fostering professional and continuing education, reinforcing community health promotion, and promoting learning to improve health in Central Asia, Afghanistan and Pakistan.

Teaching was interactive and varied combining the use of video, hands-on-practice with the help of newborn and maternal advanced mannequins, simulations and clinical case studies. CIME Champion Dr Farheen Yousuf, assistant professor in the department of obstetrics and gynaecology, even used a novel teaching technique using the papaya fruit as a simulation aid. She explained:

“Papaya, internally, can substitute for a female uterus and is a reliable and cheap model that can be used for teaching and assessing some obstetric procedures. Haemorrhage is the leading cause of maternal mortality in our region. This could be postpartum or after a miscarriage. Manual vacuum aspiration can be effectively taught on the papaya simulator and once mastered, the skills gained can be used in practice to minimise the morbidity related to miscarriage.”

All in all, the workshop’s methods represented how innovative teaching methods can be very effective.



## Successful ophthalmology sessions

Three successful workshops were held at the CIME on Thursday August 17, 2017. Each workshop focused on different skills:

- Fundus Simulator Training Workshop, conducted by Dr Irfan Jeeva, assistant professor in ophthalmology (surgery). He used the 3-D funduscopy simulator to enhance the skills of fundus examination technique in a group of enthusiastic conference participants.
- Dr Rehman Siddiqui, lecturer in surgery, offered a retinal surgery workshop on the Eyesi Simulator to provide trainees with hands-on practice. This high-end virtual reality simulator provides an interactive, three dimensional learning environment with a high degree of realism.
- Dr Sharmeen Akram, assistant professor in surgery, offered a workshop on LASIK flaps. In order to understand how LASIK eye surgery works, it is important to understand the necessity and function of the LASIK flap.

## Scientific events

Polycystic Ovarian syndrome was the subject of the latest of several BAYER scientific events. The session was held on August 9, 2017 at the multipurpose hall. Consultants from different health care centers attended the session. It was very well evaluated even though the timing was not conducive to a full house.

Professor Charles Docherty was invited to give a short presentation on how to incorporate simulation in teaching and learning. He identified the cultural barriers to male students accessing female patients to acquire relevant skills and competencies. This is the case in many parts of the world not only in Pakistan, and showcases the crucial role that simulation can play.

Within AKU, obstetrics and gynaecology, midwifery, and undergraduate medicine and nursing programmes will soon have access to a whole raft of different simulation equipment to help all learners, female and male, to more readily achieve their curricular objectives.



## Heart attack on a plate

Lipids and Arterial Disease were the subject of a scientific session supported by Getz Pharma at CIME on August 8, 2017. The session was very well-attended with hardly a spare seat in CIME's multipurpose hall.

Professor Peter Lansberg, lipidologist and senior staff member of the Academic Medical Centre in Amsterdam, Netherlands, presented an informative, interactive lecture entitled 'Primary Prevention and Its Role in Managing Dyslipidemia, and the evidence based role of Statins'. It was captivating, and a good example of how to use seamlessly use audience participation technology in a lecture.

The accompanying breakfast of fried paratha, fried chicken sausage and fried omelette with milky tea, although traditional, seemed less appealing in light of his talk. The speaker's prediction of a "tsunami of cardiac disease poised to break over Pakistan" gave us all food for thought about providing healthy options at events. Even though this type of food is so delicious and satisfying, we should be able to cater events without giving people a 'Heart Attack on a Plate' (a Scottish saying – only we have a worse problem - deep-fried Mars bars!)



Mr Khalid Mahmood, chief executive officer at Getz Pharma, and Professor Lansberg went on a tour of the CIME after the event.

## Blog: a medical student's encounter with the Harvey simulator. SPIE is beginning to mentor students. This account is from first session.

*“During our rotation in Internal Medicine in year 3, we had the opportunity of coming across a plethora of patients, including those with cardiac problems. This gave us the opportunity to listen to heart murmurs. However, nothing came close to the experience that we had with Harvey, the one patient to rule them all. Training with Harvey gave us the opportunity to listen to almost every possible heart murmur in a controlled environment.*

*“The best thing about Harvey was that we could take as long as we wanted to listen to the murmurs, without him objecting or making a weird face. What was truly remarkable was the use of remote stethoscopes. We used them to allow each individual to practice the placement of the stethoscope while the rest could follow along. This allowed us to compare and discuss our understanding of the murmurs in a productive and helpful way, especially since the murmurs were reproducible on request.*

*“Our overall experience with Harvey was absolutely phenomenal. Getting familiar with the setup made it easier for us to approach this situation in the exam and helped us feel more comfortable, thus allowing us to focus on the murmurs more than the simulator. The only regret I have is that I wish I'd met Harvey during the beginning of Internal Medicine so that he could have helped me better understand murmurs on patients. It was the best of experiences and I'll be back to see him soon.” - Year 3 medical student Zaid Qureshi.*



Here are some of the comments from our visitor's book.

Dr Bashir Jiwani, ethicist and director of the Fraser Health Ethics Services and Diversity said: “Incredible experience! This could save lives in future. I would now like to come all the way to Pakistan if required.”

Mr Rafeeq Jiwani said: “This is an inspirational facility! The incredible technology and passion of people speaks hope for the influence.”

*There were many more workshops and events this month than we have room to describe here. Our facebook pages document these as they occur.*



# Clinical Simulation Workshop

## Change the way you teach!

During this workshop you will learn that -

1. You are part of a team that delivers education using technology: you are not alone!
2. Our technology in CIME can help you teach in different ways
3. The people at CIME will carry the 'technology burden' leaving you to concentrate on your students' learning.
4. Managing large numbers of students is a challenge, it is not impossible!
5. There is no situation where technology cannot provide benefits to learning.
6. If you bring details of what you want to teach, and when, we can do on-the-spot room booking, equipment booking, and specifications for all you need to prepare for your session including helping create realistic scenarios, how to manage debriefing, and support with dry-run and practice sessions.

### Workshop Details

**Date:** Friday, September 22, 2017

**Time:** 2 to 5 PM

**For Registration Contact:** Ms. Nazleen Punjwani  
(Ext: 3701 or [nazleen.punjwani@aku.edu](mailto:nazleen.punjwani@aku.edu))

### Next Workshops in 2017

October 19, November 16 and December 14



***Last Few Seats!***