

## New training methods for disaster management

A new way of training those working in disaster management is being forged through a partnership between the University of Johannesburg's (UJ) Department of Emergency Medical Care (EMC) and Rescue South Africa, responsible for rescue operations in South Africa as well as internationally.

The first African integrated emergency medical care simulation lab, which stimulates real-time medical emergency, was launched at UJ in 2014. The partnership provides rescue workers with the opportunity to develop and refine their skills using simulation technology.

The simulation environment, where the entire patient journey from the scene, to the ambulance, to the Emergency Department, the ICU, to a general ward and even a transfer to another medical facility, will strengthen Urban Search and Rescue Capacity and rescue workers will gain confidence in their ability to perform clinical skills with actual patients.

The simulation of medical scenarios allows learning, practice and repeat procedures, as often as necessary in order to ensure fine-tuned skills and enhanced clinical outcomes.

Emergency services face hampering scenarios says Prof Andre Swart, Executive Dean at the UJ's Faculty of Health Sciences. "When a patient needs emergency medical care near a city centre it is possible to get an ambulance quickly to him or her. However, away from urban environments, responding to an EMC call becomes far more difficult. This project will contribute to the hands-on training of rescue workers by providing clinically accurate simulations in imitated medical emergency settings."

In addition, with simulation, trainees can gain experience with various types of patients and cases they may not actually encounter during their rotations and shifts. This is particularly significant for training in disaster managing emergencies.

Dr Craig Lambert, Head of UJ's Department of Emergency Medical Care (EMC), adds that it is imperative for a fully incorporated curriculum with simulation as a key component of teaching and assessment. "The programme aims to ensure future sustainability. The Simulation Laboratory is part of our ambition to improve the quality of emergency medical care through meaningful solutions, innovations and partnerships. Recognising the shortage and availability of trained and skilled healthcare professionals is an increasing challenge, not only in South Africa, but also across the entire continent. Therefore we place a lot of emphasis on clinical education and training. UJ's Simulation Laboratory is equipped with medical equipment and diagnostic devices intended to facilitate the exposure of emergency care students and academic staff to current medical technologies and adequately prepare them to operate under a pressurised and intense work environment."

Rescue South Africa will provide experienced and qualified employees to manage, coordinate and lecture on the respective programmes. Appropriate implementation training (on a 'train the trainer' basis) will be provided by UJ, which will also assist with the sourcing and appointment of specialist lecturers, moderators, assessors, instructors and academics in the respective programmes.

"Rescue South Africa is committed to enhance successful executions in disaster struck areas. The partnership is a mutually beneficial opportunity, as we are contributing much needed resources to ensure that there is a highly trained and qualified emergency workforce for the public to rely on," continues Swart. "Together, we are helping to transform emergency medical care by enhancing the individual performance of the next generation of healthcare professionals, which will ultimately benefit the patients in the form of good, reliable care. We look forward to a long and sustainable partnership dedicated to training a solid and reliable emergency medical care workforce."