

# The inaugural Defence Chair of Military Medicine and Surgery

Lieutenant Colonel Michael C. Reade MBBS, MPH, DPhil, FCCP, FANZCA, FCICM.



Lieutenant Colonel Michael Reade is Associate Professor of anaesthetics and intensive care medicine at the Austin Hospital / University of Melbourne. In late 2011 he will become the inaugural ADF Professor of Military Medicine and Surgery at the University of Queensland and the Royal Brisbane and Women's Hospital.

Medical research related to conflict in the last ten years has led to better understandings of coagulopathy in trauma, damage control resuscitation and surgery, and the significance of mild traumatic brain injury, to name but a few. In November 2011, ADF health services take a major step into joining productive US and UK military medicine research groups with the appointment of the Defence Professor of Military Medicine and Surgery at the University of Queensland. Embedded in the UQ Burns, Trauma and Critical Care Research Centre, the major focus will be research, with additional mandates to work with the new ADF surgical team at the Royal Brisbane and Women's Hospital, to assist training ADF procedural registrars, and to oversee deployed clinical governance.

The inaugural Defence Professor of Military Medicine and Surgery is Lieutenant Colonel Michael Reade. LTCOL Reade is an intensivist and anaesthetist with a doctorate in applied molecular biology from the University of Oxford and post-doctoral research at the University of Pittsburgh focused on clinical trials. He was until recently an Associate Professor in the Department of Surgery of the University of Melbourne, and the Officer Commanding the Clinical Advisory Group of 6HSC, 3HSB. LTCOL Reade was commissioned as a General Service Officer in 1990. Transferring to the RAAMC after medical qualification, he has served extended exchange postings in the UK and US, and has deployed to Bosnia and Kosovo with the British Airborne Brigade, and East Timor, the Solomon Islands and Afghanistan with 1HSB and 3HSB.

The new Chair will develop trauma-related research themes building on extensive UQ infrastructure. These will initially include:

- **Fluid resuscitation in trauma**, including effectiveness of frozen red cells and platelets in trauma resuscitation, the modulation of trauma-induced coagulopathy and inflammation, and novel methods of preserving and delivering blood clotting factors;
- **Characterisation and initial treatment of acute cognitive impairment** associated with both critical illness and traumatic brain injury;
- **Pharmacological and ventilator management of traumatic lung injury** sustained in blunt or blast trauma; and
- **Management of sepsis in trauma**, including early diagnosis of sepsis and identification of infecting organisms using molecular diagnostics and investigation of methods to reduce bacterial translocation across the bowel wall;
- **Design of trauma systems**, investigating the effectiveness of initial damage control surgery in smaller hospitals compared with longer transport times to major trauma centres.

Each of these themes will benefit both civilian and military patients, and all are examples of the types of collaboration ADF clinician-investigators are invited to consider. The programme will become largely funded by extramural grants over the next 3-5 years. The clinical trials components of these programmes will make use of the world-leading Australian and New Zealand Intensive Care Society Clinical Trials Group and its affiliates.

In time, it is anticipated the Chair will develop a research centre that will support ADF clinician-investigators around Australia. A new ADF Health Research Consultative Group will be formed to which suitably qualified Defence academics will be posted, with access to the laboratories and clinical trials infrastructure at the University of Queensland Centre for Clinical Research. With the possibility of conjunct academic appointments and research degrees at the University of Queensland, the new Chair's 'department' will become the principal Australian centre for research of this nature.