

WITSIE AT THE CUTTING EDGE: Researcher Profile

Professor Guy Richards

Academic Head of the Department of Critical Care



Who are you and what is your academic/scientific training and background?

I am the Academic Head of the Department of Critical Care, University of the Witwatersrand. In 1971 I completed my secondary schooling from Grey High School, Port Elizabeth, where I was also Head Boy. I completed my MBBCh in 1978 from the University of the Witwatersrand, FCP (SA) in 1985 (Coronation Hospital) and my PhD on the mechanisms of smoking induced lung disease in 1992.

I have been awarded the Bobby Grieve Research Award and the Pulmonology Society Junior Research Award in 1987, the T H Bothwell Research Award in 1997 and the Phillip V. Tobias and Convocation Distinguished Teachers Award in 2013. In 2000 I was a Runner-up for best paper at the Critical Care Congress and won the best research paper at this congress in 2005 and in 2009.

In 2001 I was awarded the Best Publication in Critical Care Medicine and Best Paper at the Critical Care Congress in 2001. I was also awarded the Best Presentation Award at the Botswana Medical Association meeting in 2004. In 2008 I was awarded the Best Published Paper. In June 2014, I was co-presenter at the 10th Prestigious Research lecture at the University of the Witwatersrand. The lecture was entitled "Superbugs: are the bugs winning the war?". I was recently promoted to full Professorship at Wits.

Explain the nature of the research that you are currently undertaking.

I am currently investigating the inflammatory effects of new oral anticoagulants, oxidant mediated injury in pneumocystis jiroveci, the outcome and aetiology of community acquired pneumonia in ICU, B-blockade in severe sepsis, charged central venous catheters and the prevention of biofilm formation as well as the prevalence of carbapenem resistant enterobacteriaceae in South Africa.

What do you think is the most pertinent/relevant/significant contribution you have made to research/science/your field?

I have made contributions relating to the appropriate antibiotic use and reduction in resistance i.e. antibiotic stewardship, including a study of prescription practices and their relationship to outcome in South African intensive care units; the documentation of management of *Ebolavirus* and the new variant lassa virus the *Lujovirus*; and the use of corticosteroids in life threatening varicella pneumonia. I have been involved in a study on central venous catheterization, a prospective, randomized double blind study documenting the appropriate duration for use and reduction of line sepsis. I also contributed to the recommendations for intensive care unit and hospital preparations for an influenza epidemic or mass disaster: a summary report of the European Society of Intensive Care Medicine's Task Force for intensive care unit triage during an influenza epidemic or mass disaster.

Did you have a particular mentor or supervisor who inspired you in research?

Professor Ronald Anderson from the Department of Immunology, University of Pretoria and Professor Charles Feldman, Head of the Department of Pulmonology, University of the Witwatersrand.

Tell us about what you do when you're not busy at work and carrying out cutting-edge research.

Play golf and tennis; I enjoy cooking and entertaining; I enjoy travelling and staying in game lodges

Read one of Guy's papers: Guy A Richards, Adrian J Brink, Ross McIntosh, Helen C Steel, Riana Cockeran. Investigation of biofilm formation on a charged intravenous catheter relative to that on a similar but uncharged catheter. *Medical Devices: Evidence and Research* 2014;7 219–224;