



## The Centre for Accident Research and Road Safety – Queensland

presents

**Dr Thomas Balkin,**

**Walter Reed Army Institute of Research, USA**

### *An Analysis of Sleep Loss and Neurocognitive Performance*

The field of sleep research has a long tradition of producing studies entitled “The effects of fatigue on.....”. From an ‘applied science’ standpoint, several of these studies have proven enormously useful – yielding results with clear, readily generalizable implications for real-world applications.

From a ‘basic science’ standpoint, the hope continues to be that the accumulation of information taken from such studies will eventually make clear sleep’s most elusive secrets. That is, it is hoped that results from each study will serve as a “puzzle piece” that incrementally contributes to our knowledge of sleep – a coherent “big picture” revealing the process/es by which sleep subserves waking brain function – achieved when a sufficient number of such puzzle pieces have finally been added.

This seminar discussion will focus on why this strategy has not yet led to any significant revelations regarding the function(s) of sleep - and why it never will.

Dr Balkin joined the Department of Behavioural Biology at Walter Reed Army Institute of Research in 1985, where he developed a research program to evaluate the efficacy and performance effects of sleep-inducing medications and in 1995 was appointed Chief of the Department of Behavioural Biology. With collaborators from the NIH and WRAIR, he has conducted and published studies of functional brain imaging during sleep and wakefulness, sleep and performance, the psychopharmacology of sleep-inducing and stimulant medications, and sleep deprivation.

Dr Balkin has been an invited lecturer and keynote speaker at national and international conferences, government research laboratories, and universities; and has served on a variety of panels addressing topics ranging from the measurement of sleep and performance in outer space to the impact of insomnia on quality of life.

*Date:*

12.30pm – 3pm  
(Including lunch)  
Tuesday 29 March 2011

*Venue:*

IHBI Seminar Room  
Level 4 (Street Level)  
Institute of Health and Biomedical Innovation  
60 Musk Ave  
Kelvin Grove Brisbane QLD 4059

**Registration:** This event is offered free of charge.  
Please RSVP to Clare Murray, Marketing and Events Officer, CARRS-Q, by emailing [clare.murray@qut.edu.au](mailto:clare.murray@qut.edu.au) to secure your place.

**Closing date:** Wednesday 23 March 2011

**Car parking:** Paid parking is available in surrounding streets, or in the Kelvin Grove Urban Village