



# Seminar

## Revealing the pulsatility behind real cortisol secretion: Beyond mere levels

by

**Prof. Phil Evans**

*Psychophysiology & Stress Research group  
University of Westminster, London, UK*

**Date** : 22 May 2017 (Monday)  
**Time** : 12:00 noon - 1:00 pm  
**Venue** : Room Y7302, SS Multi-function Room  
Academic 1, City University of Hong Kong  
**Language** : English

### *Abstract*

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Virtually all psychological, health, and social science investigations which have used cortisol as a biomarker in relation to revealing something about a latent psychosocial construct of stress have been content to analyze and report mere levels of cortisol, as if high or low levels and crude changes in those levels are all they can get from the data. In biologically rooted neuroendocrine research, much more is possible using sophisticated so-called deconvolutional analysis software to separate out the processes of secretion and elimination of hormones which are produced in reality by rapid pulsatile bursts of activity. Psychologists and social scientists are often either ignorant that this is possible at all, or are daunted by the highly mathematical rationale behind the software algorithms, and wary of answers generated by processes they do not entirely understand. I will in this seminar share some exciting findings from the use of analysis techniques which seem to reveal pulsatile secretion in a predictable and reliable manner and at the same time demands no more mathematics than that of the reasonably competent user of SPSS or other conventional statistical software.

### *Biographical Sketch*

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Prof. Phil Evans graduated from the University of Cambridge in psychology and got his PhD from Cardiff in clinical behavioural therapy. In 1990, he moved to Westminster University to co-found the Psychophysiology and Stress Research Group with two close colleagues. The group is now an internationally recognized centre for psychobiology research using salivary bio-measures. Current research projects include a focus on cognition, emotion, and neuroplasticity in older age and associations with the diurnal cortisol cycle, and cortisol as a biomarker in the evaluation of cognitive-behavioural interventions, such as mindfulness. Phil is also a leading advocate for advancing methodology and the use of statistical modelling techniques in psychophysiological research. He has held visiting professor posts at SUNY Stony Brook, USA, University of Hong Kong, City University of Hong Kong and UIB Spain, is a Fellow of the International Organization of Psychophysiology, and for many years editorial board member of its International Journal of Psychophysiology. Phil is the author of four books, several book chapters, and over 100 peer reviewed papers. He is currently a very active Emeritus Professor of Psychology at the University of Westminster.

*All Are Welcome*