

ASSESSMENT OF EXECUTIVE FUNCTIONS

PAUL W. BURGESS

Presentation Sunday 13.00-16.00

Neuropsychological assessment of executive functions presents a challenge. There are three reasons why it is so difficult. The first is the nature of the system under measurement, which presents conceptual and practical psychometric issues beyond those encountered when measuring other cognitive systems. The second is the poverty of the psychometric tools at our disposal. There are many of them, but we know little about what they really measure, and there may be many different reasons why someone might fail them. The third is the lack of an overall decision-making framework for approaching the assessment of any one patient. This is largely a consequence of the way that the field has developed historically, and the differences in the professional demands placed upon clinicians and researchers: these two groups are largely trying to answer different kinds of questions. This workshop will address these issues in detail, with an emphasis upon the different steps one can follow in determining a principled, decision-making approach that is individualised to the assessment of particular clients. In this way one might maximise the chances of detecting problems and minimise the chance of drawing erroneous conclusions.

Although some basics of executive function assessment will be covered, the main emphasis of this workshop will be at a more advanced level, aimed at clinicians and researchers who already have some specialist knowledge. So it would be useful if, in preparation, delegates read the following paper:

*Burgess, P. W., Alderman, N., Forbes, C., Costello, A., Coates, L. M-A., Dawson, D. R., Anderson, N. D., Gilbert, S. J., Dumontheil, I. and Channon, S. (2006) The case for the development and use of "ecologically valid" measures of executive function in experimental and clinical neuropsychology. *Journal of the International Neuropsychological Society* 12, 1-16.*



Paul W. Burgess
Institute of Cognitive
Neuroscience, UCL, 17 Queen
Square, London WC1N 3AR,
UK

Tel. +44 0208 679 1139
www.ucl.ac.uk/neuroscience
E-mail [p.burgess@psychol.
ucl.ac.uk](mailto:p.burgess@psychol.ucl.ac.uk)

Professor Paul Burgess has a longstanding interest in executive functions and the frontal lobes. He has created a number of the neuropsychological tests used in the clinic (e.g. BADS battery, six elements test), and he has contributed greatly to the understanding of the role of the most anterior (rostral) parts of the frontal lobes in the planning and organization of behavior. The rostral prefrontal cortex (area 10) was until recently unknown territory, but thanks to Paul Burgess and his coworkers, this enigmatic part of the brain is finally yielding to scientific efforts ("BA10 is boss"). An initial paper in this research line (Shallice & Burgess, 1991) is among the most cited in neuropsychology (802 citations by last count).