

ABOUT THE TUTOR

Guy Sutton is Honorary Special Lecturer at the University of Nottingham Medical School and Director of Medical Biology Interactive. At Nottingham, he lectures medical students and consultants-in-training on brain structure and function in health and disease. He has held academic appointments at Manchester and Cambridge Universities, lecturing and researching in neuroscience and genetics to a wide range of undergraduate and postgraduate students.

Dr Sutton has been a visiting researcher to universities in the United States and has conducted research projects and data analysis for various organisations, including the Department of Health and the Medical Research Council. In addition to presenting research at various international conferences and writing for academic publications, he has talked about the theoretical and clinical aspects of his research on television and radio. In 2008, he was a keynote speaker at the Human Resources Development World Conference in London, delivering a very successful Masterclass, 'Mind & Brain In The 21<sup>st</sup> Century'.

Dr Sutton has been involved in public and private sector consultancy for several years, working with a wide range of professionals. He is an associate tutor with Villiers Park Educational Trust, Cambridge and the national Young, Gifted & Talented Programme. He is a member of the British Neuroscience Association.

#### ABOUT MBI

MBI (Medical Biology Interactive) delivers one-day and halfday courses, seminars and tutorials in epidemiology, occupational health and the human sciences to the health service, industry and education. All MBI seminars are written and run by academics and health specialists, each of whom has considerable experience in research and its practical applications. Seminars are delivered at the hospital, workplace or school, based on cutting-edge research and current practice benchmarks, and tailored to the needs and concerns of the client.

For further information and full programmes, please contact Dr. Guy Sutton; tel. 07941 039670.

"The seminar was very well received. Officers enjoyed it on both a professional and a personal level. The explanation of terminology was extremely useful and officers made note of how well the content was delivered and how passionately it was presented."

> Mr Rich Alexander Leicestershire Constabulary



#### Seminars & Tutorials For The Health Service, Industry & Education

Director Dr. Guy Sutton

82 Kinross Road Wallasey Wirral CH45 8LJ

Tel. 07941 039670 E-mail: gmsutton@mbi-consultancy.co.uk Web site: www.mbi-consultancy.co.uk



PRESENTS



Exploring The Healthy & The Damaged Brain -A One-Day Seminar For The Police Service

S P E A K E R:

### Dr Guy Sutton

Director, MBI & Honorary Lecturer in Neuroscience, University of Nottingham Medical School

## WHY A BRAIN DAY?

Over the past twenty years there have been astounding advances in our understanding of the workings of the human brain and nervous system. We are now beginning to understand the underlying brain mechanisms which mediate mental functions and human behaviour. Unfortunately, trying to decipher anatomical terms, clinical syndromes and technical procedures used for examining the healthy, damaged and post-mortem brain, can be an unenviable task for the layperson.

The modern police officer will often attend accidents in which head trauma has occurred, and autopsy, when the brain is removed from the cranium and examined, forensically or otherwise. In both settings, and in the Court of Law, comprehension of terminology and procedures employed is important. Brain Day is thus intended to provide the investigating officer with a working knowledge which will greatly aid in understanding medical and scientific information relating to the brain, encountered across different work-based settings.

This tutorial is based around the format of the widely praised and successful MBI Brain Day; a tutorial developed for universities and sixth forms and designed to present students with a comprehensive and stimulating introduction to the brain. Brain Day for the Police Force retains the high standard of presentation set by the above tutorial and introduces material highly relevant to the working police officer.

# AIMS OF THE SEMINAR

There are three main aims to this seminar:

- to provide the police officer with an overview of how the human brain works, illustrating elementary principles of anatomy and brain function.
- to examine what happens when the brain becomes damaged, disorganised and degenerates, with accompanying clinical examples.
- to introduce and make accessible terms and medical procedures which the working police officer is likely to encounter in clinical settings such as hospital and autopsy, and in the Court of Law.

A fascinating one-day seminar designed to provide the modern police officer with an understanding of how the brain works and the effects of traumatic injury, addressing terminology and procedures likely to be encountered in clinical settings and the Court of Law.

© MBI, Medical Biology Interactive, 2009.

### PROGRAMME

Seminar structure *is* flexible and can be tailored to accommodate particular topics. Below is an exemplar programme for the morning.

#### • 9.00-9.10: Introduction & Aims

#### • 9.10-10.10: From Nerve Cells to Brain

An introduction to brain structure: nerve impulses and nerve communication. Genes, brain development and behaviour. Functional brain anatomy: which bits of the brain do what?

#### • 10.10-10.50: Drugs & The Brain

Drugs and how they work on the brain. The biological effects of alcohol, cocaine and ecstasy.

#### Morning Break

#### • 11.15-12.45: The Effects of Brain Damage

Types of brain damage: closed and open head injury. Coma and persistent vegetative state. Defining brain death. Frontal lobe damage and personality change. Temporal lobe damage and memory function. The brain at post-mortem.

Lunch

#### • 1.30-2.30: Mental Illness & The Brain

What we know about mental illness in the 21st century. Schizophrenia and the psychoses. The neural basis of visual hallucinations. Violence and mental illness: facts and myths. The brain of the psychopath. Brain scans and post-mortem findings.

#### • 2.30-3.30: Neuroscience & The Law

The new polygraph? New brain imaging techniques and 'mind-reading'. The brain and morality. Applications of recent developments to debates over criminal responsibility and decision-making by judge and juries.

• 3.30-3.45: Conclusions & Questions

# FORMAT

Format is varied, with interactive, multimedia lectures and group discussions (dependent upon group size). Superb PowerPoint slideshows have been developed with a high visual content to aid learning and understanding. Superb Adam Rouilly anatomical models are also employed for hands-on learning.

Each attendee receives an interactive CD-ROM featuring tutorial material, useful activities and web links. Attendees also receive a comprehensive tutorial pack complementing material presented during the tutorial.