

O15. Forensic science for the non-scientist: CSI Leicester summer school

A. ROBERT HILLMAN¹, KATY J. MCKENZIE¹, LISA SMITH² AND JOHN W. BOND³

¹*Department of Chemistry, University of Leicester, Leicester LE1 7RH*

²*Department of Criminology, University of Leicester, Leicester LE1 7RH*

³*Scientific Support Department, Northamptonshire Police, Wootton Hall, Northampton, NN4 0JQ*

arh7@le.ac.uk, ls149@le.ac.uk

There are large numbers of professionals associated with the criminal justice system who have limited formal training in the physical or biological sciences but whose routine work brings them into frequent contact with evidence derived using scientific methods.

Commonly, such individuals are required to make decisions based on such scientific evidence – a difficult task if it involves an element of technical assessment. Modern developments in forensic science make this challenge increasingly difficult.

With this in mind, the University of Leicester annually runs a three week summer school – “CSI Leicester” – open to non-science students of subjects related to the criminal justice system. The course is taught with a Problem Based Learning (PBL) approach alongside traditional educational methods such as lectures, workshops and lab activities. It is structured around a fictitious scenario involving alleged harassment of a woman by a male work colleague. Students operate as though working as forensic scientists: they have regular briefings and are presented with evidence and witness statements. They use scientific equipment for acquisition and analysis of fingerprints and shoe prints, blood pattern analysis, glass fragments, microscopic analysis of bullet casings and documents. Students work in teams and at the end of the course each team makes a presentation of their findings and provides answers to key forensic questions provided at the outset.

During the summer school, students have contact with scientists undertaking forensic research, with PhD students undertaking forensic science projects and with practitioners. PBL has been shown to be an effective educational approach that allows the development of transferable (both interpersonal and study) skills in a scientific context: students gain an appreciation of some relevant scientific techniques and aspects of the scientific method. Above all, through experiential learning, they discover that forensic science is challenging, rewarding and can be fun. Many of the students who have enrolled are from the US, so there are additional experiences associated with thinking in the context of different societies and legal systems and of delivery in a different learning environment.