# **ORLA SOWER**

## FORENSIC BIOLOGIST

#### CAREER OVERVIEW

Ms Sower has been employed as a forensic biologist since 2003. She has prepared reports in over 850 cases, many of which involve offences against the person including assault, rape and murder.

### EXPERIENCE AND EXPERTISE

#### Typical cases involve:

- Undertaking a review of the prosecution findings relating to the detection of body fluids and speculative 'Touch DNA' type samples
- Interpretation of body fluid patterns including interpretation of blood patterns at scenes of assaults and murders, to attempt to construct a sequence of events
- The interpretation of DNA profiling results including complex low template mixed profiles
- Reviewing routine and advanced statistical assessments carried out on simple and complex DNA profiling results
- Carrying out examinations of items not previously examined by the prosecution in our in-house DNA clean laboratory facility. This includes testing for blood, semen and saliva and speculative DNA sampling
- Interpretation of the significance of the scientific findings in terms of disputed accounts of events

As part of her role at Keith Borer Consultants, Ms Sower set up, validated and ran the in-house DNA profiling unit for 10 years being responsible for the analysis of a wide range of sample types. She is currently manager of KBC's laboratory facilities and responsible for the training of new staff members in laboratory techniques. She has also been responsible for the quality review of close to 1000 reports prepared by other experts at Keith Borer Consultants.

Ms Sower has attended court on many occasions to advise counsel and has given expert evidence in England, the Isle of Man, Northern Ireland, Scotland, the Republic of Ireland and the Cayman Islands. She has prepared reports for Courts throughout the United Kingdom, the Republic of Ireland, Bermuda, Gibraltar and the Cayman Islands, including the UK Court of Appeal where her forensic examinations led to the successful appeal in the case against Victor Nealon in 2013.

Ms Sower has completed training in crime scene examination, the interpretation of DNA evidence, the use of Probabilistic Genotyping Software and blood pattern analysis, and has completed the Bond Solon Courtroom Skills Course. She undertakes regular training and development in the field of forensic biology, including attending conferences and relevant training courses.

## SPECIALISMS

- Interpretation of DNA profiling evidence
- ★ Complex statistical evaluation of DNA mixtures
- ★ Blood pattern & body fluid analysis

## QUALIFICATIONS

- Bachelor of Science in Industrial Microbiology, 2000
- Master of Science in Forensic Science, 2002
- Member of the Chartered Society of Forensic Sciences, 2006

## CONTACT

- Keith Borer Consultants
  Locard House
  Belmont Business Park
  Durham, DH1 1TW
- kbc@keithborer.co.uk
- <u>www.keithborer.co.uk</u>

