

Michael Barber

Principal Forensic Services Ltd, Telephone: +44 (0)7810815924

Email: mikebarber@principalforensicservices.com

PERSONAL PROFILE

- Professional forensic scientist for 30 years with DNA and body fluids expertise. In-depth experience in DNA technical and interpretation roles as a leader and a practitioner.
- National leader with extensive experience in establishing best practice, developing scientific standards, implementing processes and embedding continuous improvement. Commissioned by the UK Forensic Science Regulator to develop industry standards in the UK.
- Skilled interpreter and presenter of complex DNA, paternity and DVI evidence with considerable experience in the UK and in several overseas jurisdictions. Since becoming independent has been engaged by defence lawyers in many cases and has a well-rounded perspective.
- Expert in disaster victim identification (DVI) DNA techniques and procedures as part of wider coordinated response to mass fatality incidents.
- DNA quality expert and technical assessor for the United Kingdom Accreditation Service (UKAS) against international standard ISO/IEC 17025
- Innovative thinker that has instigated many improvements adapted into DNA methodology.
- Maintains the highest standard of personal integrity always acting in the best interests of justice.

CAREER HISTORY

- DNA Expert witness, DNA technical assessor for (UKAS), quality consultant, trainer and director at Principal Forensic Services Ltd, 2012 to date.
- Forensic Science Service (FSS) (UK Gov) Principal Scientist for DNA testing (national head of discipline), 2010-2012.
- FSS Interim Lead Manager for services to the North East Police Forces 2009-2010. Interim role
 during FSS organisational re-structuring, responsible for operational delivery to seven UK police
 forces.
- FSS Head of Specialist DNA Unit 1999-2009. Led the development of lab facilities, development of process and the effective delivery to customers of a specialist low template DNA analysis, paternity and DVI testing. Included interpretation and reporting of results and providing expert witness testimony to UK and overseas criminal courts.
- FSS Senior Reporting Officer (DNA/body fluids) and DNA Lead 1993-1999
- FSS Scientific Officer, body fluids, DNA analysis and court reporting roles 1986-1993

EDUCATION

BSc (Hons) in Biochemistry, Upper second class (2:1), University of Stirling 1982-1986

EXPERIENCE

- Expert witness specialising in DNA and body fluids. Expert testimony provided to numerous UK
 courts (Civil, Magistrates, Coroner, Crown Court, Court of Appeal). Has presented evidence to
 courts in several overseas jurisdictions.
- Deep practical experience and understanding of DNA, DNA mixtures interpretation, paternity/kinship and DNA statistical evaluation through training and casework activities. Includes the application of enhanced sensitivity methods and dealing with stochastic effects.
- Experienced in the application of Case Assessment and Interpretation (CAI) methodology.
- Contributed to the design of fit for purpose PT (proficiency testing) schemes within the FSS, took part in internal and external trails as a practitioner and, as a Unit leader, was an end-user of PT data to inform continuous improvement.
- Has taken national lead roles in relation to both implementation and technical assurance of DNA profiling systems on a number of platforms within manual and automated processes.
- Responsible for the development and maintenance of ultra clean, low template DNA facilities.
- As lead DNA scientist and Principal Scientist is highly accomplished in the development, communication and implementation of ISO 17025 compliant standards into DNA casework.
- Core part of career has been developing and reviewing standard operating procedures and training material with responsibility for ensuring they are fit for purpose and suitable for the maintenance of robust standards demonstrable to accreditation assessment bodies. Now also a Technical Assessor for the UK's assessment and accreditation body (UKAS).

RECENT ACTIVITY

- Delivered training on DNA profile characteristics and DNA interpretation (2 week course) for an overseas DVI agency on behalf of Thermo Fisher Scientific (September 2017).
- Delivered DNA biostatistics and interpretation training (1 week course) to DNA Experts from the Croatian Ministry of the Interior (May 2017)
- Criminal Casework: Advisor, consultant and expert witness services for defence and prosecution. Caseload typically accounts for about 30% of workload currently.
- Appointed Advisor (8 missions of 1 week) for the development of effective DNA processes for DNA DVI (Disaster Victim Identification) for the Ministry of Interior in Croatia. European funded twinning project running from January 2017 until December 2017.
- UKAS Technical assessor of DNA Forensic Science Providers for DNA interpretation and statistical methods against the ISO 17025:2005 and ILAC-G19:08/2014 standards. (March 2016 – on going)
- Commissioned by the OSCE (Organisation for Security and Cooperation in Europe) to advise the Albanian Police on body fluid and DNA quality standards and development towards ISO 17025 accreditation. (September 2015)
- Consultant working with Thermo Fisher Scientific / Life Technologies to assess validation testing and advise on limitations for a new DNA analysis process for the Italian Carabinieri (September 2015 – on going).
- Consultant working with Thermo Fisher Scientific / Life Technologies to advise on quality standards, accreditation and the process development of a new DNA reference process for the South African Police Service (August 2014 – March 2015).

- Delivered training workshop commissioned by the Chartered Society of Forensic Sciences (UK)
 on application of new generation DNA multiplexes and implications for evidence interpretation.
 (December 2014)
- Key contributor to scientific guidance forming the appendices to the UK Forensic Science
 Regulator Codes of Practice and Conduct, including laboratory DNA anti-contamination guidance
 (November 2012), guidance re cognitive bias effects on DNA mixture interpretation (March
 2014). Also commissioned by the UK Forensic Regulator, along with PFS colleagues, to design
 and deliver a national DNA mixtures interpretation proficiency testing exercise (Completed April
 2015).
- DNA analysis capability assessment and identification of training needs on behalf of the UK
 Government's College of Policing of major facilities within the Ministry of Interior (MOI) in Saudi
 Arabia (January 2014) and similarly for facilities within the MOI in Bahrain (March 2014).
- Provision of low template DNA training material relating to two of the casework multiplexes (NGM SElect, ESI 17) that was delivered to a major UK forensic science provider.
- August 2012. Led the organisation of and contributed to the delivery of a fully subscribed workshop entitled "The Integrity of Scientific Evidence" to forensic practitioners, lawyers and law enforcement personnel commissioned by the Chartered Society of Forensic Sciences (UK).
- April 2012 ongoing. Many criminal case reviews for parties within the UK Criminal Justice System.

AWARDS

- Was awarded a police commendation for his work in leading the DVI forensic response and reporting the DNA results for the identification of the British victims of the Egyptian terrorist bombings in Sharm el-Sheikh.
- In 2012 he was awarded a Commendation by West Yorkshire Police for many years of professional support to high profile and complex investigations.