



## Careers

### A Career In Forensic Science

#### What is Forensic Science?

Forensic science can be simply defined as the application of science to the law. In criminal cases forensic scientists are often involved in the search for and examination of physical traces which might be useful for establishing or excluding an association between someone suspected of committing a crime and the scene of the crime or victim. Such traces commonly include blood and other body fluids, hairs, textile fibres from clothing etc, materials used in buildings such as paint and glass, footwear, tool and tyre marks, flammable substances used to start fires and so on. Sometimes the scientist will visit the scene itself to advise about likely sequence of events, any indicators as to who the perpetrator might be, and to join in the initial search for evidence. Other forensic scientists analyse suspected drugs of abuse, specimens from people thought to have taken them or to have been driving after drinking too much alcohol, or to have been poisoned. Yet others specialise in firearms, explosives, or documents whose authenticity is questioned.

In civil cases forensic scientists may become involved in some of the same sorts of examinations and analyses but directed to resolving disputes as to, for example, the cause of a fire or a road accident for which damages are being claimed.

Forensic scientists can appear for either side - prosecution or defence in criminal matters, and plaintiff or defendant in civil ones. They tend to present their findings and opinions in written form either as formal statements of evidence or reports. Sometimes they are required to attend court to give their evidence in person.

#### Forensic Medicine and Forensic Dentistry

By analogy, this is the application of medical and dental knowledge to legal problems. Forensic medical examiners, who deal with the living and forensic pathologists, who deal with the dead, are qualified medical practitioners who, having completed their training as doctors, choose to specialise in either field. Forensic odontologists are qualified dentists who have undergone additional training and who provide expert evidence on dentistry.

#### Scientific Support within the Police Forces

Civilians are now employed by many police forces to provide a variety of technical services. These include photography, the collection and comparison of fingerprints, vehicle examination and the detailed examination of scenes of crime. Scene examiners, often referred to as SOCOs (Scenes of Crime Officers), will normally have some scientific training.

#### Career Opportunities

The majority of forensic scientists in the United Kingdom are employed by the Forensic Science Service (in England and Wales), by specific police forces (in Scotland), and by regional government (in Northern Ireland), and by private companies which also specialise in providing primary forensic science services to the police such as the Laboratory of the Government Chemist. Aside from these, there are a number of other organisations which focus on specific areas of forensic science such as fire investigation, questioned documents, and advising the defence.

#### Training to Become a Forensic Scientist

There are two main elements in the training required to become a general forensic scientist. The first involves academic courses, and the second, on-the-job training usually with one of the main suppliers of primary services to police.

#### Academic requirements:

Requirements in respect of academic qualifications depend on the ultimate goal. For instance, to become an assistant forensic scientist or equivalent or a technical specialist, you are likely to need at least four good passes at GCSE including English and either science (Biology/Chemistry) or Maths, and at least one A level in a science subject. To become a case-reporting forensic scientist and/or a forensic science researcher, you will usually require at least a good first degree in Biology, Chemistry or related subject, followed up, in many cases, by a postgraduate/MSc qualification in forensic science or direct employment.

#### Training on-the-job:

On-the-job training tends to be best catered for by suppliers of forensic science services to police and other law enforcement agencies as it is in these organisations that there is the breadth and depth of casework to provide the necessary experience. Such training generally includes a combination of specialist in-house courses and practical casework - all forming part of a professional apprenticeship.