## Source Certain

### **INDUSTRY TRAINING PROGRAMS**

Advanced forensic application
Online, flexible training

Our advanced forensic training offers advanced professional development for graduates and industry professionals who want to expand their knowledge in forensic science and enhance their current employment opportunities.



### Grow your forensic skill set

- Further your understanding of the multidisciplinary approach to modern forensic science.
- Enhance your ability to use data generated from forensic science evaluations over the course of an investigation.
- Gain the skills to utilize forensic science analysis in an investigation and learn how data can be used in a legal setting.
- Learn about the appropriate evidence identification requirements, collection process, and preservation of unique material.
- Develop skills to better understand and interpret reports generated from crime and crime scenes.

# Who will benefit from this training?

Professionals currently working in a forensic or investigative role looking to expand their knowledge base for improved professional outcomes and opportunities.

Students with an undergraduate diploma or equivalent in science wanting to understand the world of forensic science.

Institutions, law enforcement agencies and the judiciary looking to up-skill their staff with practical and specialised forensic training delivered by forensic practitioners.

## We recommend this training for the following career roles:

- Police Officers (various ranks)
- Law Enforcement Agents
- Science Technicians
- Crime Scene Technicians
- Private Investigators
- Defence Force Investigators

Flexible and accessible

Our training is 100% online and available worldwide. It uses dynamic content delivery that enables flexible learning and interaction with educators.

Taught by real-world practitioners with global recognition and extensive in-the-field experience.



### Available modules

### **FORENSIC ANTHROPOLOGY**

This module introduces students to the human skeletal system and its potential to assist in determining identity and time since death estimation. This course will include topics from the examination of the taphonomic process to search and recovery methods for skeletal remains. The module will conclude with a detailed study of how forensic anthropologists can examine the skeleton for age, sex, stature and population affinity determinations.

### **FORENSIC DNA**

This module focuses on how DNA analysis is related to the crime scene. Content will include the appropriate requirements for the collection of DNA and serological samples and new preservation techniques. The module will conclude by reviewing how DNA analysis has changed over the years and the future of such evidence. Please note that this module is not designed to be a detailed examination of how DNA is processed in the lab.

### FORENSIC ENTOMOLOGY

The forensic entomology module exposes students to the roles that insects can play in a forensic investigation. Training will include the identification of forensically relevant insect species and explaining how insects can assist with time since death estimations. The module will include a field component via video where students will observe how to collect and preserve entomological evidence.

### **DEATH SCENE INVESTIGATION**

This module examines how a death scene differs from other types of crime scenes. It will include precautions that investigators need to take and the unique challenges of body documentation and other evidentiary issues associated with a death scene. The module will also explore how different countries and jurisdictions approach death scenes and evidence collection.

### **FORENSIC CHEMISTRY**

This module emphasizes the strengths and limitations of current laboratory practices for the detection and analysis of abused drugs, including alcohol. Screening and confirmatory methods, field evaluation, and methodological limitations on testing will be addressed for both live subjects and postmortem cases. The effects and potential hazards of the major drugs and drug groups on both users and exposed personnel will also be addressed.

### WILDLIFE FORENSICS

This module focuses on applying scientific techniques to investigate crimes involving wildlife. It combines the principles of scientific disciplines such as biology, ecology, genetics and chemistry to analyze evidence related to wildlife crimes, including poaching, illegal trade and habitat destruction.

### **FOOD FORENSICS**

The food forensics module applies scientific techniques to investigate food-related issues, ranging from food fraud to contamination and safety concerns. It combines elements of chemistry, biology, microbiology, genetics and legal studies to investigate the food supply chain.

### **SUPPLY CHAIN FORENSICS**

This module examines supply chain fraud and criminal activity that occurs within complex supply chains that span multiple countries and typically have a high reliance on third-party vendors. This module considers the value chain and movement of money alongside the supply chain and physical movement of products. Students will learn about supply chain breaches, different types of fraud, regulatory intervention, and the importance of origin, transparency, traceability, and chain of custody in modern supply chains.

### **Training delivery**

### Lectures

All lecture content is pre-recorded and available to students online.

Tutorials are live and interactive with an open door policy for communication with practitioners.

### Laboratories

Laboratories will be delivered online.

**Group training can be arranged** with in-person delivery that includes hands-on workshops. Please contact us to discuss further.

## Recommended training packages

### **FOUNDATIONAL FORENSICS\***

- · Forensic anthropology module
- Forensic DNA module
- Forensic entomology module
- Death scene investigation
- Forensic chemistry module

### **CRIME SCENE INVESTIGATION\***

- · Forensic anthropology module
- Wildlife forensics module
- Death scene investigation
- Forensic entomology module
- Forensic chemistry module
- Forensic DNA module

#### **FOOD FORENSICS**

- Food forensics module
- Supply chain forensics module
- Forensic chemistry module

Additional modules can be added to the above training packages. Prerequisite knowledge of forensic basics is not required prior to commencing our training. Prior to commencement, a compulsory reading list will be supplied for each module.

\* We are in the process of gaining RPL status for these packages from a highly recognised Australian university.





### Who we are

Source Certain is a scientific technology company based in Perth, Western Australia, with leading capabilities in provenance, analytical, and forensic sciences. Source Certain's service portfolio includes an established and highly regarded analytical and forensic science service department that has supported global law enforcement for over fifteen years.

Source Certain is committed to research, innovation and furthering education in the scientific field. We conduct a comprehensive and progressive internal research program and develop training material for individuals and organisations looking to broaden their understanding of the latest developments in the industries we operate.

## Meet the training team



### **Professor Ian Dadour**

Forensic entomology and death scene investigation

Professor Ian Dadour has specialised in insect ecology, forensic entomology (FE) and myiasis research for over 35 years. His involvement in numerous homicides led to his current research and training in FE, including taphonomy, decomposition, entomotoxicology and aquatic FE. Ian has over 150 publications and co-completed numerous PhD Master students, attended an extensive number of crime scenes, submitted expert reports and presented evidence in a number of trials globally.



### **Cameron Scadding**

Food forensics and supply chain forensics

Cameron Scadding is a forensic and analytical chemist with extensive knowledge of complex forensic investigations. He has specific experience and expertise in food fraud, supply chain security, traceability, and managing supply chain risks. Cameron has published numerous work on provenance science and provenance determination. In 2016, he founded the scientific technology company Source Certain, which specialises in provenance verification services.



### Associate Professor R. Chris O'Brien Forensic anthropology, wildlife forensics

and death scene investigation Associate Professor R. Christopher O'Brien is a forensic taphonomist who

specialises in animal scavenging and its impact on the decompositional process. His initial background in anthropology led to his interest in forensic science, ecology and the wildlife aspect of forensics. He was the founder and Director of the Center for Wildlife Forensic Research and has sat on the federal advisory board for wildlife forensic science in the United States.



**Professor R. John Watling** Forensic chemistry

Professor R. John Watling has been an applied Analytical Chemist since 1974. He holds degrees in Mining Geology and Geochemistry and a PhD from the Imperial College London. John has over fifty years of experience in instrument design, applied analytical chemistry research, mineral exploration research, government service and consultancy. John pioneered the scientific provenance determination concept that was later developed into TSW Trace®.



**Associate Professor Guan Tay** Forensic DNA

Associate Professor Guan Tay is an academic and researcher with a background in genetics and forensic science. Guan completed his PhD in immunogenetics, where he developed innovative techniques to match patients requiring transplants to suitable donors. Guan has held positions at numerous international institutions, taught extensively on genetics and published work in numerous peer-reviewed journals.