1154th General Monthly Meeting

From the Crime Scene to the Courtroom: Removing the Hollywood Hype, What is Forensics all about?

Professor Claude Roux
Professor of Forensic Science at UTS and founding Director of the UTS Centre for Forensic Science

Date: Wednesday, 1st August, 2007
Time: 6:30 for 7:00 pm
Venue: Conference Room 1, Darlington Centre, City Road

ABSTRACT

The use of forensic evidence in court cases and criminal investigations can be extremely controversial. In times of "smarter" crimes and new investigative techniques, one of the greatest challenges facing forensic scientists is determining how to demonstrate and communicate the significance of their findings in our legal system, to juries and the wider community.

In this presentation, Professor Roux will discuss the challenges faced by forensic scientists in the battle against the world's growing wave of sophisticated acts of crime and terrorism. He will also show how real life forensic science can be different from its Hollywood image.

Enquiries: Prof. P.A. Williams
email: P.Williams@uws.edu.au
or phone the Society – details on Introduction page.

BIOGRAPHICAL NOTES

Prof Claude Roux (UTS) is the founding Director of the Centre for Forensic Science at the University of Technology, Sydney (UTS). He moved to Australia in 1996 after obtaining a BSc and a PhD in forensic science from the University of Lausanne, Switzerland. UTS has been producing graduates in forensic science for over ten years and offered the first honours degree in forensic science in Australia. The program consistently graduates many first class honours students and university medal winners. Claude has a very extensive publication and research record (some 65 refereed papers, 7 book chapters and 20 awards for collaborative research) and his group has won numerous academic and industry research grants (almost AU$3 M in research earnings). UTS is highly regarded internationally with some 25 forensic PhD students and Claude has been a plenary and key note speaker at many international conferences.

Claude's research activities cover a broad spectrum of disciplines which are aimed at understanding and solving analytical and interpretative problems encountered in forensic science. These include trace evidence (fibres, paint, glass etc), document examination (inks, toners), fingerprints and other forms of physical evidence. Claude is currently leading a major Government-funded research program in the area of counter-terrorism in collaboration with the forensic and analytical industries.

Claude is involved in a number of European, American and Australian forensic working groups (eg. European Fibres Group, SWGMAT, Australian Criminalistics Specialist Advisory Group, International Fingerprint Research Group). Claude is also the President of the Australian and New Zealand Association of Forensic Science Educators, President of the NSW Branch of the Australian and New Zealand Forensic Science Society and a Council member of the Australian Academy of Forensic Sciences. Claude received a Young Tall Poppy Award from the Australian Institute of Policy & Science for his contribution to science research in 2004.

Report on the General Monthly Meeting
by Jim Franklin

Professor Claude Roux spoke on problems of using forensic evidence in criminal investigations and court cases. Both police and juries can suffer from the "CSI Effect" with unrealistic TV driven expectations of how much forensic science can be brought to bear on an average case, how long the testing takes, and the resources required. For operational purposes the police usually need quick, intelligence-grade information. However, current practise is geared towards producing proof beyond reasonable doubt, which may take months. All too often the results of current forensic tests are not available until near the end of the investigation. Claude outlined some new developments in taking the forensic lab to the crime scene to permit rapid, on-the-spot processing of evidence. He also described recent advances in numerous areas including: mulitspectral imaging (a powerful tool for investigating suspect documents), obtaining fingerprints from difficult surfaces (including polymer bank notes), bruise age analysis (via multi-spectral imaging), explosives testing (hand held lab-on-a-chips are being developed), DNA identification of ethnic group (still in its early days), and obtaining DNA identification from trace (almost microscopic sized) samples.

Claude illustrated his talk with interesting presentations on several cases including: the problems with analysing partial fingerprints in the Christine Jessop case, a murder in Frenchs Forrest where the conviction hinged upon highly detailed analysis by Claude and his colleagues of carpet fibres found on a shoe print, and the murder of an Israeli Tourism minister where a chain of DNA and fingerprint evidence secured the assassins' conviction. The lecture stimulated a wide variety of questions from the audience.