



Australian and New Zealand FORENSIC SCIENCE SOCIETY



September 2004
Issue 6

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NSW Branch Newsletter

NSW Branch ANZFSS Inc ABN 33-502-753-392

AFI Meeting

Please note that the AFI meeting is on the **9th September**

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Message from the President

Dear ANZFSS members,

As many of you would know, I had the pleasure to spend one month in Switzerland in July. I would not be honest if I told you I spent my entire days and nights in front of my computer or performing some scientific experiments. However, amongst other enjoyable moments such as eating tasteful cheese and drinking nice wine, I spent some time at the School of Forensic Science at the University of Lausanne. In particular I could follow up some discussions and projects with Prof Olivier Ribaux who many of you met at our March public night.

It was especially enlightening and mind blowing to see some of the concepts about Forensic intelligence and proactive policing he presented to us applied in practice. The reality is far from Hollywood and other 'Without a Trace' or 'CSI'. There was no high-tech intelligence room with flashy computer and bubbling staff.

No, what is considered to be one of the teams at the forefront in this area is 'only' a small team of some four people working with a home-made database using FileMaker Pro and a geographic mapping software. And this is enough to identify links based on, say, a partial DNA profile, a partial shoe sole pattern and modus operandi information. Many of these links are subsequently proven correct and allow the police to catch the offenders. This demonstrates how an intelligent holistic approach of forensic science can make a real difference at a relatively small cost.

Of course, their approach and success did not happen overnight and are rather the result of years of development and fine tuning. But they undoubtedly showed us a very interesting direction for forensic science, policing and the criminal justice system in general. As my mentor at the University of Lausanne, Prof. Pierre Margot, used to say: "The quality of a GP does not depend on his or her stethoscope"...



Claude Roux, President
3rd September, 2004



NEXT MEETING: Crash Investigation - Senior Sergeant Peter Jenkins

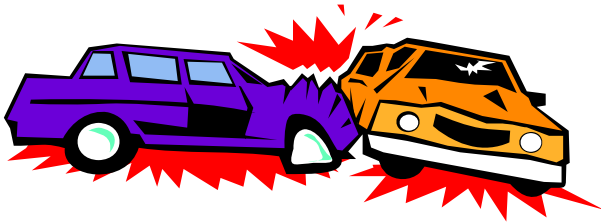
DATE: Wednesday, 22nd September 2004

TIME: 6:30pm for nibbles, 7:00pm start

VENUE: Institute of Forensic Medicine, Glebe

COST: Free to members, \$5 for non-members

The ANZFSS is pleased to introduce Senior Sergeant Peter Jenkins, Commander of the Metropolitan Crash Investigation Unit, who will give us an insight into crash investigation.



Peter has been a member of the NSW Police since 1986, transferring to the Crash Investigation Unit in January 1988. He has since occupied the positions of Investigator, Team leader and now Commander of the Sydney Metropolitan Crash Investigation Unit. Peter is one of the longest serving members of the Crash Investigation Unit, now into his 16th continual year of service with this Unit.

Peter has undergone specialist training in the field of Crash Investigation and related road safety topics, providing expert evidence at Local, District, Supreme and Coroner's Courts for matters associated with driving offences. He is a lecturer at the NSW Police College on the Crash Investigation, Traffic Services and Highway Patrol Courses.

Peter is a graded member of the Society of Automotive Engineers Australasia and International. He is a member of the College of Road Safety and the Australia and South Pacific Association of Collision Investigators. Peter is currently completing a Diploma of Mechanical Engineering at Mead-owbank TAFE.

In countries like America the field of crash investigation has been researched and refined since the end of World War Two. Crash Investigation is a relatively new science in Australia, and is recognized as a specialist field of investigation.

Crash Investigation encompasses both the forensic and criminal investigation role into one. Crash Investigators are responsible for the collection, identification and interpretation of the physical scene evidence, and the investigation aspect of interviewing all parties, determining the appropriate offences and subsequent taking of the matters through the Judicial system.

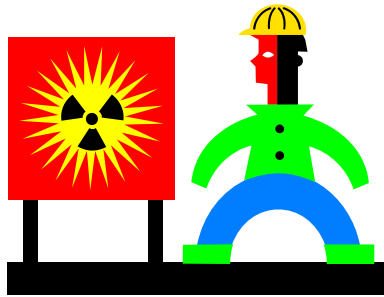
In this presentation we will look at the role of the Crash Investigator, the physical evidence aspects, the Legislation utilized in NSW regarding serious driving offences and conclude with how Collision Analysis can assist the crash investigator in determining cause, speed and dynamics of the crash.



(Thank you to Aldo Severino for this funny!)



REVIEW: "Nuclear Fingerprints" - The Role of Nuclear Forensic Science in Preventing Nuclear Materials Falling into the Wrong Hands - Michael Colella ANZFSS Meeting, 25th August 2004



Michael began his talk with some background on the sources of radioactive materials and radiation. All radioactive materials are unstable and spontaneously disintegrate, emitting radiation (α , β , γ or η) in the process. He explained the different hazards associated with each type of radiation, and how the radiation can be classified by origin, that is: natural radioactive material; neutron and proton captured "induced" radioactivity; radioactivity produced from atmospheric weapons testing and nuclear accidents; and fission by-products and wastes.

Michael gave us some common legitimate applications of nuclear materials, indicating the amount of stockpiled material in Australia. He mentioned international concerns such as trafficking for the black market, trafficking of dual use / special use materials and components, and the accidental release of abandoned nuclear materials. Since 1993 there have been 214 confirmed incidents including seizures and radiological terrorism incidents that Michael elucidated.

Michael explained the different types of improvised nuclear devices, emphasising that Radiological Dispersal Devices, or "Dirty Bombs" are worthy of the most concern. He illustrated its potential by highlighting the area on a map of Canberra's Capital that would need to be decontaminated if a dirty bomb were to be detonated there.

Michael then showed us the Network of Analytical Laboratories that deal with Nuclear Forensics, and spoke about the involvement of ANSTO.

Nuclear Forensic science can provide information about the nature of seized material, the immediate radiological danger, its origin and a possible route, and possible intended uses. It can thereby assist authorities to combat the trafficking of nuclear materials and radiological sources. A holistic approach to investigating nuclear material is taken, involving traditional forensic science, microstructural analyses, isotopic fingerprinting and chemical fingerprinting.

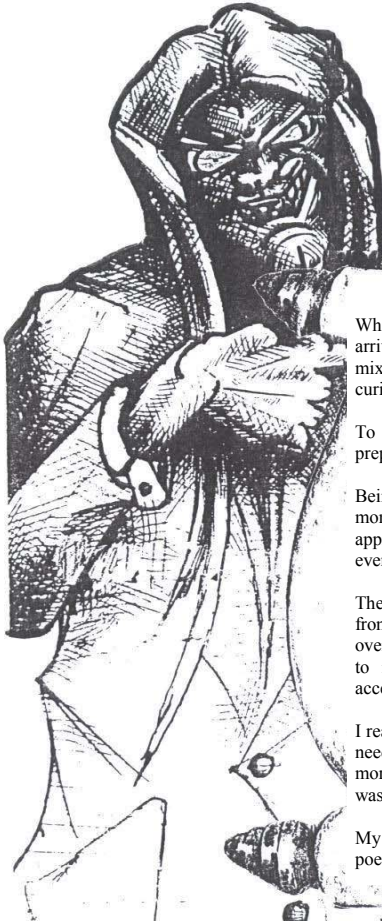


The ANZFSS NSW Branch would like to thank Michael Colella for giving up his time to talk to us about what was a very interesting topic.



Impressions of a Mortuary Student

The following depicts the impressions of Mortuary Student Genevieve Collate on her first day of work orientation and induction. We appreciate her sharing her thoughts with us.



Whilst waiting in the foyer for the other members of my group to arrive for our 'mortuary' induction – I found myself grappling with a mixture of emotions ranging between fear, apprehension and curiosity.

To my surprise, the work place felt like a room where I study, prepare, tidy and present, more than a clinical hospital morgue.

Being exposed to a dead body without breath is like, sharing the moment but not sharing it. Being there, but not there. My apprehension was replaced by total absorption in my surroundings, eventually, feeling safe enough to participate in hands on experience.

The benefits from this work experience have enabled me to visualise from paper, to form. The overall affect created these phases, mind over matter, stretching my boundaries, beyond safe to ugly, difficult, to messy, to raw and then to beautiful. Creating then a total acceptance of the separation of the life form to death.

I realised that this was far more involved than I first understood. One needed to have the total understanding of the diversity of the mortuary technician assistant. I then instantly knew where my role was and where it was not, and where best I am placed in this field.

My studies are enhanced with my visual reflections of that time. This poem came after a very long day:

Innocence
 I lay here on your table
 Of steel cold and wet.
 Reminds me of my
 mother's kitchen,
 Before dishwashers were set.
 But in between my hollows,
 I guess I'm gaunt you see.
 So I have left the digging to your eyes
 For me.
 Although chastity has called me;
 I wonder?
 Through those eyes, can he see me?
 Cutting, slicing, dissecting.
 So raw, I am as vulnerable as
 I can be.
But: I have given you
 permission
 Permission,
 So that you can set me free

Contact Details

If you have any query, comment or suggestion about this newsletter or any information contained within, please do not hesitate to contact us. *All correspondence regarding general enquiries, membership renewal, payment etc, can be addressed to:*

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Final Words:

*“To change your mind and to follow him who sets you right is to be nonetheless the free agent that you were before”
 Marcus Aurelius (AD 121-80)*