



Message from Claude Roux – President

Dear ANZFSS Member,

It took some time in the making, but the 'Discussion Paper on the Professionalization of the Australian and New Zealand Forensic Science Society (ANZFSS)', including recommendations for the creation of a professional membership category, has been considered by ANZFSS members through a Society-wide survey in March 2016. The feedback was overwhelmingly positive: out of 262 responses, a strong majority of respondents indicated that professionalization of the ANZFSS was desirable or highly desirable (84%); 68% of respondents also said they would (44%) or would probably (24%) apply for professional membership if available. After some more refinements, I am pleased to inform you that we are making a crucial legislative step in this direction with revised Rules of Association being proposed to the ANZFSS membership ahead of the Auckland AGM in September. The rationale for such an evolution, along with the challenges and opportunities associated with these changes, have been debated for some time now and will not be discussed further here. I will only repeat that the ANZFSS Executive and Council are convinced that the proposed direction provides the means to drive the Society into the future, enhancing the professional identity of the Society as a whole and will put us on a par with our sister societies in the UK and USA.

Further, many of you would have heard the very recent news that SMANZFL has been integrated into the newly established Australia New Zealand Forensic Executive Committee (ANZFEC) - part of the new ANZPAA NIFS governance model. This model retains the ANZPAA Board (Police Commissioners) oversight. It is obviously not appropriate for me to comment on these changes. However, they effectively mean that ANZFSS is now the only significant independent forensic science organisation across Australia and New Zealand. This changing landscape reinforces the need for our Society to become a genuine professional organisation.

The ANZFSS Symposium in Auckland is almost upon us. The Society is very grateful to Sarah Scott and her Organising Committee and the PCO, Conference Innovators, for their enthusiastic and dedicated work and to all the sponsors for their support. Everything is shaping well and it is not too late to register. If you have already done so, there are also many exciting workshops you may want to consider and add to your program. Please visit <http://www.anzfss2016.org/> to stay in touch.

In other news coming from 'across the ditch', at the last NZFSS AGM, Matt Gittos stood down and Prof. James Curran was elected as New Zealand President with a number of new and returning Executive members. I sincerely thank Matt for his hard work and commitment to our Society, especially during very busy times both professionally and privately. Matt has always been a great defender of the New Zealand cause and we all appreciated his sense of humour during Executive and Council meetings. I also congratulate James

and his newly elected Executive on taking the helm of the NZFSS and becoming the New Zealand Vice-President of the ANZFSS.

Finally, while we are on the topic of Executive changes, it is with mixed emotions that Profs James Wallman, Chris Lennard and I will stand down at the next AGM in Auckland. It has been a great honour to serve our Society at the Executive level for six years. The ride has always been interesting although challenging at times. It has given us a great appreciation of the complexity and value of the forensic science community in our part of the world. However, it is important and very healthy for any such Society to experience Executive changes every few years. I humbly believe that the next Executive will inherit a Society that has been renewed and is in great shape. This is to the credit of all our

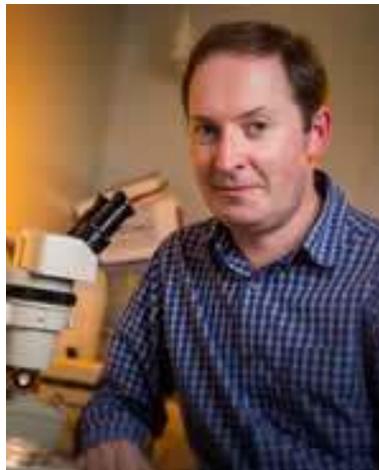
colleagues in the Executive and Council over the years. This is also to the credit of the membership who always showed us such positive support. Personally, I am forever indebted to James, Chris, Anna and Matt for their unconditional support during the last six years. I may have been the public face of the ANZFSS, but they always ensured the Society's engine never stopped. Thank you!

The ANZFSS Symposium in Auckland will undoubtedly be a great place to celebrate not only a step closer to professionalization but also the renewal of our Society across both sides of the Tasman!

Yours Forensically,
Prof. Claude Roux
ANZFSS President



Prof. Claude Roux



A/Prof. James Wallman



Prof. Chris Lennard

Conferences of Interest:





Important Announcement

Evolution and Consolidation of Strategic Forensic Alliances in Australia and New Zealand

Background

An outcome of the 2014 ANZPAA National Institute of Forensic Science (ANZPAA NIFS) Review was the establishment of a new funding and governance model, and the implementation of a new operating framework for ANZPAA NIFS. The new framework retains ANZPAA Board (Police Commissioners) oversight, but incorporates new non-police participation, facilitated through the establishment of the Australia New Zealand Forensic Executive Committee (ANZFEC). This has resulted in overlaps between the functions, activities and representation of SMANZFL and ANZFEC.

This gave rise to discussion about the evolution of forensic science at the Australia New Zealand strategic level and whether SMANZFL has a continuing role as a valuable contributor to the forensic science environment. Additionally, the function and governance of the Specialist Advisory Groups (SAGs) has been considered. The aim of the review was to reduce duplication and provide greater clarity to what is a complex governance and reporting environment for forensic science.

Decision

SMANZFL considered the current forensic landscape, roles and functions of SMANZFL, the SAGs and the Quality Managers Forum (QMF), the operating framework for ANZPAA NIFS and the roles and functions of ANZFEC. SMANZFL has determined, by unanimous vote, that:

- 1. the roles and functions of SMANZFL should be integrated into ANZFEC and provided within the ANZFEC framework through facilitation by ANZPAA NIFS, and**
- 2. the SAGs and the QMF should be transferred to the management of ANZPAA NIFS with reporting to ANZFEC.**

Future Status

SMANZFL, ANZPAA NIFS and ANZFEC have established a subcommittee to facilitate the evolution and consolidation of the forensic environment and oversee the amalgamation. There are many complexities in undertaking a smooth transition and it is anticipated that appropriate consultation will occur. It is envisaged that the process will be completed by the end of 2016. Updates on the progress will be provided at relevant forums and via the ANZPAA NIFS newsletter and communications.

Dr Linzi Wilson-Wilde OAM
Director NIFS

Colin Priddis
Chair SMANZFL

Release date: 27 July 2016



Together InForming Justice

ANZFSS 23rd International Symposium
on the Forensic Sciences
18 - 23 September 2016
Auckland, New Zealand
www.anzfss2016.org



Kia Ora!

It's now only weeks until we welcome everyone to the ANZFSS 23rd International Symposium on the Forensic Sciences in Auckland.

Things are hotting up here for another memorable Symposium filled with world leading science, fantastic networking opportunities and a packed trade exhibition.

Earlybird registration has now closed but delegates can still register and receive all the program inclusions and great rates on accommodation.

Pre- and post-Symposium workshops are filling up but some spaces are still available.

The full program is available on the website, including details of all discipline specific breakout streams. The Symposium app is in the final stages of development and will be released to delegates shortly. This will allow everyone to begin planning their personal conference line up well in advance of their arrival in Auckland.

Things kick off on the Sunday night with the welcome reception proudly sponsored by Illumina. This will be held in the main exhibition area at SkyCity in amongst the trade exhibition. This is your first opportunity to meet with exhibitors, other delegates, old friends and new.

On Tuesday night, delegates will be transported to the Aviation Hall at the Museum of Transport and Technology (MOTAT) for a flight themed night of superb NZ cuisine and beverages. Sponsored by BioStrategy/Hamilton and NATA, guests are encouraged to dress in theme for this fantastic networking evening.

The Symposium concludes with the Symposium Gala Dinner on Thursday evening in the stunning ANZ Viaduct Events Centre, sponsored by Forensic & Analytical Science Service (FASS). This evening includes the presentation of the Symposium awards, including the prestigious Ian Riebeling New Practitioner award as well as the handover to the 2018 Symposium team. Delegates can then hit the dance floor until the small hours to farewell another tremendous Symposium. Additional tickets can be purchased for all events.

Our trade and exhibition hall has now sold out but we still have opportunities available. If you are interested in joining us as a sponsor or exhibitor, please get in touch ASAP.

This Symposium has been in excess of four years in the planning and we are all excited, and very nearly ready to welcome you all. NZ is being polished and shined

ready to showcase her absolute best to all of our delegates. It is looking like being a warm spring in Auckland although hopefully the ski season may still be going strong for all those snow bunnies amongst you. And for anyone wanting an absolute Kiwi extravaganza, the mighty world champion All Blacks are playing Argentina in Hamilton (just down the road) on the 10th of September, and South Africa in Christchurch on the 17th September.

With so many sweet reasons to come to NZ, why wouldn't you book your ticket now. We look forward to welcoming you all in September. Hei kona ma. Haere pai atu, hoki pai mai. Goodbye for now. Travel safely.

Sarah Scott
Chairman - Organising Committee



3rd Meeting of the Scientific Advisory Board of the Office of the Prosecutor, International Criminal Court, The Hague, 16-17 June 2016

The 3rd meeting of the Scientific Advisory Board (SAB) of the Office of the Prosecutor (OTP) was held in the stunning new permanent premises of the International Criminal Court (ICC) on the outskirts of The Hague near the seaside suburb of Scheveningen. After an official welcome by Deputy Prosecutor James Stewart, the SAB members focused on the review of two Standard Operating Procedures (SOPs), namely on "Handling of Medical Information" and on "Satellite Imagery Use". As it was the third such meeting for most SAB members this year, the meeting was particularly effective and solid progress could be achieved. In addition to



developing and reviewing SOPs, the future involvement of the SAB in the OTP casework and training sessions for ICC judges were other topics discussed during the meeting. Australia was represented by Linzi Wilson-Wilde and Claude Roux.



Calling: Victoria

To date, the Victorian Branch of the ANZFSS has had a very successful year.



Membership renewals sit at some 160 as at mid-July; this is out of an active membership last year which just topped 200. The centralised payment system has made it much easier for both members and the committee, and I expect nearly all of the remaining past members to renew, and we have another 17 applications in process. So our goal is to have membership at 250 - a far cry from a few years ago when we found ourselves struggling to reach much over 100.

Why?

I put it down to offering some interesting and varied presentations, with generic and general appeal. So far in 2016, we have heard about trouble with Outlaw Motorcycle Gangs, Chasing the Money Trail, Cold Cases, Forensic Odontology and Forensic Veterinary Science.

We regularly now have meetings with attendances of 50-60, and have exceeded 100 on occasion, which reflects well both on the topics presented, and the interest of members to get out and hear about forensic 'stuff'.

We have a great committee, and are looking at moving into the world of social media which scares me but should be great for the younger set, including the students in the Deakin Forensic Science Society – who support us very well. For the last talk they sent up a busload! Brief reviews of two of these talks are included below.

We have had one minor change to the committee recently. Luke Rodda has taken up a position as the Forensic Toxicologist Supervisor at the San Francisco Office of the Chief Medical Examiner! Our loss is San Francisco's gain, and we wish Luke well in this new and exciting role. However, as it was impractical for Luke to remain on the committee, we canvassed a replacement member from VIFM and I'm delighted to welcome Samantha Rowbotham to the committee, filling the casual vacancy. Our aim as a Branch Committee is to have six or so meetings per year covering a variety of topics and interests. As always, we are pleased to receive suggestions for speakers, topics and venues. Our program for 2016 is listed on the next page (somewhat retrospective).



Program of Meetings for 2016

| | |
|-----------------|---|
| 23 Feb | <i>T/F ECHO - The OMCG Landscape, Culture and Emerging Issues;</i> A/SSGT Shane Cashman |
| 5 Apr | <i>Thaw & Order: Tales from The DNA Freezer;</i> D/SSGT Dr Deb Bennett & Forensic Biologist Kate Outteridge |
| 26 May | <i>Chasing the Money - The Importance of Financial Intelligence in The 21st Century;</i> Dr John Moss, AUSTRAC |
| 6 July | <i>Oro-Facial Trauma and Bite Marks - Forensic Odontology Case Work And The Strength of Evidence;</i> Dr Richard Bassed, VIFM |
| 18 August | <i>Animal Abuse and The Important Role It Plays in Human Interpersonal Violence;</i> Dr Rebecca Belousoff, RSPCA |
| 18-23 September | <i>The 23rd ANZFSS International Symposium On the Forensic Sciences, Auckland NZ</i> |
| Early November | <i>AGM/Annual Dinner – Date, Venue & Presentation TBA</i> |
| December | <i>End-Of-Year (TBA)</i> |

Meeting Reviews

D/SSGT Dr Deb Bennett & FO Kate Outteridge: Thaw & Order: Tales from the DNA Freezer, 5 April

Approximately one hundred ANZFSS members and guests were present at this meeting. Detective Senior Sergeant Dr Deb Bennett, Sergeant Al Jephcott (Cold Case Sex Crimes Squad) and Kate Outteridge, a Senior Forensic Biologist from the Victoria Police Forensic Services Department (VPFSD), gave a fascinating presentation about the combined efforts of the Sex Crimes Squad and the VPFSD, in investigating unsolved Cold Case Sex Crimes, some of which were more than 30 years old.



Back in the 1980s and 1990s, before the existence of DNA testing, Forensic Biologists from the VPFSD had the foresight to store biological samples such as blood, saliva, hair and semen, from items of evidence in hundreds of unsolved major crimes. These samples were placed into cold storage, a biological time capsule of sorts, in the hopes that future technology

could help solve some of these serious crimes.

Decades later, with advances in DNA profiling and the creation of the National DNA database, investigators were provided with new intelligence regarding persons of interest and connections between multiple offences. To date, 582 cases have been investigated, 1858 samples tested, 368 DNA profiles have been put on the database and 84 DNA matches have been made.

Thanks to this cold case project, many of these “freezer” cases have now been solved. The presenters discussed the complications of investigating cold cases after so much time has passed and presented some interesting case studies.

We thank Detective Senior Sergeant Dr. Bennett, Sergeant Jephcott and Ms. Outteridge for an excellent and enlightening presentation.

Dr John Moss: Chasing the Money - The importance of financial intelligence in the 21st century, 26 May

The discussion by John Moss was unusual to begin with, in that there was no PowerPoint. Just the speaker talking to the audience of about 70; but before long they were enthralled. John is the National Intelligence Manager for Austrac, Australia's Transaction Reports and Analysis Centre. He described Austrac's role, both nationally and globally, which was informative, but when he started to explain just how many financial transactions occur daily/hourly, and how they are tracked, analysed and pursued when necessary – wow! I for one will never look at a credit card transaction in the same way again. The power of technology to monitor and analyse the enormous amount of electronic information criss-crossing the globe is staggering. The ability to see patterns of expenditure and track finances is amazing.



At the end of John's presentation, I think we were all a little nervous, but also comforted by the knowledge that this watchdog was out there. I thank John for a truly fascinating talk.

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In less than two weeks, the 23rd ANZFSS International Symposium on the Forensic Sciences will be held in Auckland, New Zealand. The program is up and workshops are being organised. It looks like a fabulous opportunity to network, hear the latest developments, and of course catch up with colleagues. If you can make it – do so. I'm sure it will be of great benefit no matter what your discipline and role. As usual, the Victorian Branch, and the wider Society, has provided assistance to a number of people to attend – 17 Victorian Branch members were successful in securing either Branch or Society Awards. Congratulations to each of them.

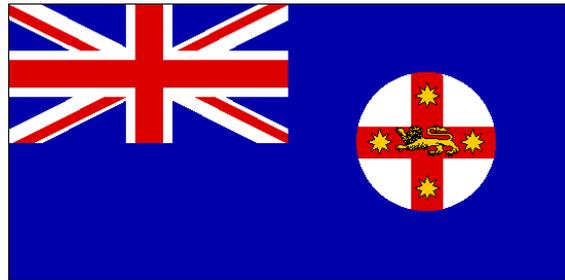
Finally – I look forward to continued growth of the Branch through a strong membership and enthusiastic committee.

Dr Jim Pearson
President
ANZFSS Vic Branch

Calling: NSW

Membership drive

2016 has been another great year for the NSW Branch. We have been working hard to diversify our membership base and encourage new attendance by holding our meetings at a variety of locations across Sydney.



Special thanks to our four ANZFSS NSW Branch committee members: Waseem Hermiz, Jodie Ward, David Bruce and Alison Sears, who work at NSW Health Pathology Forensic and Analytical Science Service (FASS), held a very successful membership drive and morning tea for FASS staff at the Lidcombe site to introduce to them ANZFSS as a forensic society and encouraged them to join up. The membership drive was a huge success and on that one day ~24 staff became new ANZFSS members and several others renewed their membership. This takes the total number of FASS staff who are ANZFSS members to 73 people, which is just over 25% of the total number of ANZFSS NSW Branch members.

Following on from that membership drive on that same week, the FASS Lidcombe site hosted the NSW Branch meeting with a talk given by Professor Gary Edmond called "What's an expert to do? Forensic scientists, expertise and expert reports after Honeysett, IMM and JP". The talk was sold out (with a long waiting list) and Professor Edmond's presentation was well received with plenty of questions and robust discussion. A survey was circulated amongst those FASS staff members who attended the talk and the feedback was overwhelmingly positive and encouraged more talks to be held at FASS Lidcombe. Once again, sincere thanks to our wonderful NSW branch committee members for facilitating this very successful event.

Total ANZFSS NSW Branch membership at June 2016 stands at 285.

Congratulations to NSW committee member Dr Jodie Ward!

Dr Ward was awarded the prestigious Winston Churchill Memorial Trust Travel Fellowship in 2015, and embarked on her travels in July. The aims of the project are to:

- 1) investigate specialist DNA techniques for the identification of compromised human remains arising from criminal, coronial or mass disaster scenarios; and
- 2) examine exemplar national DNA Identification Programs.

Dr Ward will be visiting world renowned experts, laboratories, and academic institutions in North America, South America and Europe that specialise in the DNA identification of human remains, are conducting novel research in this field, or have established successful DNA Identification Programs. We look forward to seeing the results of her investigations being presented at the upcoming Auckland ANZFSS symposium.

Meeting Reviews

Environmental Forensics — Dr Andrew Symons (NSW Branch Meeting 29th of April 2015) Review by Glen Wilcher

Andrew Symons is a Senior Scientist in the Environmental Forensics team within the NSW Office of Environment and Heritage. Andrew uses various forensic, analytical, and ecotoxicology techniques to undertake environmental forensic investigations. Andrew has over ten years' experience in environmental science, previously having worked at the National Measurement Institute and CSIRO Land and Water. Andrew has a BSc in Environmental Chemistry and a PhD in Environmental Microbiology from the University of Sydney. The Environmental Forensics Team within the Office of Environment and Heritage undertakes approximately 400 forensic investigations each year. The team analyses an extremely diverse range of sample types including toxic and hazardous materials, orphan wastes, poisoned wildlife and atmospheric fallout.



Andrews team at a scene

Andrew commenced by defining environmental forensics:

Environmental forensics is the scientific investigation addressing contamination, environment, and media being air, soil, water and biota to assist in determination of facts for use in law courts.

Andrew discussed the legislation in NSW concerning environmental protection with the main legislation being the *Protection of Environment Legislation Act and the Pesticides Act*. The *Contaminated Land Management Act* is another example.

Andrew explained the Environmental Protection Authority (EPA) works in collaboration with other government agencies to respond to and manage incidents being in effect the 'environment police'.

The EPA does this by monitoring emissions and compliance, conducting audits and investigating reports of pollution. They issue environment protection licences to control activities that could have an impact on the environment or human health. The EPA provides scientific and legal services, and prosecuting organisations and individuals who breach environmental laws.

The Environmental Forensic team consists of 24 staff members and is based at Lidcombe being employed for chemical forensics and ecotoxicology testing. The facility has \$4 million of modern laboratory equipment. Clients include the EPA and NP&WS.

Investigation of Environmental Incidents.

Andrew outlined the steps involved in the investigation of incidents. An incident occurs such as a pollution event. The EPA is notified. This can be self - notification, a member of the public or the EPA conducting audit or compliance checks. An EPA

Officer investigates and collects evidence. Advice and consultation is provided on collection of evidence. Samples collected are examined and tested by the forensic team and a report prepared as a brief of evidence in effect so as to decide on a decision with respect to a regulatory response.

Key questions to be asked in investigations include what is the chemical contaminant, the concentration levels, where did the contamination originate, why did it occur, who was responsible, and what is the potential or actual environmental impact.

Types of evidence collected.

Andrew outlined types of evidence collected by investigators which includes;

- Interviews
- Physical evidence such as samples
- Records like manifests, productivity records, emissions, electronic and paper records.
- Photographs
- Surveillance such as video cameras, motion sensors, and camouflaged cameras used in illegal dumping.
- Tracers being fluorescent balls that are placed in dumpsters of building waste such as asbestos. The balls are labelled 'EPA' and if balls are found by the EPA it shows a link between the origin of the waste and the dump site and contractor.

Andrew also outlined the collaboration that occurs between his team and other government bodies. The example he used was of a methamphetamine lab that was located in a National Park. This was a combined Police and Environment Operation. There were chemicals on site, LPG gas cylinders, 20 litre reactor flasks, and coffee plungers used as beakers. Andrews team was asked to analyse the samples collected. He then outlined some of the capabilities they have such as chemical, metal and organic testing using different technology as simple as optical microscopy and ability to utilise SEM, gas chromatography such as 2D gas chromatography, and infrared spectrometry.

Types of Ecotoxicology testing.

Andrew mention various types of tests conducted using test species such as the water flea test, using fluorescent bacteria, juvenile rainbow fish and the worm avoidance test.

These test species are used in toxicology testing, heavy metals, agricultural and domestic use of pesticides establishing safe levels of use. Examples include the levels of copper with rainbow fish and crude oil toxicants and dispersants with respect to egg production, hatchability, and larval growth.

Worm avoidance test look at the worm's mortality or avoidance of soil contaminates. *Daphnia magna* are small 5mm species so a great number can be raised in a small space. They have short life span, easy to culture. Different tests of chemicals utilize the water flea with exposure to varying concentrations of a substance under test and in chronic toxicity testing for example the total number of offspring produced at the end of a test can be assessed.

Cases.

Andrew presented various cases investigated in the past.

South West Sydney – Poisoned pigeons.

Busby Shopping Centre contacted a Russell Betland Manager of 'Birds No More' who specialised in "pigeon control". Tenants were complaining about the birds. Betland arrived in a van owned by his sister. He had no drivers licence or pest control licence. The unlicensed contractor's method of pest control was less sophisticated than his website suggested. Russell Betland and a friend went on to the roof and spread piles of seed laced with Fenthion. Betland also claimed he was offered money to poison more birds at the near -by home of Ronald Dean, who fed birds that visit his property. Scattered poison seed was found where Dean's grandchildren play as well as 44 dead birds, consisting of 38 Pigeons, 4 Doves and 2 Rainbow Lorikeets. 26 more birds were found dead at the shopping centre.



EPA worker recovering bird remains for testing

Dubbo bird deaths.

Bodies of cockatoos, corellas and galahs were discovered at Troy Reserve, a stretch of the Boothenda Road and other locations. The EPA reported testing indicated that an insecticide, Fenthion, was the likely cause of death. The insecticide detected in bird samples is commonly used to eradicate insects and non - native birds, such as starlings

Newcastle Oil Spill – MS Magdalene

On the 25th August 2010, at approximately 1030 hours while berthed at Kooragang Berth 4 in the Port of Newcastle, the MV "Magdalene" commenced deballasting. Oil had seeped into a ballast tank as a result of a 15mm diameter hole. During the deballasting between 1030 and 1400 hours on the 25th August oil was discharged into the Hunter River at the Port of Newcastle.

The mixture of oily water containing 72,000 litres of heavy fuel oil was discharged. The total cost of the clean-up to the Port of Newcastle was approximately \$2 million. Difficulties were experienced due to the thickness of the oil.

The spill had effects on fauna and the local ecosystem. 45 to 50 pelicans were impacted which were required to be transported to Taronga Zoo for intensive care and rehabilitation. Light oil spotting occurred in protected salt marshes and mangroves in the Hunter Wetlands National Park. Invertebrate animals on mudflats were also contaminated. Environmental forensics is gaining more interest within consulting and



Wildlife affected by the oil spill

legal communities, academia, industry and regulators as well as outside the legal environment. It is a specialization in forensics with greater investigative methods and tools. The advancement of this forensic and scientific discipline is evidenced with numerous universities offering degree programmes in environmental forensics and the publication of specific peer reviewed journals.

References.

Images from Google image.

Sydney Morning Herald 4/10/2010 Pigeon lover poisoned other man's birds.

www.abio.com.au/bifenthrin-pesticide-causes-catastrophic-crayfish-mass-mortality

www.epa.nsw.gov.au/epamedia/EPAMedia1502801.htm

www.dailyliberal.com.au/story/2142090/dubbo-bird-deaths-caused-by-insecticide

2015 NSW Branch AGM 1st of October - Malaysian Airlines flight MH17- Operation AREW - Dr Simon Walsh. Review by Scott Chadwick

For the 2015 ANZFSS NSW Branch Annual General Meeting, our speaker was Dr Simon Walsh, AFP Chief Scientist and AFP National DVI Commander, who gave a very insightful presentation into the Australian response to the MH17 tragedy. Simon's presentation focussed in on the process of the investigation which specific focus on disaster victim identification (DVI).

On the 17th of July Malaysian Airlines flight MH17 was travelling from Amsterdam to Kuala Lumpur. The Boeing 777-200 was carrying 298 passengers and crew, 41 of which were passengers of interest to Australia (either Australian citizens, permanent residents or non-permanent residents). At approximately 1:20 PM (UTC) the plane crashed in the eastern Ukraine province of Donetsk, all passengers on board lost their lives. Initial reports indicated that the aircraft has been shot down by a BUK surface-to-air missile. The wreckage spread over an area of 50km², with six different wreckage sites identified, adding to this, the wreckage was in a conflict zone, which significantly impacted investigators ability to retrieve remains and analyse the crime scene.

Simon then began to outline the Australian government response to the tragedy, early on there were issues with communication, with different information coming from media and other sources. On the 18th of July the Australian Federal Police establish operation AREW, which made contact with the Netherlands and offered



Dutch and Australian Authorities at the crash site on 3rd August 2014

Australian support in the investigation. The aim of the Australian investigation was to help identify the victims of the crash, other aspects of the crash were investigations by the Dutch authorities. Over the course of the investigation approximately 280 AFP members would be deployed, with 63 personnel (AFP and other authorities) deployed just for the DVI process. The remainder of Simon's presentation focussed on the process involved with DVI.

DVI—Phase 1— Scene

The first part of the Australian investigation involved the search of the scene and recovery of any remains. This was a challenging task given the size of the crime scene, but there were also other factors that were working against investigators, this included, issues with access (the area was under separatist control, which meant that investigators were only allowed in certain areas for short amounts of time), geographical isolation, communication issue, time restraints (separatists only allowed them access for three weeks) and few investigators had experience in working in active conflict zones. Despite these factors working against them, investigators pressed on to achieve their objectives. The recovery of human remains was their primary objective, they also hoped to recover any personal effects relating to the deceased (which could aid in identification) and aircraft wreckage which could be used for the air crash investigation.



"Convoy of MH-17 victims on the highway" by Ministerie van Defensie

This phase of the investigation was successful with most remains being recovered from the scene. After the remains had been recovered they were transported by train out of the conflict zone in Torez to Karkiv (a disused munitions plant), at this point in time no analysis of identification steps were performed, the aim at this stage was to log what was retrieved, a preliminary safety assessment and placing the remains into coffins for transport to the Netherlands. After this all remains were transported to

Korporaal Van Oudheusdenkazerne in a escorted convoy. After the coffins were transported to the facility the identification process could begin.

Phase II—Post-Mortem

This phase of the investigation aims to establish cause, manner and mechanism of death and to collect data for identification purposes. The first step in this process involved the x-raying and catscanning each coffin, this was done to identify whether any remains were of interest to the criminal investigation, these remains were then separated from the DVI process. Once this was performed a safety check of the remains was performed, this was of particular importance in this case since the remains had been exposed to a topical formaldehyde cream prior to transport. This resulted in a significant build-up of toxic gases in the coffins, which was a significant risk to investigators. Simon reported that the safe working levels of this particular chemical is around 50 parts per million (ppm), the levels reported inside the coffin were between 500-1500 ppm, as a result full respirators needed to be worn during the DVI process. Following this the post-mortem procedures could be carried out, including an autopsy, fingerprint collection, descriptions of clothing, collection of pathology samples (DNA) and dental examination. This process was all performed according to the INTERPOL Disaster Victim Identification Guide.

Phase III—Ante-Mortem

| Victims by State | |
|------------------|----|
| ACT | 1 |
| NSW | 5 |
| NT | 1 |
| QLD | 7 |
| SA | 0 |
| TAS | 0 |
| VIC | 18 |
| WA | 9 |

In order to compare the victim data, to a known source, ante-mortem collection need to occur in order to assist in the identification process. This process involved contacting the families of passengers on-board and collecting detailed descriptions of each potential victim, including jewellery, dental and medical records, photographs, DNA, fingerprint. During this time it was determined the number of victims from each state, Since this process needed to be done in Australia, the Victorian coroner and the Victorian Institute of Forensic Medicine (VIFM) were responsible for this process in the identification. Ante-mortem data in this case was collected within 2-3 weeks and sent to the facility in the Netherlands for the final phase of the DVI process,

Phase IV—Reconciliation

The final phase of the DVI process requires the matching of post-mortem data with ante-mortem data to identify the remains. This process relies on primary identifiers (dental records, friction ridge analysis or DNA) or in some cases a combination of secondary identifiers (medical records, clothing, jewellery, tattoos) may be used. Simon mentioned that in this particular case social media (Facebook photos of victims before boarding the plane) was helpful in certain cases. Secondary identifiers were also helpful in reconnecting families with some of the belongings collected from the crime scene. During this process, all post- and ante-mortem data needed to be verified and confirmed that it was to the proper standard so that a comparison report could be shown to international representatives as part of the Reconciliation Centre. Once they are satisfied, the report is sent to the appropriate legal authority which confirms and accepts the identification. After this stage the remains are returned to the families of the victims for proper burial. By December 2014 all Australians had been identified and accounted for. In the case of the Australian victims Simon stated that DFAT coordinated repatriation via military or commercial flights to bring them home. Information on the victims return was kept contained so that only the family were aware when the remains were being returned; this was done to ensure that the media did not circulate the information. The DVI operations for flight MH17 ceased on the 1st of September 2015 with 296 of the 298 victims identified. This is an incredible feat considering the factors working against investigators and the monumental task they undertook.

Simon's presentation was very interesting and informative, by sharing his experience our members were able to gain greater understanding into the processes involved in this side of forensic science. This can be attested by the overwhelming response we had to this meeting.

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<http://www.defensie.nl/onderwerpen/oekraine-repatrieringsmissie/inhoud/fotos>
https://commons.wikimedia.org/wiki/File:Convoy_of_MH-17_victims_on_the_highway.jpg#/media/file:Convoy_of_MH-17_victims_on_the_highway.jpg

NSW Branch meeting 13th April 2016 – the “Weight of Evidence” by Matthew Murphy. Review by David Bruce.

The Australian Museum was a fitting venue for the April presentation evening of the NSW Branch, when our guest presenter was local history author, and veteran fireman, Matt Murphy.

Matt is the author of the book ‘Weight of Evidence’ (Hale and Iremonger publishers), which describes the events in the 18th and 19th centuries surrounding the Newtown Ejectment Case, a lengthy legal property dispute involving 210 acres of land in the inner west of the fledgling Sydney colony. Little did they know that the land in this area was destined to become a significant part of two of Sydney’s trendiest inner city suburbs, Newtown and Erskineville.

Matt enthralled the audience with the fascinating tale of the Convict Supervisor, Nicholas Devine, who was given the land, then known as Burrin Farm, in 1799, in appreciation of his service to the colony, by the Lieutenant Governor Francis Grose.

Unfortunately for Devine, he was befriended in his later years by an Irishman, Bernard Rochford, who was a convict attaint. Matt defined the concept of the ‘attainted’ convict as offenders who had their death sentence commuted to life imprisonment, but who were still considered legally dead. In other words, they had no legal rights and could not own property. Despite this significant setback, Rochford set about defrauding Devine (who was by then elderly and suffering from dementia) of his land, subdivided it and sold it off to other colonists. However, following the death of Devine, his family in Ireland laid claim to his property in Sydney only to discover that the dastardly Rochford had robbed them of their rightful inheritance



“Weight of Evidence” Author Matt Murphy (Left), NSW Branch president Rebecca Johnson (centre) and NSW Branch committee member, David Bruce (holding Matt’s book!!)

And so began one of the longest and most expensive court cases in Australia’s history, when John Devine, the nephew of the late Nicholas, came to Sydney to claim his birthright. The case was to be hotly contested due to the vested interest of the property owners who had purchased the land from Rochford, and were understandably reluctant to give it up. Ironically only property owners could act as jurors in the case adding a further bias to the proceedings.

Matt Murphy, a natural and entertaining raconteur, told the tale with both humour and intrigue, even including some handwriting comparison of signatures (allegedly from John Devine) for the forensic document examiners. Apart from the intriguing story itself, Matt warned of the ease by which apocryphal tales can easily be embedded in our culture as ‘facts’. As an example, Matt discussed the unfounded, yet widely accepted story, that a past resident of Newtown, Eliza Donnithorne, was jilted on her wedding day and inspired the character ‘Miss Havershaw’ in the Charles Dicken’s novel ‘Great Expectations’ (his own detailed research has found that this rumour has

no factual basis). It was a cautionary note for us all to dig deep to find strong evidence and not merely accept things on face value alone. A take home message as relevant to science and the delivery of expert forensic evidence as it is to the study of history.

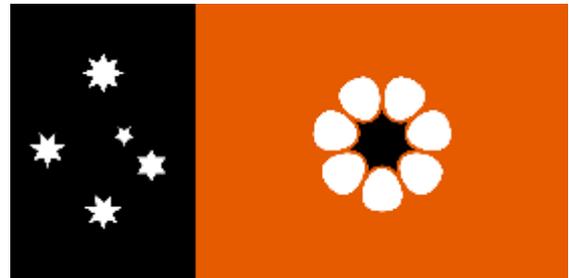
Matt also temporarily switched over to his other profession to remind us all about the crucial importance of installing and maintaining smoke detectors in our homes. An irrefutable fact!

Dr Rebecca Johnson
NSW Branch President

Calling: NT

A Top Trio

To finish off 2015, the NT Branch were excited to have access to an amazing trio of presenters who were all in the Northern Territory for the Australian Society of Forensic Odontology Symposium. They all generously donated their time in between their prior conference commitments to present to the NT Branch.



- Mrs Carla Noziglia from the USA delivered a presentation titled “The Steady Current in the Changing Tides – Or – Not Another Ethics Talk”.
- Professor Carol Henderson, also from the USA, delivered a presentation titled “The National Clearinghouse for Science, Technology and the Law”.
- Mr Chris Anderson from Australia delivered a presentation titled ‘Emerging Technologies in Forensic Document Examination’.



Mrs Carla Noziglia, Mr Chris Anderson and Professor Carol Henderson

Disastrous Start to 2016

The NT Branch was delighted to start off the presentations for the year on 6th April with a talk by Chief Forensic Pathologist for the NT, Dr John Rutherford. His presentation, entitled "A Miscellany of Disaster", was delivered to one of our largest audiences. Dr Rutherford reviewed a number of high profile Disaster Victim Identification (DVI) incidents in which he had been personally involved, and the lessons learned. These DVI incidents were from a wide range of geographical areas; from Waco (Texas), through to Kuwait and Iraq.



Dr John Rutherford and NT Branch President Dr Karen Cavanagh

NPFES Open Day



NT Branch Public Officer Kelsey McGorman and Dr Karen Cavanagh

The NT Branch were honoured to participate in the NT Police, Fire and Emergency Open Day on the 16th April. With approximately 15,000 people attending the community event, it was a great opportunity for the Branch to host an information stall and meet interested members of the local community. We are lucky to have dedicated members who are willing to give up their valuable time to promote the association. A huge thankyou to everyone involved!

Previous Executive

The ANZFSS NT Branch extends its sincere appreciation to the retiring members of the previous Executive Committee for their dedication to advancing forensic science in the NT and to serving the members of the Branch for many years. President Anna Kmon, Vice-President Narelle Moss and Treasurer Hazel Rivera are to be applauded for their efforts.



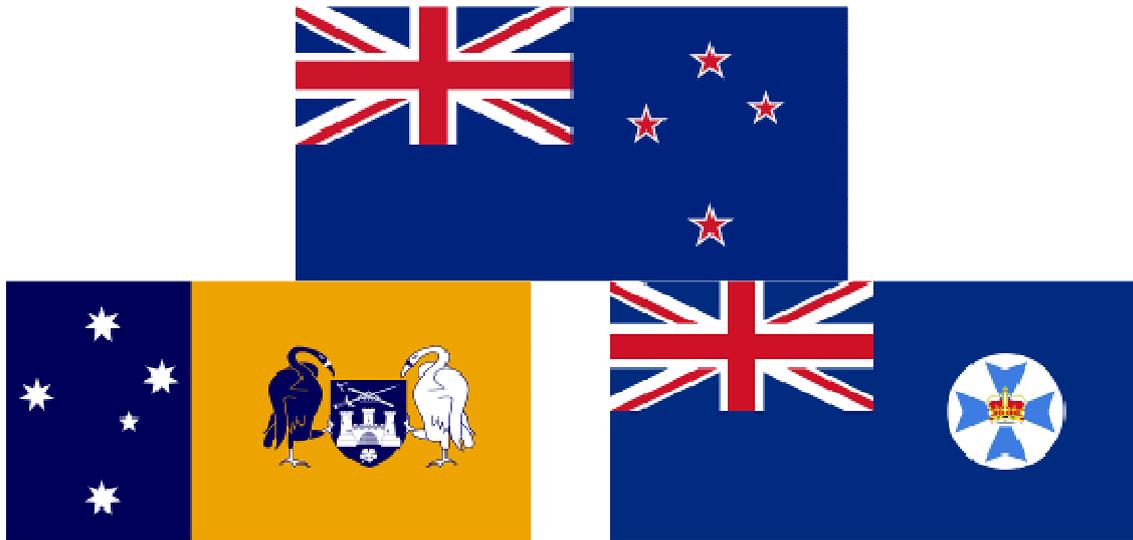
We have plenty of events coming up so don't forget to like us on Facebook if you want to keep up to date.

www.facebook.com/AnzfssNTBranch



In the next edition:

Branch updates



Together InForming Justice

ANZFA 23rd International Symposium
on the Forensic Sciences
18 - 23 September 2016
Auckland, New Zealand
www.anzfa2016.org



Symposium highlights including all Award winners.