



Forensic Science News



The Newsletter of the South Australian Branch of the Australian and New Zealand Forensic Science Society

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Barry Collins Memorial Wine Night

Friday 3rd December 2010

7pm for 7:30pm start

The German Club

223 Flinders St, Adelaide



Wines by Bundaleer wines, presented by winemaker Angela Meaney

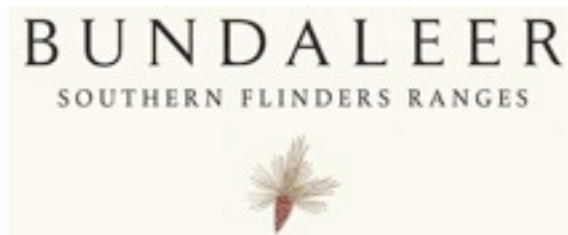
Guest Speaker: Alan Pollnitz - "Pepper aromas in Shiraz wines and in pepper"

Come along and taste some great wines, eat some supper and learn from Alan Pollnitz (FSSA, formerly of the Australian Wine Research Institute) about the discovery of important aroma compounds found not only in wine, but pepper and other plants.

ANZFSS Members: Free Non-Members: \$15

RSVP by **1st December** to Carolyne Bird:

Phone 8226 7700 or carolyne.bird@sa.gov.au





ANZFSS 2010 Symposium - SA Travel Award Winners: Showcasing Forensic Science Research in SA

L-R: Stewart Walker, Des Phillips, Jessirie Dilag, Rachel Hughes, David Eitzen, Danielle Butzbach, Kerryn Mason and Kerrilee Allan. Not pictured: Michael Cook and Nicol Sly.

The ANZFSS 2010 Symposium was held in Sydney from the 5th to 9th September and was a successful international meeting of forensic practitioners, researchers and sponsors from around the world. Approximately 960 delegates attended, cementing the ANZFSS symposium as one of the leading forensic science conferences in the world. The conference also provided the opportunity to take part in workshops, view the latest technological developments and presented the chance to network, not just country wide but also internationally. The conference program was excellent, with 300 oral presentations and 300 posters, across a wide range of topics. Plenary

and keynote speakers were diverse with international guests presenting within the theme of the conference "Forensic Science on Trial" and exploring topics such as the future of forensic science, the professionalism of the field, the philosophy of the science which underpins forensic science, and continuing improvement and quality assurance despite funding issues and the demands of an increasingly educated and critical public.

South Australia was very well represented with a large number of posters and oral presentations from both academia and industry here in SA. The quality of the research from SA was of a high

calibre, and demonstrates that SA is continuing the trend of leading the way in forensic innovation and research on an international level.

Some of the branch members who attended the conference were recipients of travel awards, both from the National and local branches, which covered some or all of the costs associated with attending the conference. Over the last few months, the recipients of these awards have been sharing their presentations at the branch meetings. The research presented spans the full range of forensic specialisations and showcases the excellent work going on right here in SA. Many thanks must go to both the SA and the

National branches for providing the funding for these travel awards.

On the following pages is an overview of the travel award recipients and a brief snapshot of the work they have presented over the last few months at the society meetings. Congratulations again to the 10 recipients.

Travel Award Recipients are as follows:

Stewart Walker - Multiple oral and poster presentations
Sandy Congdon Travel Award
Presented at the September meeting

Stewart is an Associate Professor at Flinders University. As well as research he maintains a very busy schedule supervising graduate students, and coordinating and teaching several subjects in the forensic science program. Stewart's work has been focused on the evaluation of mass spectrometry techniques not traditionally used for forensic analyses. The two techniques LA-HR-MC-ICPMS and IRMS, are usually last resort methods after cheaper and less destructive techniques have been exhausted. Stewart argues however that the new techniques may be preferable in some cases and may in fact be cheaper and faster than trying other methods first. Further work is needed however, to test applicability and validate both techniques for forensic use, but Stewart's work shows new techniques definitely have a place in the future of forensic science.

Jessie Dilag - Oral presentation
National and SA Partial Travel award
Presented at the August meeting

Jessie is a PhD student at Flinders University who is assessing new materials for fingerprint detection. In recent years there has been a unique twist in fingerprint research which has involved the implementation of nanotechnology into the structure, function and design of novel fingerprinting reagents, and Jessie is focused on evaluating this new technology. Jessie presented not only a review of the technology but also her current work that involves the synthesis of chemically specific fingerprint powder reagent using a custom polymer coating on fluorescent semi-conductive nano particles (quantum dots) of cadmium sulphide (CdS).

Rachel Hughes - Oral presentation
SA Full Travel Award
Presented at the August meeting

Rachel is a PhD student at Flinders University and her thesis has focused on evaluating ion chromatography (IC) to quantify GHB, a drug which has both medicinal and recreational uses. GHB is an illegal drug in many countries, thus being able to quantify it as part of clandestine lab analysis may assist in intelligence about the lab. Rachel assessed the use of IC based on conductivity, detection, robustness and sample preparation conditions. Upon optimizing conditions, Rachel found that the conversion of GBL into GHB may be problematic – GBL is a prodrug of GHB, but also is a common chemical with a wide variety of uses, and is a controlled substance. This effect on the GHB analysis by IC is of particular concern for cases where solutions are from clandestine labs and may contain both GBL and GHB. Rachel has identified the key validation concerns and issues surrounding using IC for GHB analysis.

Danielle Butzbach - Oral presentation
SA Full Travel Award
Presented at the July meeting

Danielle Butzbach is in the third year of her PhD studies at Flinders University and is working in conjunction with Forensic Science S.A. Her research examines the ability of bacteria that decompose the body post-mortem to also convert particular anti-depressants and anti-psychotics into degradation products. Several of these bacterially-produced degradation products have been identified and it is hoped that this research will assist in post-mortem toxicology cases involving these drugs in the future.

Travel Award Recipients continued...

**Nicol Sly - Poster presentation
National Full Travel Award
Presented at the October meeting**

Nicol's poster, "Improving DNA Success Rates from Firearms" reported a study to determine the success of sampling for traces of DNA from under the grips of firearms. Previous work has shown that external surfaces of firearms, which are typically sampled for DNA have low success rates - only about 4% of samples lead to usable DNA profiles, and approximately 80% don't yield enough DNA to process at all. Nicol's work has focused on evaluating a new sampling technique, targeting beneath the grips of the firearm, working on the premise that DNA may get trapped in this area. Over a six month trial, it was found the DNA under the grips was of a similar amount to that on the external surface of the firearm and similar success rates were found. Research into the sampling technique continues, as any extra information which can be provided is worthwhile to the investigation.



Some of the travel award winners in action presenting their research at the Branch meetings. L-R: Kerrilee Alan, Jessirie Dilag, Michael Cook.

**Kerrilee Allan - Poster presentation
National Partial Travel Award
Presented at the October meeting**

Kerrilee's work involves modifying capillary surfaces with polymers, for the separation of short strands of double-stranded DNA using capillary electrophoresis. Separation of these oligonucleotides is possible due the screening of the negatively charged DNA by the positive charges on the coated surface. Typical gel electrophoresis is expensive, degrades quickly and the results are often not reproducible. Kerrilee's study therefore is important in developing new approaches for DNA analysis. Her work has included the identification of a suitable coating, the production of the coating, and application of it. Upon determining a copolymer to coat the capillaries, and optimising conditions, it was possible to successfully separate and resolve small fragments of DNA.

Travel Award Recipients continued...**Des Phillips - Poster presentation
SA Partial Travel Award
Presented at the October meeting**

Casework has revealed that the refractive index (RI) of container glass is likely to vary widely across the item, but there has been no published research. Des's study investigated the range of refractive index (RI) within various common container glasses including drinking glasses, bottles, jars and miscellaneous containers. Results found that RI does vary, particularly for beer bottles and wine glasses. In some cases, completely different glass has been used to manufacture the bowl versus the stem of a wine glass. A further part of the study was to examine the effects of annealing and the change in RI post annealing. Des found each sample of glass which was annealed reacted in a totally different manner. There was no correlation between the RI pre- and post- annealing to suggest that its origin may have been from a particular type of container. Des's work has shown that whenever a container may be the glass source of interest, as much of that container should be collected so a complete range of sampling can be undertaken for comparison with any recovered glass.

**Michael Cook - Poster presentation
National Partial Award
Presented at the October meeting**

Michael Cook's poster was a combination of casework and research. In March 2009, a man was seen to be acting suspiciously in an area just prior to a grass fire breaking out. An intact incendiary device, with not burning or charring was located in the area. The liquid found was composed of pool chlorine and silicon oil rather than the typical car brake fluid (polyethylene glycol), which is often used as an ignition fluid. Silicon oil is used in high performance racing cars, but despite searches, Michael couldn't locate any in use by car retailers in Adelaide. However, he discovered that Harley Davidson motorcycles use this kind of brake fluid. He obtained a sample and tested the conditions of the recovered 'incendiary device', with the same result (ie. it didn't ignite). He also undertook further research to investigate why pool chlorine and standard brake fluid do ignite, because alone they are non-reactive. The only prior publication regarding this question was research by SA's own Hilton Kobus and Paul Kirkbride, who put forward a theory in 1991. Better instrumentation available has now allowed Michael to test their theory, but he didn't find any of their postulated reaction gases.

**Kerryn Mason - Oral presentation
National Partial Award
Presented at the October meeting**

Kerryn's presentation was an analysis of heatwave deaths in Adelaide during a heatwave in January 2009. During this time there was a significant increase in the number of deaths and Kerryn's analysis was aimed at determining the key groups which were impacted, and the factors which led to an increase in mortality rates. 58 deaths were ruled as heat related with an age range of 27-95, and the highest proportion of deaths were in the age groups 51-65 and 76-85. Autopsy results, toxicology including blood alcohol, and psychiatric conditions were all examined. Overall, over half the individuals were negative for any type of drug, and almost half had blood alcohol levels of less than 0.05%. Kerryn's work has identified two key groups based on age demographic which had increased mortality during the 2009 heatwave. Kerryn's work in understanding the impacts of heatwaves on certain demographics may be of use in targeting key demographic groups at risk and minimizing deaths during future heatwaves.

Travel Award Recipients continued...

David Eitzen - Poster presentation
National Full Travel Award
Presented at the October meeting

David's poster "Working with Bariatric (obese) bodies in the mortuary" came about after observing an increase in the number of 120 - 300+ kg bodies admitted to the FSSA mortuary. The obesity epidemic has been well documented and the consequences have led to a number of changes in work practices to enable the staff to deal with the movement and examination of these deceased in a safe manner. David's investigations showed that the issue begins prior to the mortuary affecting many areas within the community including, emergency services, hospitals, residential care facilities, and the funeral industry. What started as an investigation of what could be learnt from other industries ended up concluding that the current obesity epidemic is affecting a broad range of industries within the community and other than using mechanical lifters & changing some work practices, no one seems to have the complete answer in dealing with these cases. David's investigation is continuing.

Contributions Welcome

All members are welcome to contribute articles for inclusion in the newsletter.

If you don't have an article, but may have a question that another member may be able answer relating to forensic science, please send them to us.

Email the editor: janette.edson@adelaide.edu.au

A Member's Achievement:

Congratulations to ANZFSS SA Branch member, Amy Austin who recently graduated with 1st Class Honours in Pathology at the University of Adelaide. Amy's project examined suicide trends in SA from 2005-2009. Congratulations on your fantastic achievement, Amy.

From the Editor:

Welcome to the Spring/Summer edition of the SA ANZFSS newsletter. This newsletter is a bumper edition with lots of meeting recaps and the latest from both the local and National committees. This edition also includes reports on the ANZFSS Symposium in Sydney, which saw excellent representation from South Australia. This is also my maiden publication as editor, with the new SA branch committee being elected at the SA branch AGM in August.

The SA Branch committee has been busy planning for 2011. Next year is shaping up to be a great year with meetings ranging from the legal perspective of cases through to forensic evidence and case studies - there is sure to be something for all the interests of our members. Please make note of the tentative meeting dates on page 15, and further information will be coming out soon once the schedule of speakers and venue is finalised. The SA Branch has seen excellent attendance at meetings and membership continues to grow from all facets of the community, and it is hoped that 2011 will see continued interest in the society.

The Barry Collins Memorial Wine night on December 3rd will be the final event for the SA Branch for 2010 - further information is on page 1. On behalf of the committee, I would like to wish all members a safe and enjoyable Christmas and holiday season, all the best for the new year, and hope to see you at a meeting in 2011.

The June Meeting - Derrick McManus

SAPOL Officer and motivational speaker

On 3 May 1994, a group of SA Police STAR Group officers were assembled to execute a warrant on an individual at Nurioopta. Whilst these officers are trained to deal with the most high-risk and dangerous situations, the events which unfolded that day were forever to shock the community, yet would also demonstrate the strength and heroism of not only the STAR Group officers, but emergency response teams, paramedics and doctors. One individual whose life was forever changed that day was Derrick McManus. At the June meeting, Derrick took us through that fateful day, his recovery and life since – a truly challenging and inspirational journey, and nothing short of extraordinary.

Derrick has been a member of the SA Police for over 20 years, and this included time as part of the police dive team. Derrick had encountered highly volatile policing situations before – he had been held at gunpoint, and managed with a colleague to wrestle the gun from the hands of his intended killer. Recounting the events of that day at Nurioopta, Derrick told the story with much humour, and many anecdotes of the events and life since.

The STAR Group team arrived at the property and approached the house - they were there to arrest a man on fraud charges, who had threatened the police. Derrick moved around to the side of the house. Upon reaching the door, he was hit with 14 bullets and shrapnel within 5 seconds – the individual was waiting inside the house armed with shotgun. Derrick hit the ground on his back and managed to pull his gun, firing back at the gunman. He noted that he had to be careful not to shoot his own toes off, as that would not be a good look! He dragged himself to a spot at the side of the house, doing everything he could to stay alive including controlling his breathing and heart rate, a technique learnt during his diving days. Staying calm was critical, and even when he lost his eyesight due to his body shutting down, he managed to hold on.

Meanwhile a team had assemble to not only attempt to capture the gunman, but also to retrieve the now near-death Derrick. Despite being a distance away from the house, the team was under constant gunfire as the shooter had moved into the roof of the house and was taking aim on the team. Dr. Bill Griggs was called in with a team from the Royal Adelaide Hospital. Bill's expertise is trauma medicine and he would prove indispensable in saving Derrick's life - three hours after being shot, Derrick was rescued. By this stage Derrick had lost so much blood he was as white as a ghost, had almost no pulse and didn't appear to be breathing. In a fortuitous moment, while Dr. Griggs was looking over Derrick for any vital signs, he took a breath. At that moment, Dr. Griggs knew it was worth a shot to try to revive Derrick, and while his team worked to stabilize him, the gunfire continued around them.

Derrick was taken to hospital, and the long process of removing the shrapnel and bullets began. One bullet came within a paper breadth of hitting his femoral artery, something which would have cost him his life. After surgery, the long road to recovery began. Derrick's colleagues rallied around, visiting on a regular basis to keep his spirits up even getting together and completing lots of handyman tasks around the house including a makeover of the garden. However, despite the good humour and positive outlook Derrick had, it was a long, slow and painful recovery. There was a risk Derrick would never fully recover and at times, he suffered severe drawbacks. Upon returning home, he couldn't do even basic tasks like lifting even small weights or hugging his children without pain, and this was incredibly demoralizing. However, he made the choice to look up and get on with it – and despite the prognosis, even managed to return to work about a year after the incident. This journey, with its ups and downs, now forms a large part of Derrick's life. He is often called on to share his story, telling others how to overcome challenges and be "Prepared to Win".

The gunman maintained the standoff for 40 hours. He was eventually arrested by partial demolition of the roof of the house. It turned out that his wife and children had also been inside, trapped inside the house. For the final part of the meeting, Derrick showed some of the crime scene photos, highlighting where he had lain for those 3 hours, and the location where the gunman had been in the roof. It turned out the gunman had in fact not been taking aim, but rather was shooting randomly through the air vents in the roof it was impossible for him to shoot accurately; however this fact it did not make any of the shots fired any less dangerous.

The story of Derrick McManus and his amazing journey provided for an inspiring meeting. Thanks must go to Derrick for recounting the events from that day, both from a forensic science perspective and also personally.



The July Meeting -Professor Adrian Linacre

SA Chair in Forensic Science, Flinders University

When one thinks of Scotland, kilts, bagpipes, the Loch Ness Monster, Haggis and maybe William Wallace spring to mind... and that famous detective, Taggart. And for July's meeting, Adrian brought us tales from Taggart-land. What doesn't spring to mind when one thinks of Scotland is that Glasgow is Britain's capital of knife crime. As Adrian put it, Adelaide is rather tame with its title of Australia's murder capital in comparison to the bad parts of Glasgow.

As well as DNA evidence, Adrian is a blood spatter expert. In some cases the blood spatter evidence is straightforward and incredibly useful, in others it poses more questions than it answers. Blood spatter evidence relies on the basic laws of physics, so patterns of spray, splatter and droplet direction can inform investigators about not only how much someone has bled, but movement, weapons used and even a timeline of events. The patterns produced depend on whether the splatter is caused by impact, is projected, or even passive, in the case of bleeding. The height the blood falls from as well as the surface it lands on also dictates the resulting pattern. Post-depositional events such as smearing and walking through blood, thus splattering the blood are also informative about individuals and their movements.

In some cases, even impressions of shoes and weapons are left behind, providing further information about the events which have unfolded.

Adrian recounted a number of the cases he advised on, complete with plenty of images and examples:

Case 1: A case of Déjà vu?

This was one of Adrian's first visits to a crime scene – police had been called to a flat in Ibrox, a dangerous part of Glasgow. The flat was run down, and it looked like it had a been a messy night which had consequently turned sour. Slumped in a lounge chair, a man had been beaten over the head with a bottle of Buckfast, a popular fortified wine. The blood spatter on the walls showed cast off from the bottle, and the spray patterns showed the direction of impact. Around six months later, another crime in the area was reported. Adrian was called out, and upon arriving at the scene, sensed a strong feeling of déjà vu. Not only was it the same block of flats, but the same flat and the same room! This time however, the story was a little more complicated – two men had a big night, had taken drugs and fallen asleep on the lounge. Upon one man waking, the other was dead. He claimed to have no idea what had happened. Once again, a bottle was the weapon, and the blood spatter had its story to tell. The blood spatter pattern was odd, with the cast off going in what appeared was the wrong direction. It turned out the victim had been hit by a left-handed individual. The remaining man was also was left handed, thus linking him to the bottle and the murder.

Case 2: A trip down the stairs

Adrian was called to a case in Edinburgh. A body had been found at the bottom of a set of stairs. The victim had been stabbed in the chest and blood was present all the way down the stairs. Furthermore, there was forced impact spatter on the fireplace in

the apartment at the top of the stairs, which may have been the site of the stabbing. The investigation also revealed passive blood spatter on the sheets of the bed and a lot of blood spots, with a range of patterns, indicating mixed actions. It appeared someone had walked through the blood, possibly multiple times. The case was originally ruled a suicide but remains open.

Case 3: The murder of Billie-Jo

The murder of Billie-Jo Jenkins remains as one of the controversial unsolved cases in the UK today despite occurring 13 years ago. Adrian took us through the blood spatter evidence, which was the crux of the prosecution's case, and also a source of much debate. Sion Jenkins, Billie-Jo's foster father became the prime suspect after more than 150 small spots of blood were found on the clothing he was wearing. His alibi was that he went to the hardware store, and had taken his two biological daughters with him. He arrived home to find Billie-Jo lying on the back patio, having been hit in the head 19 times with a large tent peg. He claimed the blood ended up on his clothing because Billie-Jo expired the blood whilst taking her last breaths. There were criticisms of the investigation and lack of explanations for the blood spatter, and despite his claims of innocence, Sion was convicted of the murder in 1998. Sion's lawyers appealed, and were initially unsuccessful, but a second appeal saw a retrial ordered and Sion was released. Two more retrials occurred, but the juries were unable to reach a verdict, and Sion was declared not guilty, and

July meeting - Prof. Adrian Linacre continued.....

thus cannot be retried. This case turned out not to be so much about the trial of the accused, but rather a trial of the role of the expert witness and the delivery of complex scientific evidence.

Case 4: Suicide or Murder?

The Thai MP, Hangthong Thammawattana was found dead in his brother's room on September 5 1999. Hangthong was the son of a wealthy family and administrator of his family's fortune, and this was not only a high profile case due to his politics, but also his family – a family feud had seen several members be killed or disappear prior to Hangthong's death. Thai police had ruled his death was a suicide. As a result, Thammawattana was not able to have a traditional funeral under the family's religious customs, which was deeply distressing to his family. Adrian was visiting Thailand to attend a conference and was approached by Hangthong's sister, who asked if Adrian could look over the evidence as she was adamant that he hadn't committed suicide. What started as a simple consultation quickly became national news, and even a security risk. Hangthong had been found in a chair, head tilted back, with a revolver in his hand. He had been shot through the ear with a pellet based bullet. Upon studying the images and blood spatter, it appeared that the conclusion of suicide was not consistent with how the victim appeared, the location of the gun and the blood spatter.

Alongside forensic pathologist Dr. Khuning Pornthip Rojanasunand, Adrian was part of a team which conducted a second autopsy, confirming suicide could not conclusively explain Hangthong's death. Due to the high profile nature of the case and the team involved, the media took a keen interest, with

near daily reports on the case, and due to the nature of the case, security was a big concern. Adrian recounted going into Bangkok to buy a gift for his wife. Arriving at the Hard Rock Café, he noticed there was no-one around. It turned out that his security escort had evacuated and closed the entire square to avoid any risk to Adrian's life. As a result of the investigation, Hangthong's brother, Noppodal was arrested and tried for murder. In order to counter Adrian's blood spatter evidence, he hired the famed blood spatter expert Henry Lee. Now with even more famous forensics experts involved, the media storm continued. A third autopsy was performed, with experts ruling Hangthong had indeed committed suicide. Despite the opposing expert opinions and evidence, Noppodal was indicted for murder, 5 years after the death of his brother. The Thai royal family stepped in and ruled that Hangthong could have a traditional funeral. Early in 2010, over 10 years after Hangthong's death, Noppodal was acquitted on the grounds that not enough evidence existed to convict him of murder.

On a side note, Adrian was asked to consult on another case whilst visiting Thailand. Upon seeing the victim, who was thought to have died from a stroke, he pointed to a very clear Timberland shoe print on the deceased's throat – whilst initially looking like it may be another controversial Thai case, this one turned out to be much more straightforward than the death of Hangthong Thammawattana.

Based on these few cases, July's meeting provided insight into how blood spatter evidence can be used to help piece together the events at a scene of crime and link individuals to that scene. Furthermore, Adrian

showed how controversial some cases can be – unlike in popular media where everything seems so straightforward, often evidence is inconclusive, expert's conclusions differ, investigations are compromised and politics can come into play, meaning sometimes the truth of a crime is obscured, and unfortunately, sometimes never solved.



The August Meeting - Associate Professor Martin Jarvis

Artistic Director of the Darwin Symphony Orchestra, and Associate Professor at Charles Darwin University

Johann Sebastian Bach is undisputedly one of the most celebrated and respected composers and musicians of the Baroque period. His music is played and enjoyed all over the world, but did he compose it all on his own?

This is the question that Professor Martin Jarvis has been trying to answer and at August's meeting, Martin took us through his use of forensic document examination to study Bach's original transcripts in order to determine the author of the work. Studying Bach is a challenge, as little aside from his musical transcripts have survived. In fact according to Martin, less is known about Bach's life than Shakespeare's.

Martin set about studying the music transcripts using modern handwriting analysis techniques. Whilst the calligraphy of the music had been studied extensively, the use of forensic document examination had previously not been tried, however as the music was scribed by hand using a quill it was more than likely that the author of the music could be elucidated.

Forensic Document Examination (FDE) is a well established method, having existed for over 100 years. Martin explained the principles of FDE – the formation of handwriting, habituation, complexity and uniqueness, which form the foundations of handwriting comparisons. Martin set about comparing the formation of the clefs, notes and notation of Bach's transcripts, and noted that they did not appear to be written by the same person. Even the audience were able to see the differences when Martin passed around copies



of the transcripts, and he even tested the group with a few comparisons.

So who was the other scribe? Martin advised that most likely it was Bach's second wife, Anna Magdalena. Aside from the evidence in the music, this is quite plausible. Before marrying Bach, Anna was a talented musician in her own right. She was the second highest paid member of the musicians in the royal court at Kohen (second only to Bach). Originally it was thought Anna simply copied Bach's music, however a small note in one of the transcripts originally written in French, lends further support to the results of the FDE. The note translates not to Mrs Bach being the copier, but the author. In this time period, copies and authors were distinguished. This suggests, that in fact, Mrs Bach was possibly co-composing with Bach. Martin outlined that it is quite possible that Bach asked Anna to compose and make improvements while he was at work.

The story however, wasn't finished. Martin has since identified several other differing scribing styles. This quite possibly could be the hand of Bach's children. A total of 13

survived to adulthood and several went on to become composers in their own right. As Bach was busy working for the court and later St. Thomaskirche, teaching music to his children and managing a large household, it does seem plausible that his wife and children may have helped pen his now-famous compositions.

The use of forensic document examination has proven indispensable in studying Bach's manuscripts and helping to understand the life of this great composer, when resources are scant. Furthermore, for the forensic science community, this work demonstrates the adaptability and use of forensic techniques in answering historical questions.

The September Meeting - Col. Frank Crispino

Gendarmerie Impériale- Bordeaux, France

An international guest was the presenter for the September meeting. Colonel Frank Crispino visited the SA Branch after the ANZFSS 2010 Symposium in Sydney, where he presented as a plenary speaker. This meeting was a fantastic opportunity for the members of the ANZFSS SA Branch to hear about a prominent policing agency and how it operates alongside military operations.

Col. Frank Crispino is the head of the Criminal Investigation Department of the Gendarmerie Impériale in Bordeaux, France. The Gendarmerie is a national police force which has military powers, and has a long history. The Gendarmerie originated with the Maréchaussée, a 16th century policing body. By the 17th century the Maréchaussée was attached to the house of the king, and had small operations all over France maintaining law and order, as well as a group which took care of the safety of the royals. During the French revolution, the Maréchaussée was renamed the Gendarmerie Impériale. By the end of the 19th century, the Gendarmerie incorporated both footmen and horsemen and in 1901 an office was established to train Gendarmerie officers. The modern Gendarmerie consists of not only police officers, but specialized groups including criminal and forensic operations, maritime, air and republican guards.



The role of Gendarmerie is varied, and may include local policing, investigating terrorism, peacekeeping operations, military policing and extended support for French military operations. The Gendarmerie have served in many international conflicts and peacekeeping operations worldwide, including in the former Yugoslavia, Bosnia-Herzegovina, Haiti and Afghanistan. Col Frank Crispino spoke about the Gendarmerie's operations in Afghanistan, a very recent and ongoing military and peacekeeping mission.

The Gendarmerie Impériale joined forces with other European Gendarmerie of the European Union in 2006, forming the European Gendarmerie Force (EGF) in Afghanistan. This group was formed to act as police in Afghanistan, and works on missions in conjunction with the United Nations, Organization for Security and Cooperation in Europe (OSCE), North Atlantic Treaty Organization (NATO) and other international organisations. The EGF contains about 150 Gendarmerie Impériale members, but the force can rapidly mobilise up to 800 staff from the five involved nations if needed. The EGF can be put under either military or police authority, depending on the requirements, and such a group has played a pivotal role in establishing order and supporting military operations in Afghanistan. The crime fighting section which includes forensic support, intelligence, explosive expertise and counter-terrorism operations, have been working in Afghanistan, along with the operations unit, to investigate crimes, collect intelligence and intercept terrorist activity and establish and maintain order in the country. Recently, two mobile Gendarmerie squadrons were enlisted to train the Afghan police, so the country can maintain peace and continue counter-terrorism operations independently.

Col. Frank Crispino's presentation provided interesting insight into a policing agency which bridges the gap between civilian and military operations, and how organisations such as the Gendarmerie Impériale play a key role in investigating local and international crimes.

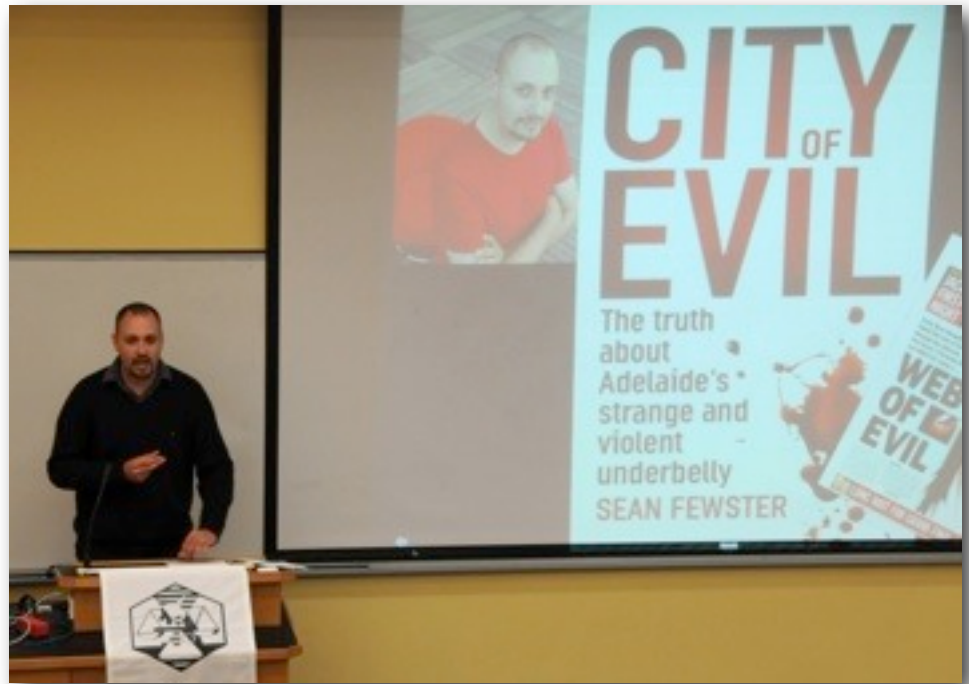
The October Meeting - Sean Fewster

Author and Court Reporter for the Adelaide Advertiser

Adelaide has the reputation for being a town of murder - in fact some go as far to say it is the murder capital of Australia. Whilst this title is far from correct and murder rates have been steady for the last two decades, Adelaide may take the title for the town of strange and bizarre crime. For reporter Sean Fewster, the tales he shares of Adelaide's crimes in his new book "City of Evil", couldn't be invented by the most imaginative of writers, and the truth sometimes really is stranger than fiction.

Sean is the court reporter for the Adelaide Advertiser, putting him in the perfect place to learn first hand about the darker side of Adelaide. His book recounts some of the more interesting cases he has come across, including that of Roman Jadrych who attacked his wife in broad daylight in a park; the case of Paul Habib Nemer, where it seemed that money could buy freedom and public outrage led to government intervention into the SA justice system; the case of Mark Errin Rust who went from indecent exposure to rape and murder; and the case of the lesbian lovers, Donna Casagrande and Nicole Courcier who brutally murdered and dismembered John "Joanne" Lillecrap, a cross-dressing truck driver who had taken Donna under his wing whilst she overcame heroin addiction. These tales are just a small number of cases in Sean's book, and part of the wider weirdness which make up the strange side of Adelaide.

Sean explained that the bizarre crimes in Adelaide have historical roots. In the 1830's Edward Gibbon Wakefield championed for



a city without convicts, as his belief was that Britain's social problems had been caused by overcrowding, and controlled emigration would solve the problem. His ideas were key in the design of the city of Adelaide and were celebrated. Even today, his streets and buildings in Adelaide bear his name in remembrance. But Wakefield also had a dark side. In 1826, he wrote a false letter, informing the 15-year old daughter of a wealthy family her father was gravely ill. He conspired with his brother and took the girl, Ellen Turner to Scotland. He then tricked the girl into marrying him and wrote to her family, demanding money. The police were informed, and in 1827 Wakefield was sentenced to three years in prison. It was in jail that Wakefield honed his plans for what would become the settlement of Adelaide. Adelaide was in part designed by a criminal driven by greed, who marketed the new colony to social progressives and religious dissenters with a promise of

liberty and religious tolerance. The strange mix of people which ended up in the city may have led to the city of churches but also led to secrecy and moral leniency - perhaps this is the reason why Adelaide is surrounded by myths and misconceptions. As Sean pointed out, it's really no surprise that a darker side of Adelaide has emerged.

Sean also shared some of his insights regarding the interactions of the courts and the journalist. One of the major issues in SA is that of the suppression order. Suppression orders prevent the reporting of facts about a case, and while in some cases this may be important, often it means the myths and secrecy Adelaide is famous for are further perpetuated, and the public isn't told the truth about the criminals in their midst. Until a recent law change in 2007, suppression orders in SA far outnumbered the other Australian states. In 2006, SA had 216 suppression orders granted, whilst for the eastern

October meeting - Sean Fewster continued.....

states of Victoria, New South Wales and the ACT a combined total of six were granted. There are many examples of the types of things that get suppressed. In relation to one of the most famous crimes in SA history - the Snowtown murders 220 suppression orders were granted including: the colour of the barrels used (to prevent people buying them as souvenirs) and the name of Joe Wagner's dog, Hitler, as it may have prejudiced the jury and public. In another case, the identity of a man who was accused of killing his wife was suppressed, due to concerns that the investigation would be prejudiced. According to Sean, this was total nonsense - the man had stabbed his wife in front of 100 members of their local community. This highlights that sometimes suppression orders were being used not to suppress important information, but rather to keep Adelaide's crimes shrouded in secrecy. The new laws mean that cases can have wider media coverage - not only are the individuals on trial considered in regard to the possible prejudice and hardship, but also

public interest and the rights of the media are also taken into consideration. Whilst suppression orders are often used to protect investigative information during a trial, all information becomes available for reporting at the end of the trial.

Sean explained he sees the media as an important part of court proceedings. Aside from reporting the crimes, the media can be used to give the opportunity for victims of crime to express their stories, which rarely happens during court. In some cases, the media can also be used to assist in investigations. Sean was contacted by a police officer in relation to a murder where the body had been cut up and pieces strewn across the state. Whilst the body parts had been recovered, the head was still missing. Working with the police officer, Sean wrote an article about the case so that the public could be informed and if the head was found, the public knew to take care to preserve it and any surrounding evidence.

Sean believes forensic scientists and journalists feel an obligation to reveal the truths about crime in Adelaide. But in some cases the misconceptions may in fact be advantageous. TV shows and stories about forensic science and crime generate public interest in forensic science and often bring young minds to the field, providing the next generation of forensic scientists and journalists who want to dispel the myths associated with crime in Adelaide. Sean argues that both journalists and forensic scientists set about to find the truth and clear often muddied waters - he claims the journalist mantra "Never let the truth get in the way of a good story" is in fact wrong and that journalists work by the statement "Never let a good story get in the way of the truth". And in the case of Adelaide's history of crime, sometimes the truth is the most interesting story.

Sean Fewster's book "City of Evil" is on sale at all good bookstores.

ANZFSS Merchandise

Australian and New Zealand FORENSIC SCIENCE SOCIETY

NEW MERCHANDISE

- Blue and black bag: \$22
- White polo shirt: \$32
- Green and blue mug: \$8
- Blue and black bag: \$15
- Blue and black bag: \$40
- Blue polo shirt: \$25
- Green and blue mug: \$12
- Blue and black bag: \$28
- Blue and black bag: \$12
- Blue and black bag: \$44
- Blue and black bag: \$48

MERCHANDISE IS ON DISPLAY AND AVAILABLE FOR PURCHASE AT MOST MEMBER MEETINGS.

From the National Executive:

In conjunction with the 2010 Symposium, the ANZFSS National Branch AGM was held. The National Council consists of the National Executive, and the Presidents of each of the Branches. After six years of being the National Executive, the Queensland-based Executive led by President Bill Crick, stood aside. As such a national vote was held and a new Executive elected. The new National Executive consists of a team from NSW and ACT.

ANZFSS National Executive 2010-2012

President: Prof. Claude Roux
 Vice President (Australia): Prof. James Robertson
 Vice President (New Zealand): Mary-Anne Kregting
 National Treasurer: Prof. Chris Lennard
 National Secretary: Dr. James Wallman
 Public Officer: Anna Davey (non-elected position)

Thanks must go to the group stepping aside for their efforts, and welcome to the new national executive council of ANZFSS. The new National Executive has stated that one of their chief aims will be to take ANZFSS into the future, and develop a more professional organisation with a new structure for forensic specialists, whilst also continuing to support the general membership. Claude Roux, President of the National Executive will be visiting the ANZFSS branches around the country early in 2011 to present his research and outline the National Executive's plans for the society.



21st International Symposium on the Forensic Sciences
 Convicts to Criminalistics: Past, Present and Future



23-27 September 2012
 Hotel Grand Chancellor Hobart, Tasmania

SA Branch Committee Members 2010-2011

President: Stewart Walker

Vice President: Darren Bails

Immediate Past President: Carolyne Bird

Secretary: Carolyne Bird

Treasurer: Natasha Mitchell

Editor: Janette Edson

Merchandising Officer: Sherryn Ciavaglia

General Committee:

Adrian Linacre

David Eitzen

Jessie Dilag

Amanda Ellis

Julianne Henry

Andrew Murphy

Ted Sileniaks

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Post:

ANZFSS SA Branch Inc

GPO Box 194

Adelaide SA 5001

Welcome to the new members of the ANZFSS SA Branch:

Gillian Pike (Quality Assistant, FSSA)

Jennifer Templeton (Technical Officer, ACAD, Adelaide University)

Chimi Dorji (Commanding Officer, Royal Bhutan Police, Bhutan)

Michelle Flynn (Trainee Forensic Document Examiner, Department of Immigration and Citizenship)

Claire Simon (BTech student, Flinders University)

Emma Formosa (Forensic Biology, FSSA)

Danielle Hutt (ICT Change & Performance Manager, SA Health)

Paul Matthew McCurry (PhD student, Flinders University)

Amy Austin (Honours student (Forensic Pathology), Adelaide University)

Wes Jeffries (Teacher, engineer - general interest)

Thomas Sobieraj (Forensic Biology, FSSA)

Octavia Griffin (Lawyer)

Sheree Brozyna (Forensic Biology, FSSA)

Schedule of Upcoming Events

Below are the tentative dates for 2011 meetings, on Wednesday nights - stayed tuned for date confirmations and more information regarding venues and presenters.

16 February

30 March

11 May

22 June

3 August

14 September

26 October

2 December (Friday)

WARNING: The ANZFSS (SA Branch) Committee wish to advise that the material presented at some ANZFSS meetings can be of a graphic or explicit nature. Some of the material presented may disturb or offend some people. Persons attending meetings do so at their own risk. For this reason, we recommend that persons under the age of 17 years do not attend meetings.



Australian and New Zealand
FORENSIC SCIENCE SOCIETY

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*" A learned and impartial
society working to enhance
the quality of Forensic
Science"*