About the Project

Policing plays a major role in combating crime in the community, both reassuring and assisting persons affected by crime so that they can continue, or return, to enjoying their lives. Forensic science is increasingly relied upon by law enforcement to solve crime, and by the judicial system in the adjudication of a matter. However, the value of forensic science to criminal investigations or as an intelligence tool in Australia has yet to be established. Previous research has mainly focused on the science and technology, rather than upon how people within the justice system can use forensic evidence more effectively in investigations and for intelligence in serious and volume crimes. Through a comprehensive examination of forensic science use in the criminal justice system in Victoria and the ACT, this research will develop an evidence-based good-practice model for using forensic science effectively within those jurisdictions.

The Effectiveness Project has four primary aims. These are:

1. To identify the processes involved in police investigations and court trials and to investigate the phases in which forensic science is typically employed (specifically to identify the objective and subjective factors that impact upon the effective use of forensic science);
2. To quantify the outcomes of police investigations and court trials that have utilised forensic services;
3. To undertake a robust economic interpretation of the effectiveness of a range of forensic science disciplines and techniques;
4. To develop and trial an evidence-based good practice model for using forensic science effectively.

Project People

This project is funded by the Australian Research Council (LP0882797) over 5 years.
Chief Investigators: Associate Professor Roberta Julian (UTAS), Professor James Robertson (University of Canberra), Professor Claude Roux (UTS), Dr Hugh Sibly (UTAS), Professor Rob White (UTAS).
Project Team: Dr Sally Kelty (Research Fellow, UTAS), Kate Cashman (PhD Candidate, UTAS) and Peter Woodman (VicPol and PhD Candidate, UTAS).
Partner Investigators: Alastair Ross (ANZPAA/NIFS), Peter Woodman (VicPol), Robert Hayes (VicPol), Julian Slater (AFP), Anna Davey (Forensic Foundations), Professor Pierre Margot (University of Lausanne).

Update from the Field

AIM 1: We are continuing with our exploration into the effective use of forensic science using case studies of homicide and serious arson matters. We are currently working on homicide cases from both Victoria and ACT involving arson. In our case studies we will be over the coming months interviewing key personnel involved in each of the case studies being explored. For example, public prosecutors, forensic scientists, the justices who presided over the matter, police investigators and crime scene examiners.
Kate Cashman, our PhD student has been in the field and has carried out interviews and focus groups with judges, defence and prosecution lawyers to explore what type of knowledge lawyers have, and where do they obtain their knowledge about DNA evidence.

AIM 2: Pete Woodman has commenced his PhD looking at the value that forensic science adds to justice outcomes. Pete is looking at the types of roles that forensic science plays in investigations (determination of a crime / identifying or exonerating persons of interest / establishing a connection between exhibits and an offence). This work will be ongoing over the next 5 years. Pete who is based in Melbourne will be doing his PhD research within the Victorian jurisdiction. In 2012 we will start to collect equivalent data from the ACT.
**AIMs 3 & 4:** During 2011 and into 2012, those areas where an economic analysis of the effectiveness of forensic sciences in the justice system will be most valuable will be identified and an appraisal made of the type of economic interpretation that will be most effective.

**Forensic intelligence:** As part of the Effectiveness Project, two sub-projects in forensic intelligence at the Centre for Forensic Science at the University of Technology, Sydney have commenced under the supervision of Professor Claude Roux. The first project is a collaboration with the Australian Federal Police aimed at developing a greater understanding of the requirements for a more effective intelligence framework in order to analyse and use illicit drug profiling data (including physical evidence from packaging) from an intelligence-led perspective. The second project aims to improve the intelligence use of traditional forensic science case data from volume crime scene data within Victoria and the ACT.

**Other TILES forensics news**

Dr Sally Kelty and Associate Professor Roberta Julian Roberta have a new PhD scholarship on offer. This is collaboration with Dr Paul Kirkbride at the Australian Federal Police Forensic and data centres in Canberra. The project: **Communicating scientific expert opinion: What do forensic scientists say and what do police, lawyers and the jury hear?** Is a $30,000 pa tax free stipend offered at the University of Tasmania in Hobart. If you are interested please contact Sally.kelty@utas.edu.au

During June 2011 Katherine Cashman and Pete Woodman (TILES PhD students) came together with Sally Kelty and Roberta Julian for a two day planning workshop. They also took part in an EndNote and database searching workshop. We would like to thank Mr Karl Kent and Mr John Doherty from Victoria Police Forensic Services for releasing Pete from his work duties to enable him to join us.

In July 2011, Sally Kelty was an Invited speaker at the NIFS Specialist Advisory Group meetings (Field Identification Sciences) in Melbourne. Sally’s presentation was on high-performing crime scene examiners.

Roberta Julian and Sally Kelty are busy finalising a few publications. First is a project management paper exploring how police practitioners and academics can collaborate successfully on large projects by matching outcomes to initial expectations. Several other papers (with Professor James Robertson, University of Canberra and Professor Rob White, University of Tasmania) form part of a series looking at the professionalism in Crime Scene Examination (CSE), from identifying who are top-performing CSEs, to managing stress and developing resilience, to recruitment, training and retention.

Sally Kelty has been accepted to present a paper at the annual Australian and New Zealand Association for Psychiatry, Psychology and Law (ANZAPPL), on indentifying the attributes of high-performing crime scene examiners. TILES Forensic Project research on crime scene investigation was well received in 2010 and continues to be of interest to practitioners and researchers nationally and internationally.

**Interfaces between science, medicine and law.** Interviews for this NIFS project have begun in Hobart, Melbourne, across QLD and Canberra. Thank you to everyone who have taken part so far. This is an on-going project with results coming out in 2012. Email sally.kelty@utas.edu.au for more details.

**Recent Publications:**


If you would like to know more – please contact either Sally Kelty – sally.kelty@utas.edu.au Or Roberta Julian – roberta.julian@utas.edu.au

Or visit our project webpage [http://www.utas.edu.au/tiles/research_projects/forensic_science_project.html](http://www.utas.edu.au/tiles/research_projects/forensic_science_project.html)