

ANZPAA National Institute of Forensic Science

ANNUAL REPORT 2018–19



ANZPAA
Australia New Zealand
Policing Advisory Agency



Our Strategic Intent

Promote and Facilitate Excellence in Forensic Science

The National Institute of Forensic Science is a directorate within the Australia New Zealand Policing Advisory Agency (ANZPAA)

On behalf of the Australia New Zealand Policing Advisory Agency National Institute of Forensic Science (ANZPAA NIFS) and the Australia New Zealand Forensic Executive Committee (ANZFEC), we are proud to release the ANZPAA NIFS Annual Report 2018-19.

This Annual Report highlights our achievements against measurable indicators, in key priority areas, identified in the ANZPAA NIFS Business Plan 2018-19.

A key focus this past year has been the implementation of our Research and Innovation Roadmap that has provided funding across a range of forensic science disciplines to drive operationally focussed research to meet stakeholder needs. Business improvement activities included the implementation of a new structure and processes for the ANZPAA NIFS Groups resulting in increased transparency and accountability of activities undertaken by forensic science practitioners. We also ensured the long-term stability and success of the After the Fact crime scene proficiency test for Australian police jurisdictions by delivering a new HTML5 web-based platform to facilitate the annual major and volume crime scene assessments.

We worked with our partner agencies to deliver products such as the Case Record Review in Forensic Biology guideline document, Double Blind System Testing Model Framework, Best Practice Guideline for Crime Scene Managers, finalised the Empirical Study Design in Forensic Science and reported on the results of the 2019 Forensic Fundamentals Gap Analysis for Fingerprints, Firearms and Explosives. We facilitated a range of Specialist Advisory Group meetings with forensic science practitioners to co-ordinate activities that standardise and advance the services provided to law enforcement and the courts. We also co-ordinated a number of forensic science workshops to increase training opportunities for Australia and New Zealand forensic science practitioners.

Katherine Van Gurp
Chief Executive Officer, ANZPAA

Dr Linzi Wilson-Wilde OAM
Director, NIFS

ANZPAA VISION

Driving excellence in Australian and New Zealand Policing

ANZPAA MISSION

ANZPAA will proactively partner with agencies and identify opportunities for improved performance that results in better community safety outcomes in Australia and New Zealand

Quality

Delivers quality assurance programs, develops standards and manages the practitioner certification program.

Australasian Forensic Science Assessment Body (AFSAB)

Annual Recertifications

266

Fingerprints

85

Crime Scene

32

Firearms

ASFAB Review Implementation

Project completed resulting in increased transparency and robustness of the certification program leading to greater confidence in practitioner competence.

Proficiency Tests

\$70k⁺

In savings to forensic agencies through the co-ordinated procurement of proficiency tests.

After the Fact (AtF) Crime Scene Proficiency Test

373

Number of AtF proficiency tests delivered resulting in \$93k+ savings to agencies.

484

Number of proficiency test purchased on behalf of forensic agencies.

Ensured the long-term stability and success of After the Fact by delivering a new HTML5 web-based platform to facilitate the annual major and volume crime scene assessments.

Double Blind Proficiency Testing

Model developed, released and now available for use in a pilot program.

Understanding Peer Review

Guideline developed and released for use by forensic agencies.

Co-ordination

Builds current jurisdictional and cross-jurisdictional operational capability and effectiveness through protocols, products and enhanced implementation support.

Process Mapping Fingerprints and Drug Analysis

Fingerprint and Drug Analysis processes mapped for each jurisdiction and opportunities for improvement identified.

Best Practice Guideline for Crime Scene Managers

Guideline developed and released for crime scene practitioner use.

Forensic Fundamentals

Underpinning science for explosive detection, fingerprint analysis and firearm analysis completed with results informing the ANZPAA NIFS Research and Innovation Roadmap.

ANZPAA NIFS Groups Review

New structure and processes implemented for ANZPAA NIFS Groups resulting in increased transparency and accountability of activities undertaken by forensic science practitioners.

Chemical Warfare Agent Laboratory Network (CWALN)

Facilitated an annual meeting of forensic experts in chemical agent analysis and four jurisdictional training workshops to build capability, promote information sharing, education and training and quality assurance activities.

ANZPAA Disaster Victim Identification Committee (ADVIC)

Provided opportunities for DVI capability and training development by facilitating an annual meeting and a national training exercise for DVI commanders from Australia and New Zealand and specialist scientific representatives from the areas of Pathology, Biology, Odontology and Anthropology.



3 Australia New Zealand Forensic Executive Committee (ANZFEC) meetings held with representatives from government forensic science service providers across Australia and New Zealand.



4 Quarterly Governance Reports released providing a transparent overview of activities across a range of forensic science disciplines.



Innovation

Contributes to a creative and innovative forensic science body of knowledge and enhances the way we assess, adopt and implement new forensic capabilities and tools.



Assistant Commissioner Peter Cotter APM (Right) presents the John Harber Phillips Award to Professor Roger Byard AO PSM (Left)

John Harber Phillips Award

Professor Roger Byard AO PSM was the recipient of the biennial award in 2018 for his outstanding achievement and excellence in the advancement of the forensic sciences in Australia, New Zealand and internationally.

Research and Innovation Roadmap

11 projects supported with funding across a range of forensic science disciplines to drive operationally focussed research to meet stakeholder needs.

Rapid DNA Project

Strategic considerations for the implementation of Rapid DNA devices released to Australian jurisdictions and a peer reviewed paper published.

2018 Best Paper Award Winners

Recognising the contribution of members of the Australian and New Zealand forensic science community in sharing their work and experiences with other members of the forensic and wider communities, the recipients of the 2018 Best Paper Award were:



Best Paper in a Refereed Journal

Internal validation of STRmix™ – A multi laboratory response to PCAST

Jo-Anne Bright, Rebecca Richards, Maarten Kruijver, Hannah Kelly, Catherine McGovern et al.



Best Literature Review

A review of bioinformatic methods for forensic DNA analyses

Yao-Yuan Liu and SallyAnn Harbison



Best Technical Article or Note

Enhancing forensic investigation through the use of modern three-dimensional (3D) imaging technologies for crime scene reconstruction

Domenic Raneri



Best Case Study

Fatal methemoglobinemia complicating alkaptonuria (ochronosis): a rare presentation

Amanda Freeman and Stephen Wills



Best Chapter in a Book

Brainstem neuropathology in sudden infant death syndrome

Fiona Bright, Robert Vink and Roger Byard



The Henry Delaforce Award

Considerations for adoption of an evaluative reporting framework for the interpretation of firearms and toolmarks evidence

Gerard Dutton

Information Management

Promotes and facilitates information-sharing and cross-jurisdictional dialogue and events.

ANZPAA NIFS Communication Strategy

Employed a range of cost-effective communication tools to consolidate and disseminate forensic science information to a range of national and international stakeholders:

ANZPAA NIFS Website (www.anzpaa.org.au/nifs)

2,300 Average visitors from over 70 countries each month.

ANZPAA NIFS Secure Server

13% Increase in number of forensic science user accounts.

36% Increase in number of forensic science documents.

NIFS Twitter Account (@NIFS_ANZ)

329 Followers and growing with over ~90k views of NIFS tweets during the year.

Specialist Advisory Groups

10 Meetings facilitated with a range of forensic science practitioners to co-ordinate activities that standardise and advance the services provided to law enforcement and the courts.

The Forensic Exhibit Newsletter

4 Newsletters published providing visibility of the work of the Australia New Zealand forensic science community.

Certificate of Appreciation

Helen Salouros



Certificates of Appreciation awarded to outgoing SAG Chairs

- Shawn Harkins (Crime Scene and Ballistics)
- Helen Salouros (Illicit Drugs)
- Soren Blau (Medical Sciences)

in recognition of services to their respective ANZPAA NIFS Group.

Education and Training

6 Forensic science workshops facilitated to increase training opportunities for Australia and New Zealand forensic science practitioners:

- **Best Practice Digital Imaging in Forensic Odontology – Sydney, August 2018**

Medical Science Specialist
Advisory Group

- **Intermediate Toxicology Training Workshop – Melbourne, November 2018**

Toxicology Specialist
Advisory Group

- **Risk Based Workshop – Melbourne, March 2019**

Quality Specialist
Advisory Group

- **Advancing the Investigative and Evidentiary Value of Fibre Traces Obtained in Casework Through Harmonised Data Collection and Management – Perth, September 2018**

Chemical Criminalistics
Specialist Advisory Group

- **Future Service Enhancement – Melbourne, March 2019**

Biology Specialist
Advisory Group

- **National Examination Development for the FIT Modules – Melbourne, May 2019**

Fingerprint Specialist
Advisory Group

Ian Riebeling New Practitioner Workshop

Held in Perth, September 2018, as a prelude to the ANZFSS 24th International Symposium to provide new and aspiring practitioners with an overview of the forensic landscape through an engaging mix of presentations and case studies, delivered by forensic specialists within the field.



Participants of the Fibre Database Workshop hosted by ChemCentre WA, September 2018

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Acknowledgements

ANZPAA acknowledges Aboriginal and Torres Strait Islanders are Australia's first peoples and the traditional owners and custodians of the land on which we work. ANZPAA is committed to fulfilling the principles of New Zealand's founding document The Treaty of Waitangi (Tiriti o Waitangi). Central to the principles is a common understanding that all parties will relate and participate with each other in good faith with mutual respect, co-operation and trust.

This Annual Report is the direct result of the hard work and collaboration of the ANZPAA NIFS and ANZPAA teams and the generous forensic stakeholders who provided important input and feedback.