



Biological Criminalistics inc DNA
Chemical Criminalistics
Fingerprint Examination
Forensic Document Examination



2024



forensic
FOUNDATIONS
INTERNATIONAL™
ISO 9001 & ISO/IEC 17043

Proficiencytesting @ forensicfoundations

Declared, Blind & Bespoke Proficiency Tests

- Scene Examination
(inc. presumptive testing & collection)
- Receipt
- Triage
- Examination
(inc. subsampling)
- Analysis
- Case Interpretation
- Reporting

Validation Sets



admin@ffint.com.au
www.ffint.com.au
PO Box 2279,
Ringwood North VIC 3134
Office: +61 (0)411 426 656
Mobile: +61 (0)429 966 012

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Background, Rationale and Test Design

Proficiencytesting@forensicfoundations

Empowering an organisation to demonstrate the proficiency of their end-to-end systems and personnel.



Proficiency testing (and participation in inter-laboratory collaborative trials) is an essential component of your quality management program. They are much more than a mere 'tick the box' exercise.

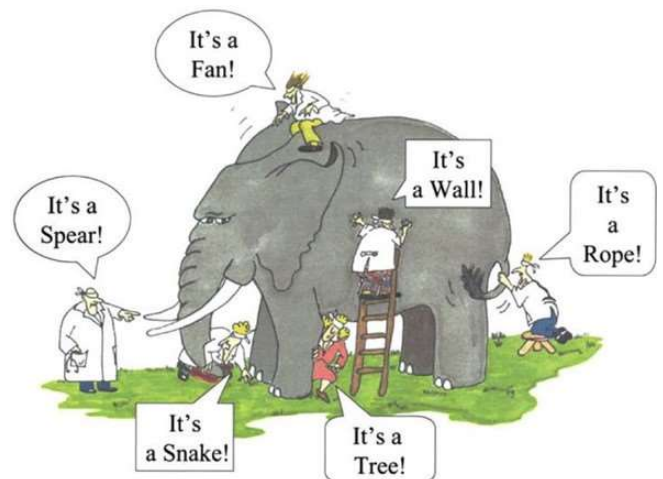
Proficiency tests provide a mechanism for participating laboratories to review their results and those of other laboratories to facilitate^{1, 2, 3 & 4}:

- Management of risk
- Evaluation and appraisal of their performance, including:
 - comparison of a facility's performance with other facilities
 - monitoring of a facility's long-term performance
- Continuous improvement, including:
 - staff education, training, and competence monitoring
 - evaluation of methods, including the establishment of method precision and accuracy
 - contribution to a facility's overall risk management process
- Corrective action (where required)
- Confidence building with interested parties (e.g. customers, accreditation bodies, regulators, and specifiers).

Forensic Foundations International's program of proficiency testing (and inter-laboratory collaborative trials) is designed to be **fit-for-purpose**.

Forensic casework is a complex process which involves multiple inter-related and inter-dependent steps.

Testing of one step in isolation leads to situations represented in the elephant analogy.



¹ ISO17025 (2017) General requirements for the competency of testing and calibration laboratories.

² NATA (2021) General Accreditation Criteria Proficiency Testing Policy

³ ANAB ISO/IEC 17025:2017 – Forensic Science Testing and Calibration Laboratories Accreditation Requirements (2019)

⁴ A2A General Requirements- Proficiency Testing for ISO-IEC 17025 Laboratories (2021)



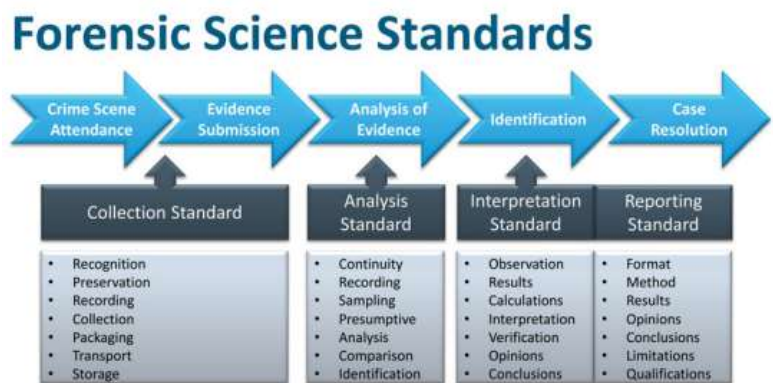
Forensic Foundations International’s tests therefore provide an assessment of the end-to-end process.

- Ask yourself:
 - has continuity been maintained?
 - has the examination step located the relevant material required for further analysis?
 - is the interpretation of the data appropriate?

ISO/IEC 1704333 states ‘Proficiency test items should match in terms of matrix, measurands and concentrations, as closely as practicable, the type of items or materials encountered in routine testing.

The AS 5388 and ISO 21043 series of Standards describe the forensic examination process from collection to reporting.

This figure⁵ illustrates the inter-relatedness of all the steps in this process and was used as the basis of the Australian Standards’ development. The figure is also used as the basis of the development of Forensic Foundations’ Proficiency Tests



⁵ James Robertson, Karl Kent & Linzi Wilson-Wilde (2013) The Development of a Core Forensic Standards Framework for Australia, Forensic Science Policy & Management: An International Journal, 4:3-4, 59-67

Forensic Foundations International's Proficiency Tests also encompass the requirements of:

- ISO17025:2017 General requirements for the competence of testing and calibration laboratories
- NATA General Accreditation Criteria Proficiency Testing Policy (2018)
- NATA Specific Accreditation Criteria: ISO/IEC 17025 Application Document, Legal (including Forensic Science) – Appendix (2018)
- ANAB ISO/IEC 17025:2017 – Forensic Science Testing and Calibration Laboratories Accreditation Requirements (2019)
- ANAB Accreditation Manual for Forensic Service Providers (2019)
- Guidance on the Conduct of Proficiency Tests and Collaborative Exercises Within ENSFI (2014)
- A2A General Requirements- Proficiency Testing for ISO-IEC 17025 Laboratories.

Assessment and Final Reports

Assessment of submitted results are undertaken to ensure:

- Relevance
- Validity
- Reliability

Final reports will be distributed approximately two months after the report submission date.

The Final Reports from Forensic Foundations Proficiency Tests are publicly available via the Forensic Foundations' website; however the identity of individual laboratories will remain confidential. Participating laboratories may use the report as outlined in their respective laboratory policies.

**You are allocating your limited resources
to proficiency testing
Make them work for YOU**

Pricing Structure

The pricing structure has been calculated to be affordable and flexible. Purchase of the test will include design, sample selection, pretesting, item creation, distribution and assessment.

Description		USD Shipping not included
Proficiency Test (end-to-end)	Test samples and associated paperwork will be provided.	450
Inter-laboratory Collaborative Trial (end-to-end)	Results to be submitted and reviewed. Final report including manufacturer's information provided for each test.	400
Individual Laboratory Report	In addition, a report specific to the individual participant containing a review of the laboratory's performance, can be included.	100
Blind or Bespoke Tests	Tests are designed, produced & distributed in consultation with the client. Test samples and associated paperwork will be provided. Results to be submitted and reviewed. Final report including manufacturer's information provided for each test.	Price on application

Shipping

Where applicable, shipping costs will be added at the time of the order. Forensic Foundations International uses Australia Post International Express Post, and the costs are given below. The use of a DHL courier can be requested and will incur an additional cost.

Region	Cost (USD)	Region	Cost (USD)	Region	Cost (USD)
Australia	20	Oceania	50	Central/South America	125
North Americas	50	Europe	50	Other regions	On application

Ordering

Orders may be placed either online at <https://www.ffint.com.au/proficiency-testing/2024-proficiency-tests/> or by emailing admin@ffint.com.au.

Payment can be made by credit card (online) or via purchase order and/or invoice.

Orders for tests should be made at least one month before the distribution date.

Test ID and description	Scenario	Participants will receive	Examination / Analysis required	Distribution	Results submitted
2024 Bio1	Assault	Detailed high-resolution photographs of the scene, with and without scales.	<p>Blood stain pattern analysis</p> <p>Examination and analysis of the photographs & videos.</p> <p>Identification of blood deposition patterns.</p> <p>Reconstruction of possible mechanisms of blood deposition.</p>	January 2024	April 2024
2024 Bio2	Assault	<p>Clothing from the victim and suspects.</p> <p>Reference samples.</p>	<p>Assessment of packaging / receipt.</p> <p>Description of items.</p> <p>Biological examination.</p> <p>Comparison of DNA profiles (including kinship analysis).</p> <p>Interpretation and reporting of the results.</p>	March 2024	June 2024
2024 Bio3	Sexual assault	<p>Medical samples from the victim.</p> <p>Reference samples.</p>	<p>Assessment of packaging / receipt.</p> <p>Description of items.</p> <p>Biological examination.</p> <p>Comparison of DNA profiles (including Y profiles).</p> <p>Interpretation and reporting of the results.</p>	August 2024	November 2024

Test ID and description	Scenario	Participants will receive	Examination / Analysis required	Distribution	Results Submitted
2024 CC1	Assault	Combing from the victim's hair. Reference sample(s).	Assessment of packaging / receipt / description. Recovery of any glass fragments. Comparison of glass fragments with reference sample(s). Interpretation and reporting of the results.	February 2024	May 2024
2024 CC2	Graffiti	Paint scrapings from wall. Reference sample(s).	Assessment of packaging / receipt / description. Recovery of paint fragments Comparison of paint samples with reference sample(s). Interpretation and reporting of the results.	April 2024	July 2024
2024 CC3	Arson	Debris from fire at a domestic property.	Assessment of packaging / receipt / description. Recovery of ignitable fluids residue. Analysis of and identification of ignitable fluids residue. Interpretation and reporting of the results.	July 2024	October 2024

Forensic Document Examination

Test ID and description	Scenario	Participants will receive	Examination / Analysis required	Distribution	Results Submitted
2024 FDE1	Fraud	Physical documents.	<p>Assessment of packaging / receipt.</p> <p>Description of items.</p> <p>Physical examination of documents.</p> <p>Interpretation and reporting of the results.</p>	May 2024	August 2024
2024 FDE2	Theft	Detailed high-resolution photographs of the questioned and reference signatures.	<p>Examination and analysis of the signatures.</p> <p>Are any / all signatures genuine?</p> <p>What other explanations could there be?</p> <p>Interpretation and reporting of the results.</p>	September 2024	December 2024

Fingerprint Examination

Test ID and description	Scenario	Participants will receive	Examination / Analysis required	Distribution	Results submitted
2024 FP1	Homicide	3 x documents with latent fingerprints Ten-print sets taken from the deceased. Ten-print sets taken from 2 suspects.	Assessment of packaging / receipt. Description of items. Enhancement and detection of latent fingerprints on the documents. Comparison of latent fingerprints with reference ten print sets. Interpretation and reporting of the results.	April 2024	July 2024

Digital Forensics

Test ID and description	Scenario	Participants will receive	Examination / Analysis required	Distribution	Results submitted
2024 DF1	Drug investigation:	Digital media e.g. hard drive	Assessment of packaging / receipt. Description of item. Access and examination of data Interpretation and reporting of the results.	June 2024	September 2024

* Offered as an interlaboratory collaborative trials. These trials are identical to proficiency tests but are not currently included in our NATA scope of accreditation

Blind & bespoke proficiency tests

The previous pages have outlined the program of declared tests.

Blind and bespoke tests are designed, produced & distributed in consultation with the client.

Declared tests serve a very useful purpose, however it is well recognized that declared proficiency tests are not treated in the same manner as casework.

Blind proficiency tests, though challenging to set up, have significantly more value as they more closely reflect genuine casework.

Bespoke tests cater to niche areas of forensic science where an existing test does not fulfill the client's needs.

Validation sets

The infrastructure required by Forensic Foundations International to design and distribute this program of proficiency tests enables us to design and distribute a wide range of validation test sets.

Validation set can be produced for all disciplines currently covered by the scope of our proficiency testing program and may include additional disciplines.

Please contact us at admin@ffint.com.au to discuss blind & bespoke proficiency tests and validation test sets.

Appendix A 2024 Program in Chronological Order

Test ID	Disciple / subdiscipline	Last date for orders	Distribution	Results submitted	Final Report distributed
2024-Bio1	Bloodstain pattern analysis	December 2023	January	April	July
2024-CC1	Glass examination and analysis	January	February	May	August
2024-Bio2	Biological examination & DNA (including kinship analysis)	February	March	June	September
2024-FP	Enhancement, detection and comparison	March	April	July	October
2024-FDE1	Physical document examination	April	May	August	November
2024-CC2	Paint examination and analysis	April	May	August	November
2024-DF1	Examination and analysis of digital media	May	June	September	December
2024-CC3	Detection and analysis of ignitable fluids residue	June	July	October	January 2025
2024-Bio3	Biological examination & DNA	July	August	November	February 2025
2024-FDE2	Signature Examination	August	September	December	March 2025

Appendix B Test development

Forensic Foundations International's Proficiency Tests are required to be fit-for-purpose. To assist us to provide relevant fit-for-purpose tests, please use the following form to suggest further tests for development.

Recommendation for proficiency test development

Contact	Name	
	Email	
	Phone	
Discipline/ subdiscipline		
Specific issues(s) to be addressed*. Note: The tests can be designed to be multidisciplinary.		
Suggested technical advisor (if known)		
Suggested manufacturer (if known)		

* All proficiency tests will include the end-to-end process (receipt & continuity, triage, description, examination, analysis, data generation, interpretation, reporting) but one aspect may be of particular interest/focus.

This form can be emailed to quality@ffint.com.au or you can discuss your suggestions on either +61 411 426 656 or +61 429 966 012.