

Forensic Biology/DNA Laboratory
Forensic & Analytical Science Service
PO Box 162 Lidcombe, NSW 1825



Health
Pathology

In the matter of: Special Commission of Inquiry into LGBTIQ hate crimes –
disappearance and presumed death of Peter Baumann

Date: 20 June 2023

Name: Carole Field

Occupation: Group Manager of the Database and Case Management Unit,
Forensic Biology/DNA at NSW Health Pathology
Forensic & Analytical Science Service

Address: C/- [REDACTED] Weeroona Road, Lidcombe NSW 2141

- 1 This statement made by me accurately sets out the evidence that I would be prepared, if necessary, to give in court as a witness. The statement is true to the best of my knowledge and belief and I make it knowing that, if it is tendered in evidence, I will be liable to prosecution if I have wilfully stated in it anything that I know to be false, or do not believe to be true.
- 2 I am currently employed as the Group Manager of the Database and Case Management Unit at the Forensic Biology/DNA Laboratory of the NSW Health Pathology Forensic & Analytical Science Service, Joseph Street, Lidcombe. (A copy of my CV is attached and marked "A").
- 3 My scientific qualifications are Bachelor of Science from Macquarie University, Sydney and Graduate Certificate in Forensic Genetic Genealogy from the University of New Haven, USA.
- 4 The questions contained in the letter from the Special Commission of Inquiry into LGBTIQ hate crimes, dated 5 June, 2023, together with my response, are set out below.



Please confirm whether the Forensic and Analytical Science Service (“FASS”) holds the DNA profiles for Mr Baumann’s relatives (Anneliese Baumann born [REDACTED] 1929 – mother of Mr Baumann and Henrich Baumann born [REDACTED] 1927 – father of Mr Baumann) and whether they are uploaded to the relevant database for searching across unidentified bodies. If the DNA profiles are held by FASS, it would be of assistance to the Inquiry if FASS could facilitate the DNA profiles of Mr Baumann’s family members being run against all unidentified bodies in New South Wales.

- 5 A search of the Forensic Biology/DNA (FBDNA) laboratory information management system did not identify the receipt of a reference sample in the name of Anneliese Baumann or Henrich Baumann for DNA testing in our laboratory.
- 6 In 2018, the NSW Police provided to the FBDNA laboratory a PDF copy of a mitochondrial DNA report from Reliagene Technologies Inc, dated 30 June 2005. This report outlined the mitochondrial DNA testing performed by Reliagene Technologies Inc on a saliva sample of “Auneliese” Baumann (NSWPD Item 62039637) and provided the mitochondrial DNA sequence variants (mitochondrial DNA profile). This report also indicated that the saliva sample of “Heirich” Baumann was not tested. A copy of this report is attached marked “B”.
- 7 The mitochondrial DNA profile of Anneliese Baumann, provided on the report from Reliagene Technologies Inc, was uploaded to the National Criminal Investigation DNA Database Integrated Forensic Analysis (NIFA) in September 2019 and since that time it has been searching against all mitochondrial DNA profiles from unidentified human remains on the national DNA database which includes mitochondrial DNA profiles from the unidentified human remains uploaded by FBDNA from NSW. To date no mitochondrial DNA match has been identified.
- 8 Routine DNA testing in FBDNA for unidentified human remains and reference samples from biological relatives of missing persons includes autosomal DNA and mitochondrial DNA. All male unidentified human remains and reference samples from paternal relatives of missing persons also have Y-chromosome DNA testing performed. Information regarding DNA comparison samples for missing person investigations is attached marked “C”.
- 9 Autosomal DNA testing provides the greatest amount of DNA information, hence this type of testing is performed by all Australian forensic laboratories for missing person casework. Mitochondrial DNA testing is more specialised and is only carried out by the forensic laboratories in NSW, Victoria and the Australian Capital Territory. The Australian Federal Police National DNA Program for Unidentified and Missing Persons can provide mitochondrial DNA testing for Australian forensic laboratories who do not have the capability in-house.
- 10 As the FBDNA laboratory does not have a physical reference sample from Anneliese Baumann for testing in our laboratory, no autosomal DNA profile is available for searching against DNA profiles from unidentified human remains on the national DNA database.



Health
Pathology

- 11 As the FBDNA laboratory does not have a physical reference sample from Henrich Baumann for testing in our laboratory, no autosomal DNA profile nor Y-chromosome DNA profile is available for searching against autosomal DNA and Y-chromosome DNA profiles from unidentified human remains on the national DNA database.

Signature:  _____

Date: 20 June 2023

Forensic Biology/DNA Laboratory
 Forensic & Analytical Science Service
 PO Box 162 Lidcombe, NSW 1825



Health
 Pathology

Annexure A

CURRICULUM VITAE – *Carole FIELD*

Scientific Qualifications:

- 2002 Bachelor of Science
 Macquarie University
- 2023 Graduate Certificate in Forensic Genetic Genealogy
 University of New Haven, Connecticut, USA

Current Position:

Group Manager, Database and Case Management Unit, Forensic Biology/DNA, Forensic and Analytical Science Service - 2009 to current.

Position Summary:

The primary purpose of the Manager is:

- Managing the operational activities of the Unit ensuring service delivery outcomes are met in accordance with agreed key performance indicators and stakeholder expectations.
- Providing scientific leadership in relation to the DNA Database, DNA analysis and interpretation and advice to stakeholders.
- Managing the allocation and expenditure of resources within the budgetary framework.
- Overseeing the training programme, methods and quality procedures to ensure that the most effective and efficient systems are implemented and meet NATA accreditation guidelines.
- Playing a key role in developing frameworks and implementing changes for the standard practices, policies and procedures of the laboratory.
- Develop/implement strategic business plans ensuring optimal divisional outcomes within budget for the customers and the NSW justice system.

The Manager also performs the role of a Senior Reporting Officer. A Senior Reporting Officer is involved in interpretation and reporting of DNA links and other results from casework and person samples. The person is responsible for providing guidance to staff, ensuring the integrity of reporting and consulting with the appropriate Police when issues arise. The work also includes the uploading of DNA profiles to the DNA database, verifying, interpretation and reporting of DNA links to NSW Police, and the peer reviewing and completion of Expert Certificates (under Section 177 of the Evidence Act, New South Wales 1995) including paternity and kinship comparisons. Consequently, the Senior Reporting Officer will be required to provide expert opinion evidence in criminal and coronial matters.



Health
Pathology

Previous relevant experience:

NSW representative for the DNA User Advisory Group

Chair of the National Criminal Investigation DNA Database Integrated Forensic Analysis (NIFA) Users Group, 2019 to current.

Invited presenter on the NIFA to the Australian and New Zealand, Biology Specialist Advisory Group, 2018 to 2019.

NSW laboratory representative for the National Criminal Investigation DNA Database User Acceptance Group, 2009 to current.

Senior Forensic Biologist (DNA Reporting), Forensic Biology, Forensic and Analytical Science Service (previously known as the NSW Division of Analytical Laboratories), 2005-2009.

Forensic Biologist, Forensic Biology, Forensic and Analytical Science Service (previously known as the NSW Division of Analytical Laboratories), 2003-2005.

Conferences/Presentations:

2016 (18-22 Sept): Attended the ANZFSS 23th International Symposium on the Forensic Sciences, Auckland. *Oral presentation: "Brothers in Crime, A Familial Study".*

2016 (April) "*Identification of Unknown Remains*" presented to the NSW Police Missing Persons Unit.

2017 (July) "*DNA-Based Identification of Missing Persons*" presented to the NSW Forensic Medicine, Coroners and legal personnel.

2017 (October) "*National Criminal Investigation DNA Database Integrated Forensic Analysis (NIFA)*" presented to NSW Police Assistant Commissioner, Inspectors and Investigators.

2019 (June) "*DNA Database Searching*" presented to the NSW Police Sex Crimes Squad.

2019 (September) "*New Applications on the National DNA Database*" presented to the Executives of the Forensic & Analytical Science Service NSW Health Pathology.

2020 (October) "*DNA in Missing Person Investigations*" presented to the NSW Police Missing Persons Registry.

2021 (May) Attended the Human Identification Solutions (HIDS) Virtual Conference. *Oral presentation: "DNA and Missing Persons Investigations".*

2022 (February) "*DNA for Missing Person Investigations*" presented at the NSW Police Missing Persons Symposium.

2022 (September) Attended the ANZFSS International Symposium on the Forensic Sciences, Brisbane. *Oral presentation: "DNA and Missing Persons (Familial Searching)".*

2022 (November) Attended the virtual NSW Health Pathology Research Forum. *Oral presentation: "DNA-led Identification for Coronial and Criminal Casework".*



SCANNED: Heather

Peter BAUMANN

E 909939200037

D255590

June 30, 2005

NSWPD Item: 62039637

ReliaGene Reference Numbers: File #F-32630, Samples #03-15267 and #03-15268, Batch #050420

Examination and Results:

The techniques employed are extremely sensitive. These methods are available for inspection (if necessary) at Reliagene Technologies Inc. Controls were used at each step of the process to provide confidence that the DNA sequence obtained relates to the time under test and has not arisen from contamination during the analysis. An inorganic method of extraction was used followed by the Polymerase Chain Reaction to amplify DNA in the regions examined.

Listing of Mitochondrial DNA results:

Results obtained using the BigDye Terminator DNA Sequencing kit available from ABI.

The following list details the results obtained in this case, relates then to the mitochondrial DNA sequence first published in the scientific journal 'Nature' by Anderson et. Al. in 1981 and identifies the differences to that sequence. The number refers to the position of the bases along the DNA chain.

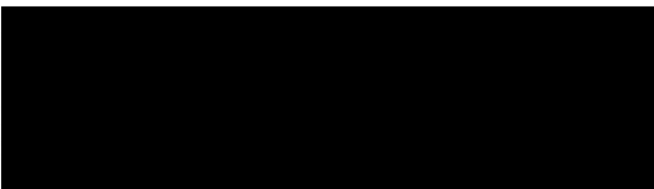
The results of the test show the chemical base at each link in the DNA chain, ie the sequence of bases. Occasionally the test will fail to produce a result from some of the bases. To indicate how complete the sequence results are, the following convention has been adopted. Where only one of the two tests has produced a result for the base at a particular position, the result is recorded as in lower case. If neither test has produced a result at that position, the base is recorded as 'not determined'.

Saliva sample of Auneliese Baumann (mom of unknown victim), RG sample #03-15267

NSWPD Item: 62039637

Sequence obtained between bases [REDACTED]

Differences to published sequence at positions:



Saliva sample of Heirich Baumann (dad of unknown victim), RG sample #03-15268 - Not tested.

The remaining bases that were determined matched that published by Anderson. Positions marked as XXX.X indicate an additional base has been inserted at the position.

The results set out above refer to the testing procedure carried out between 14 April 2005 (evidence receipt date) and 30 June 2005. The bodily samples were tested with the same primers and in parallel with appropriate known controls. Fragment lengths and analysis were in accordance with scientifically accepted standards. I am satisfied that the results obtained have been correctly coded from the fragment and patterns and that they have been correctly transcribed from laboratory work notes. Evidence to be returned to NSW Police Department via courier.

A handwritten signature in blue ink, appearing to read 'Gina Pineda'.

Gina Pineda, M.S.

Forensic Assistant Director / Technical Leader

Missing Person Investigations

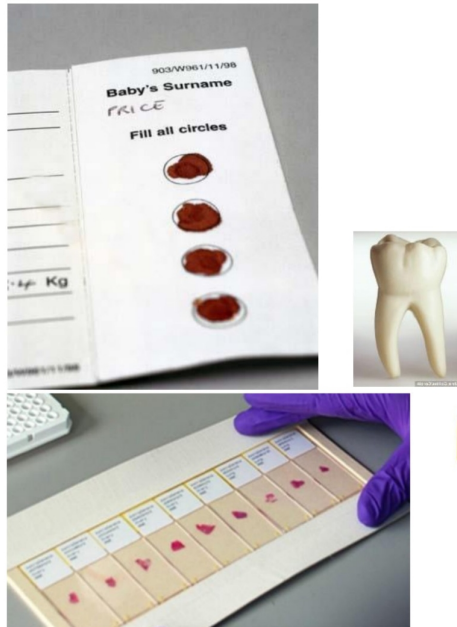
DNA Comparison Samples – Part 1 of 2

Part 1 – Comparison of unknown remains to item believed to originate from the Missing Person

Best Reference

Medical samples from Missing Person

(PKU/Guthrie card, stored blood sample from hospital, biopsy, Pap smear, stored baby teeth)



Less useful

Personal effects from Missing Person

(at least 2 samples required)



Contact the laboratory for additional possibilities if none of the above are available (NSWPATH-FASSDNA@health.nsw.gov.au)

for all of
us

Missing Person Investigations

DNA Comparison Samples – Part 2 of 2

Part 2 – Comparison of unknown remains to relatives

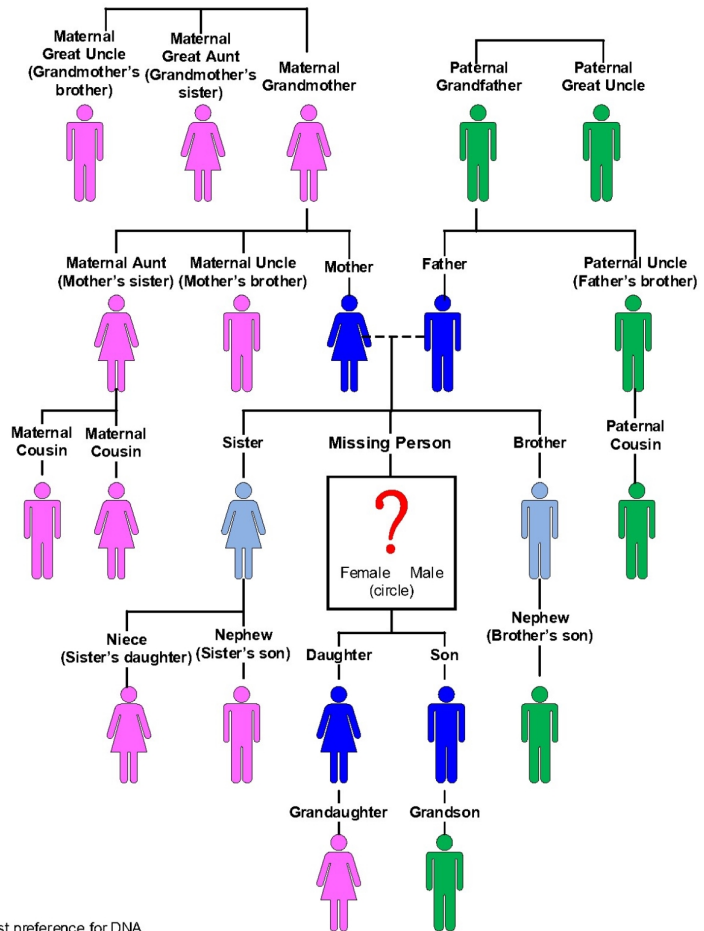
Reference samples from family members of missing person
(multiple relatives preferred):

Best Reference

Less useful

Missing Person Family Tree

1. Both parents
2. One parent, one child + spouse
3. Child + spouse
4. One parent + sibling/s (multiple siblings if possible)
5. Two or more full siblings



Legend
 ■ First preference for DNA
 ■ Second preference for DNA
 ■ Useful for Y-DNA (both missing person and relative must be male)
 ■ Useful for mtDNA (can be used for male or female missing person but the relative must be on the maternal (pink) line)

Gold standard = Guthrie card or other medical sample (see Part 1)
and reference sample from mother and father (Part 2)

