

# My whakapapa and DNA testing

---

**Whakapapa Research  
Project series: Deoxyribonucleic  
Acid (DNA) and whakapapa**



**Author**

Miriama Cribb

**Copyright**

Copyright © 2023

Te Atawhai o Te Ao Charitable Trust

**Publisher**

Te Atawhai o Te Ao Charitable Trust

PO Box 7061

Whanganui 4541

Aotearoa

**Acknowledgement**

We acknowledge Pūtiki Pā (Te Pakū o Te Rangi Marae) for permission to use the kōwhaiwhai mamaku design shown throughout the Whakapapa Research Project publication series. This kōwhaiwhai pattern is from the wharepuni and represents generations, born and unborn. This kōwhaiwhai pattern is a taonga, and as such must not be copied or used without expressed permission of Pūtiki Pā.

**Whakapapa Research Project series**

This is part of a series of writings from eight whānau researchers on nine kaupapa.

This kaupapa is about Deoxyribonucleic Acid (DNA) and whakapapa.

**Whānau researchers****Miriama Cribb**

Grant Huwyler

Tania Kara

Raukura Roa

Kaapua Smith

Rachael Tinirau

Hayden Tūroa

Raymond Tuuta

**Research kaupapa**

Aspirational letter to future generations

**Deoxyribonucleic Acid (DNA) and whakapapa**

Kai

Matriarch

Research methodology and methods

Whānau event

Whāngai

Whenua

Taonga



# He kupu whakaūpoko: Introduction

---

This submission is a short review of the process of taking a deoxyribonucleic acid (DNA) test. Participating in such a process requires an open mind as I had my doubts about its reliability and whether doing a DNA test could tell me something about my whakapapa I did not already know. I was also limited in any genomic or scientific expertise to fully comprehend the results of those tests. However, whānau researchers were offered the opportunity and curiosity got the better of me so I decided to participate thinking it would be a fun exercise. I do not intend to be particularly critical of doing DNA tests but hope to provide some reflections on this exercise.

## The process

---

MyHeritage<sup>1</sup> and Ancestry.com<sup>2</sup> are two of the more popular providers of DNA testing. I decided to go with MyHeritage. I ordered a DNA kit online for roughly \$100 (NZD) and it arrived two weeks later. I simply followed the instructions which involved taking a sample of my saliva, securing it in a safe envelope, and sending it back. While awaiting the results, I had to create an online account as this is the only way the results could be viewed. Creating an online account also allows you to be 'matched' with other people who share similar DNA. A while after sending my sample DNA, I received an email to say the results were ready to be viewed online.

## Results

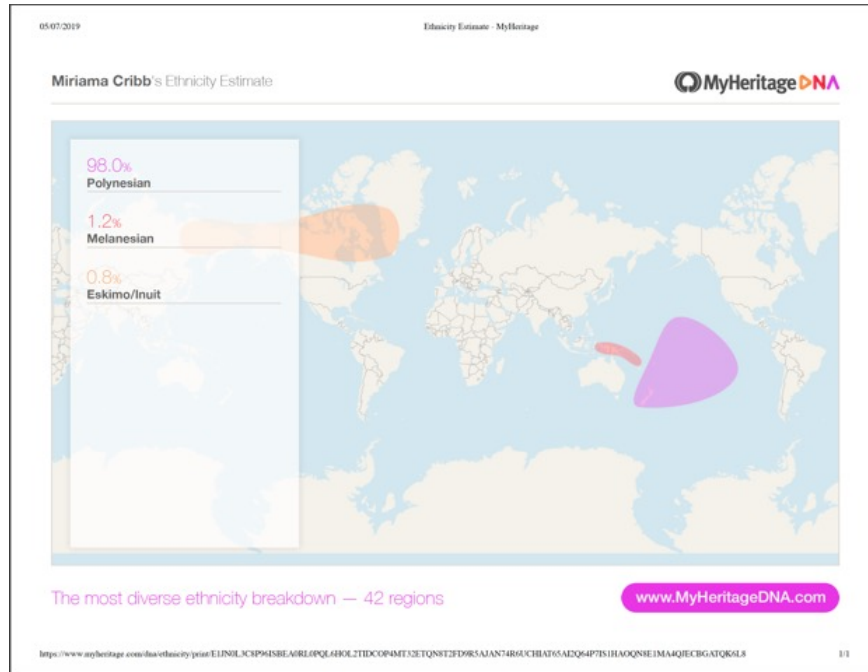
---

The results from MyHeritage are two-fold. The first is an ethnicity estimate and the second is a list of 'probable' DNA matches. I am not sure if this is how other providers present results but this is what I received from MyHeritage. The ethnicity estimate provides a percentage breakdown of possible ethnicities. My results came back as:

- 98.0% Polynesian
- 1.2% Melanesian
- 0.8% Inuit

1 <https://www.myheritage.com/>

2 <https://www.ancestry.com/>




---

### My MyHeritage ethnicity estimates.

---

I thought this was interesting but nothing out of the ordinary. I was more surprised that my Spanish or English whakapapa did not appear. Again, these are only estimates and there is a science to working out genetic markers in DNA sequencing. Depending on your view of science, the result is a matter of interpretation. Nonetheless, if one desires to trace their whakapapa or is unfamiliar with their whakapapa, this could be a good start.

The second part of the results involves DNA matches. This part provides a list of people whose DNA matches mine. There are 107 people who have a DNA match with mine and they appear in order of highest percentage of shared DNA, although you can also filter these results by estimated relationship, where they live, and their ethnicity. For each of these people, they also list an estimated relationship, shared segments of DNA as well as the largest segment of DNA, common ancestral surnames, smart matches with other users, and shared ancestral places. There is an option for you to review your DNA match and to view their family tree if they have one set up. The estimated relationship is based on MyHeritage's Theory of Family Relativity. This feature helps you make the most of your DNA matches by incorporating genealogical information from MyHeritage records to offer theories on how you and your DNA matches might be related.

This is probably the biggest revelation of this exercise. That is, the DNA results are based on probability, and that probability is based on the number of people who are registered in the system and have completed a DNA test. The results of my DNA, particularly the second part of the results—the DNA matches—are only possible based on others who have taken the test. I doubt many Indigenous people take DNA tests. It is not surprising then, that because neither my siblings nor parents have taken the test, my results are highly likely drawn from my maternal

grandmother, aunt and uncle who have taken the test. Any further information can only be drawn if others have populated their family trees or 'profiles'. Otherwise, the results are pretty minimal and do not tell you too much more than what you may have already known.

## Terminology

---

One is immediately drawn to the terminology used when taking DNA tests and you cannot help but assume it is all a marketing ploy to get you to sign up and pay these organisations. Language such as 'special', 'sign up here', and 'upgrade your kit to receive 42 detailed health reports based on your existing DNA sample' are just a few examples that led me to this conclusion. This, along with the numerous 'requests' from long-lost relatives who want to get to know you or explore family relationships, had me immediately unsubscribing from updates or any future communication from MyHeritage. If you are familiar with or have had an upbringing in te ao Māori, some of the terminology used in these sites will also have you scratching your head. 'Second cousin', or 'first cousin, once removed', or even the use of family charts or centimorgan charts can be overwhelming and confusing, hence the need to have the necessary knowledge and skills to gain a better appreciation and understanding of the results.

## Data sovereignty

---

Data sovereignty is becoming an area of great concern. This is particularly so for Māori and whakapapa is no exception. The protection of whakapapa comes to mind in an exercise such as DNA testing and you have to wonder what, if any, security measures are being put in place to secure information about your whakapapa. While there are privacy settings in creating your online profile, the uploading of information—whakapapa—must be executed with great caution and consideration, and guided by whānau. Although the creation of family trees on the world wide web helps to give context to DNA results, once the information is shared, a high degree of control and security of the information is lost.

## Whakapapa

---

In completing assignments for the Whakapapa Research Project, I have concluded that whakapapa, amongst other things, is based on lived experiences, identity, relationships, shared kōrero, histories, connections, upbringing, and family, all set in political, cultural, and social contexts across time. Whakapapa is also our past and our future. The DNA testing experience, coupled with a very small insight into genomics and the role of science in whakapapa, does not deviate from that. If anything, it provides another lens to view whakapapa that we might not have otherwise considered. As with all things, DNA testing has its positives and negatives, and for me, this experience has been nothing more and nothing less.

## He kupu whakakapi: Conclusion

---

I acknowledge the strengths of DNA testing and the opportunities it could provide for those less fortunate to know their whakapapa, as well as the underlying science that can explain health issues, individual characteristics, and provide evidence. And while my future uri may want to explore their Inuit or Melanesian whakapapa, for now, I am content with who I am and the whakapapa that has been shared and lived today and into the future.



---

MyHeritage DNA kit

---

## Kuputaka: Glossary

---

Use of tuhutō (macrons): the introduction of macrons over some Māori vowels, have (1) clarified definitions and (2) made it easier to pronounce Māori words (i.e., knowing where to place the emphasis as you are saying the words). When we quote sources from earlier periods where macrons have not been used, we have not included the macron to remain true to the original text. In the glossary, we have included both versions of the word (with and without macrons).

<b>kōrero</b>	discussions; stories
<b>te ao Māori</b>	Māori world view
<b>urī</b>	descendants
<b>whānau</b>	family; extended family
<b>whakapapa</b>	genealogy; lineage; descent

