INFOSHEET - JULY 2024

Te Nohonga Kaitiaki Guidelines Information Sheet





Introduction

Genetic and genomic research comprise a research continuum that uses gene technology to examine the nature of living things. Genes, in the simplest of terms, can be considered the most basic unit of heredity (biological inheritance). More specifically, a gene is a sequence of DNA that codes for the synthesis of RNA and subsequently of proteins. These proteins may either play a role in the biochemical processes necessary in the functioning of the living organism, or yield more direct phenotypic (observable characteristics) effects.

Genetics is the study of genes and the molecular structure of genes and is generally concerned with heredity. A genome is the complete set of genetic information of an organism, including the spatial arrangement of that genetic information within a cell. The World Health Organization defines genomics as the study of genomes, which looks at the function of genes, as well as related techniques. Genomics is broader in nature than genetics and encompasses all genes and their interrelationships to understand more fully their combined influence on the organism.

Taonga and Genomic Research

The Māori worldview is composed of values that are interconnected and overlap in many ways.

Within the context of genomic research, taonga is rooted in and connected to several values, including mauri, whakapapa, mana, wairua, tapu and kaitiakitanga. Just as with any other concept in Te Ao Māori, these values are both deeply interconnected and distinct in nature. In this sense, taonga is:

- A reflection of mauri;
- A recognition of whakapapa;
- An acknowledgement of mana;
- An affirmation of wairua;
- An application of tapu, and
- An assertion of kaitiakitanga.

Taonga: any flora or fauna in which whānau, hapū or iwi claim kaitiaki responsibilities.



Figure 1. Taonga Framework

Engaging with Māori

An important part of conducting genetic and genomic research (hereafter genomic) that involves taonga species is the need to engage with the right people. Māori have repeatedly expressed their desire to be involved in research conversations from the earliest stage possible.

While whānau, hapū and iwi can identify appropriate connections between taonga and kaitiaki, the nature of this involvement may vary from case to case. Individual projects, the organisations responsible for projects and researchers, and the systems within which the research is conducted all have responsibilities to engage with, include, and contribute to Māori (Figure 1).

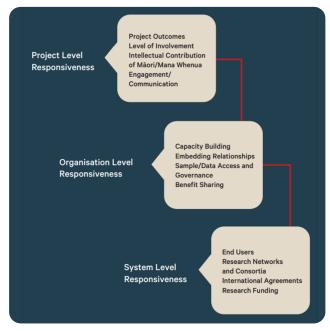


Figure 2. Responsiveness and engagement with Māori

Guiding and Operating Principles

Guiding Principles The guiding principles have been set in place to guide the thinking around genomic research. They speak primarily to the importance of how communities relate to the nature of the project. In the absence of guidelines, falling back on guiding principles should inform good decision-making. The guiding principles in this document reflect those set out in the Te Mata Ira Guidelines.¹ Wairua represents the spirit in which a taonga is shared and used. Kia tau te wairua o te tangata It encompasses the intentions, expectations and duties of care that are embedded in the use of the taonga. It requires a level of trust between traditional kaitiaki and the institutional stewards to whom the taonga is being entrusted for the purposes of the research. 'Kia tau te wairua o te tangata' sets the standard of comfort that communities should have with a given research project. The level of comfort may change over time and therefore it is important for researchers to maintain ongoing communication with mana whenua in order to keep mana whenua informed and engaged at every phase of the research Mana translates to power and authority and refers to the Kia pūmau te mana o te tangata authoritative ability of kaitiaki to exercise their tino rangatiratanga. 'Kia pūmau te mana o te tangata' speaks to maintaining a level of control that enables kaitiaki to exercise their self-determination over their taonga. More specifically, it relates to the level of control that participants and communities have with regard to the research project. Kia hiki te mauri o te kaupapa As described earlier, mauri is a core concept that underpins the Māori paradigm. It is the essence of life and encapsulates ecosystemic

balance and the biological integrity of life-sustaining systems and conditions. 'Kia hiki te mauri o te kaupapa' makes clear the importance of ensuring that the integrity of systems that contribute to research endeavours is enriched, or at the very least maintained

throughout the course of the research.

Operating Principles

The operating principles are reflective of the nature and relationship of whānau, hapū and iwi with taonga. The principles provide clarity around how relationships with the taonga are to be navigated when planning research and are of particular utility in the absence of applicable guidance.

He whakapapa tō te taonga	Taonga have relationships with people and place. 'He whakapapa to te taonga' acknowledges the vast and extensive reaches of whakapapa that contribute to the unique history of a taonga and its state of being. In this sense, whakapapa is not exclusively tied to ancestry, but encompasses each connection that enriches it with relational identity. From this perspective, we view any taonga not only as a treasure or resource, but in the light of all relationships that have culminated in its existence. 'He whakapapa tō te taonga' describes the genealogical, social, ecological, spiritual and historical relationships that cumulatively shape the highly nuanced identity of a taonga.
He mauri tō te taonga	Taonga are essential components of the ecosystem. 'He mauri tō te taonga' encompasses the delicate interplay between all organisms, which in turn form the foundations of ecosystem balance. Mauri as it relates to genomic research speaks to the importance of the preservation of distinct populations, the preservation of biodiversity, the preservation of roles within ecosystems and the preservation of mātauranga. 'He mauri tō te taonga' is the acknowledgement that taonga are central to ecosystemic health.
He kaitiaki tō te taonga	Taonga are protected through intentional action. As described throughout this document, one of the key underpinning aspects of Te Ao Māori is the taonga-kaitiaki relationship. 'He kaitiaki tō te taonga' speaks to the significance of this relationship and reinforces that taonga should be actively protected. It is an acknowledgement that whether through the self-determined actions of kaitiaki or the responsibility of institutional stewards, taonga are to be given due care and regard.

References

1. Hudson, M., Milne, M., Reynolds, P., Russell, K., & Smith, B. (2010). Te ara tika: Guidelines for Māori research ethics: A framework for researchers and ethics committee members. Health Research Council of New Zealand on behalf of the Pūtaiora Writing Group. https://www.hrc.govt.nz/sites/default/files/2019-06/Resource%20 Library%20PDF%20-%20Te%20Ara%20Tika%20Guidelines%20for%20Maori%20Research%20Ethics.pdf

Funded by: Ministry for the Environment

Published by: Te Mata Punenga o Te Kotahi | Te Kotahi Research Institute, University of Waikato,

Private Bag 3105, Hamilton 3240, New Zealand. Email: rangahau@waikato.ac.nz

DOI: 10.15663/i56.28922

This is an abridged version of the full guidelines:

Hudson, M., Thompson, A., Wilcox, P., Mika, J., Battershill, C., Stott, M., Brooks, R. T., & Warbrick, L. (2021). Te Nohonga Kaitiaki Guidelines for Genomic Research with Taonga Species. Te Kotahi Research Institute; Hamilton, New Zealand.



