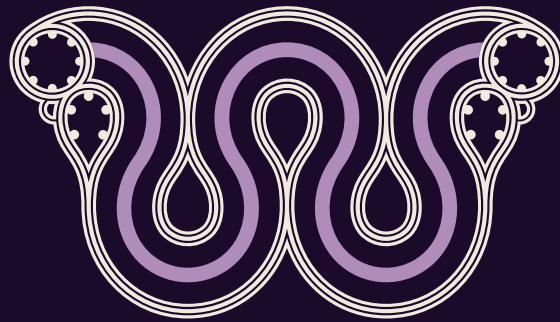




PŪTAHI MANAWA

HEALTHY HEARTS FOR
AOTEAROA NEW ZEALAND

HE PŪRONGORONGO Ā-TAU
CoRE Annual Report

1 July - 31 December 2021





Mihi

Kei ngā pū kei ngā weu o te whatumanawa. Ko te hau o mihi tēnei ka rere ki tua. Ka tuia te pō ka tōia ki te whai ao.

Ka rongo te ao, ka rongo te hunga kua kāpō.. Ērā kua tae ki te pū o te toi tangata, ki te ara tiatia, ki te ara i te toi huarewa, kia urutomo ki roto ki Rangiatea. Mā ngā māreikura, mā ngā whatukura e rāpoi, e tapuhi ki te toiora o ngā ioiongatanga tuturutanga. Ko te wai o mate ka rere, ko te wai o te ora ka here. Koia ka here i te muka tangata i ahu ,mai ai rā i Hawaiki nui, roa, pāmamao, kia kite i te ao tea roa e iri mai rā, i runga o Te Ika nui i hīa ake e Māui mā.

Tēnā, ka tau ki ngā huanga i ruia i Rangiatea, kia tuia hoki ā tatou maunga whakahī, puke iringa korero, waitapu, marae, kainga maha anō hoki, hei whakaara ake te korero, tēnā koutou,tēnā koutou, tēnā rā tatou kua puta ki te ao mārama nei.

He kupu whakamānawa ki ngā Ihorei, Manawatītī me te whakapau kaha, whakaheke tōtā nō roto o Te Iho Manawa e tāwharau nei i a tatou, ki te Pūtahi o te Manawa hoki e manaaki nei i a tatou te ringa raupā, te ringa mirimiri. Ko Manawaroa rāua ko Manawatū tēnei me te rau o te aroha e whārikingia nei ki mua i ō koutou aroaro, hei matapihi ki te āpōpōtanga me ōna pitomata katoa. Hui te Mārama, Hui te Ora!

Greetings

To the guardians of soul and spirit. This is an air of gratitude that extends beyond; it draws the darkness towards the light.

The living listen, as do those who have lost sight of the world of light. Those who have fulfilled their potential in this realm have now ascended the uppermost heavens to enter Rangiatea. The noble are assembled and secured by a lineage that reaches back to the very beginning. The water of those departed flows on, providing sustenance to the living. It connects to those who came from the great and distant home to see the long white cloud, suspended above the great fish hauled up from the depths of the ocean by Māui and his kin.

Now water settles and propagates those seeds sown in Rangiatea. Our prestigious mountains, hills, sacred waters, marae, homesteads as well are all present, raising the salutation that acknowledges and affirms all who have appeared to this world of light and understanding. Homage to our illustrious members, their collective efforts, energy and wisdom to the CoRE, enabling all who contribute to be nurtured.

These are the views, aims and aspirations we present to you as a glimpse of the potential that tomorrow holds. A shared vision, mission, understanding, and overall wellness for all.”

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Executive Summary

Essential mahi

- Establishment of Māori and Pacific Leadership Teams, Pūtahi Manawa Board and the Outreach & Education Team
- National CoRE Roadshows (Auckland, Christchurch, Dunedin, Wellington)
- Creating a tohu, naming of CoRE and gifting of a karakia for Pūtahi Manawa
- Establishment of infrastructure group to support development of national heart health databases and biobanking facilities and protocols
- Planning of education series for CoRE members to support understandings of 'business not as usual'

Grant funding

- Establishing funding principles
- Setting up of funding panel, funding process, and application forms
- Creation of Equity Grants and Integrated Research Modules
- Launch of funding rounds: Equity, Primer & Fellowships
- Launch of expression of interest for Integrated Research Modules

Policies

- Whakatakanga | Vision and Mission statements
- Ngā Wāriu o Pūtahi Manawa | Pūtahi Manawa Values
- Code of Conduct
- Stakeholders & Community Engagement Policy
- Outcomes Framework

Appointments

- Research Operations Manager
- Research Operations Coordinator



Manawaroa | Vision

Orokohanga | In the beginning ...the reason why we exist

In Aotearoa New Zealand, cardiovascular disease (CVD) remains the leading cause of death and disability. It continues to affect Māori and Pacific Peoples disproportionately compared to other New Zealanders, despite improvements in overall mortality. We know that cardiovascular disease and co-morbidities not only occur at greater rates for Māori and Pacific but earlier, causing an undue burden on whānau/aiga, communities, and the health system.

A Centre of Research Excellence (CoRE) that is focused on heart health will impact health outcomes across the spectrum of health because cardiovascular disease is the biggest driver of the inequity in life expectancy for Māori and Pacific Peoples by seven and five years, respectively (Walsh & Grey 2019). Importantly, 80% of CVD is considered preventable. *The mission of Pūtahi Manawa | Healthy Hearts for Aotearoa New Zealand is to improve equity in heart health for Māori and Pacific Peoples through research excellence and precision medicine.* Pūtahi Manawa, for the first time, brings together research scientists, clinicians and educationalists with communities to

take action against heart health inequities.

A comprehensive, and collaborative approach using personalized medicine is investigating the long-standing issues around equity in heart health outcomes. Pūtahi Manawa will have positive impact for all people in Aotearoa as we use a 'business not as usual' mindset when creating research programmes, focusing on career development pathways and engaging and involving communities in all aspects of the work we are doing.

Whakapapa | How we came about

'Business not as usual' is a concept that makes sense in theory, but takes many conversations, hui, and connections to put into practice. An intention to do things in research and workforce development differently, without a clear process, is a significant challenge but one that we as a collective recommend to all our colleagues who want to make a real difference for our country with the work that they do. Timeline below is a snap shot of journey that we have taken to get to an operational CoRE. This becomes the whakapapa of Pūtahi Manawa and can be an example for others who wish to follow a similar path of change for the benefit of those who need it most in Aotearoa.

Reference Walsh M, Grey C. (2019). *The contribution of avoidable mortality to the life expectancy gap in Māori and Pacific populations in New Zealand-a decomposition analysis.* NZ Med J. 132:46-60.

Whakapapa | How we came about

16 January 2018 Meeting with the Heart Foundation to discuss Centre for Heart Research

26 July 2018 Initial discussion with Dame Naida Glavish about Māori leadership

05 October 2018 Dame Naida presents a seminar about tikanga in heart health to the steering group called: "How does Indigenous knowledge impact on heart health"



›2017



›2018



›2019



›2020



›2021

Small steering group meetings

07 December 2017 Waiheke kick-off meeting to discuss a Centre for Heart Research

14 December 2017 ADHB kick-off meeting to discuss a Centre for Heart Research

17 January 2019 Strategic research initiative fund (SRIF) application submitted to the UoA to fund a Centre for Heart Research

07 March 2019 Meeting with FMHS Deans and DVC Research about a Centre of Research Excellence CoRE application to the Tertiary Education Commission

14 March 2019 Meeting with senior UoA colleagues about Māori engagement for a Heart Research CoRE application

26 April 2019 Research Operations Manager for the proposed new Heart Research Centre appointed

28 May 2019 First formal Māori Advisory Group meeting continuing bi-monthly

22 July 2019 Manaaki Manawa is formerly established as the Centre of Heart Research, UoA to be host for CoRE bid

13 August 2019 First Pacific Leadership Team meeting

17 October 2019 Māori Health Stakeholder meeting

26 November 2019 Healthy Hearts for Aotearoa New Zealand CoRE bid submitted

05 August 2020 Interview at the Royal Society Te Apārangi, Wellington for CoRE bid

09 Oct 2020 Tertiary Education Commission announces that Healthy Hearts for Aotearoa New Zealand is funded

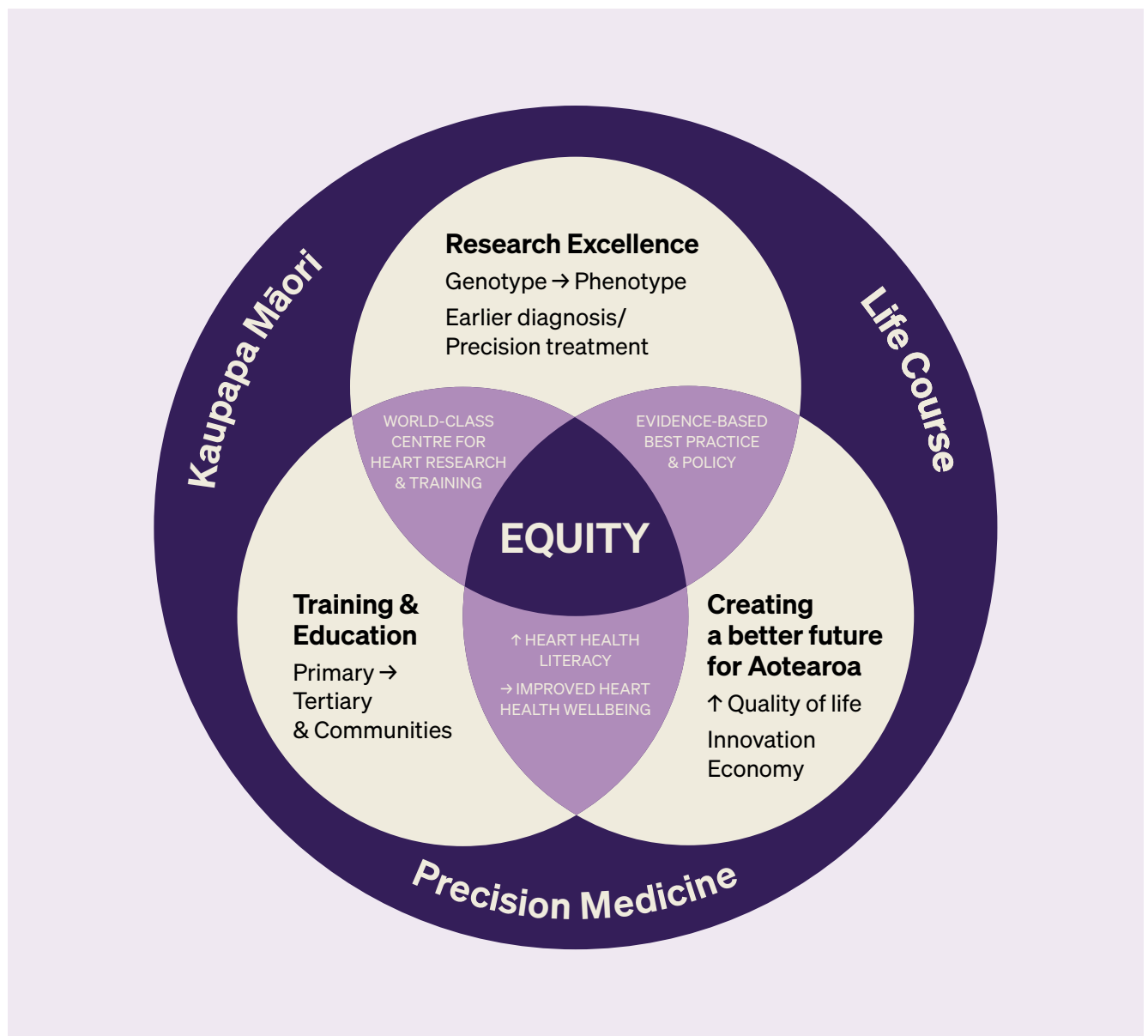
PŪTAHI MANAWA
HEALTHY HEARTS FOR
AOTEAROA NEW ZEALAND

01 July 2021 Healthy Hearts for Aotearoa New Zealand operational

What does 'business-not-usual' mean to Pūtahi Manawa

Science and medicine has a good way of collecting evidence and analysing that evidence, but that's only one way of seeing the world. Partly what Pūtahi Manawa would like to achieve is using other ways of looking at research data and analysing that information to get a different point of view. For example, a Māori model of health, which is a holistic model that approaches one as a whole person, not just their body, could be included in Pūtahi Manawa workstreams; this would be business not as usual for heart health research. Research findings then shift health care practice and priorities. Business not as usual is about researching from within the worldview

of the people that we want to have the greatest impact for. It is about moving away from the idea that the academics and clinicians are the only "experts". The process of creating a research question based on academic or clinical expertise, with the findings of that work then becoming clinical practice is business as usual and it might have absolutely no relevance at all to a population of people. Pūtahi Manawa seeks to understand how to engage with communities, understand their concerns, hear their ideas for solutions and work together with communities. Pūtahi Manawa is a relationship building enterprise with research, outreach and education and supporting workforce capability as areas that foster those relationships. This is summarised in the schematic below.



Ngā Wāriu o Pūtahi Manawa | Pūtahi Manawa Values

Toitōi Manawa

Encourage and Inspire

We encourage and inspire behaviours and actions that align and reinforce our vision and mission.

Manawa Whānau

Team and Stakeholders

Our team and stakeholders are the foundation of our work.

Tānga Manawa

Place of Refuge

Our approach is unified and collective, we create safe spaces to engage and work.

Manawa Popore

Considerate

We are committed to an approach that enhances the mana and general well-being of others through considered behaviours, language, and actions.

Manawa Tina

Decisiveness

Our vision and mission encourages and inspires a decision-making process which is underpinned by our shared values, due diligence, and transparency.

Manawa Rahi

Resilience

When faced with challenges, we remain firm and optimistic in seeking positive outcomes.

Manawa Ora

Breath of Life

We acknowledge the connection between us all through the breath of life. Identifying and acknowledging our connections gives us strength.

Puna Manawa

Spring of Water

The source (or spring) of our vision and mission is the source of our mana. Through knowing the source, we can extend our care within our team and to our communities.

Tuakiritanga | Establishing our identity

Te Tiriti o Waitangi is the founding document of Aotearoa. Pūtahi Manawa is committed to ensuring that Te Tiriti is embedded authentically across all areas of our mahi. The values that ground us arise from Te Ao Māori and acknowledge our commitment to Te Tiriti. These values tell us how to reflect on ourselves, how to interact with each other and to encourage, inspire and empower our communities.

Logo and branding

Connection to identity and culture is important for Māori and Pacific Peoples in health. Therefore a strong identity and culture needed to be established for our CoRE to achieve its aspirations for Māori and Pacific Peoples. The process of identity creation is important to document as it provides a process for others who might want to build an authentic process within which to ground their work.

‘Nā te mauri ko te kapanga manawa,
nā te kapanga manawa ko te hā,
nā te hā ko te ora.’
‘Mauri forms the pulse,
the pulse forms the breath,
the breath gives life.’

We aspire to progress heart health equity for Māori and Pacific Peoples and therefore for Aotearoa New Zealand as a whole. In our identity the notion of the indivisibility of the body, and therefore of our work was important to acknowledge to challenge the individual worldview of health and the traditional siloed approach in health. In addition there are dualities including: the inseparability of heart and breath, and the rich nuance shared between science and culture. Our CoRE was intentionally set up to be a values-led interdisciplinary initiative, with the unique opportunity to bring distinct people together for the first time to work on the same problem. These ideals established the foundations of our identity, logo and brand.

The heart in Te Ao Māori

The ‘heart’ holds a significant conceptual place in Māori tradition and narratives. Concepts such as: manawa roa (resilience); manawa tina (decisiveness); manawa nui (courage); and manawa toka (determination), signal the importance of the heart to values and desirable characteristics in society.

Characteristics of animals are also used to metaphorically connect character traits of animals and the heart. Phrases such as manawa titi and manawa piarau which focus on the hearts of the mutton-bird and lamprey eel respectively to denote bravery, stamina and robustness.

Manawa whenua is another well-known phrase, which speaks of the ‘heart of the land’. It can be provenanced in whakataukī such as

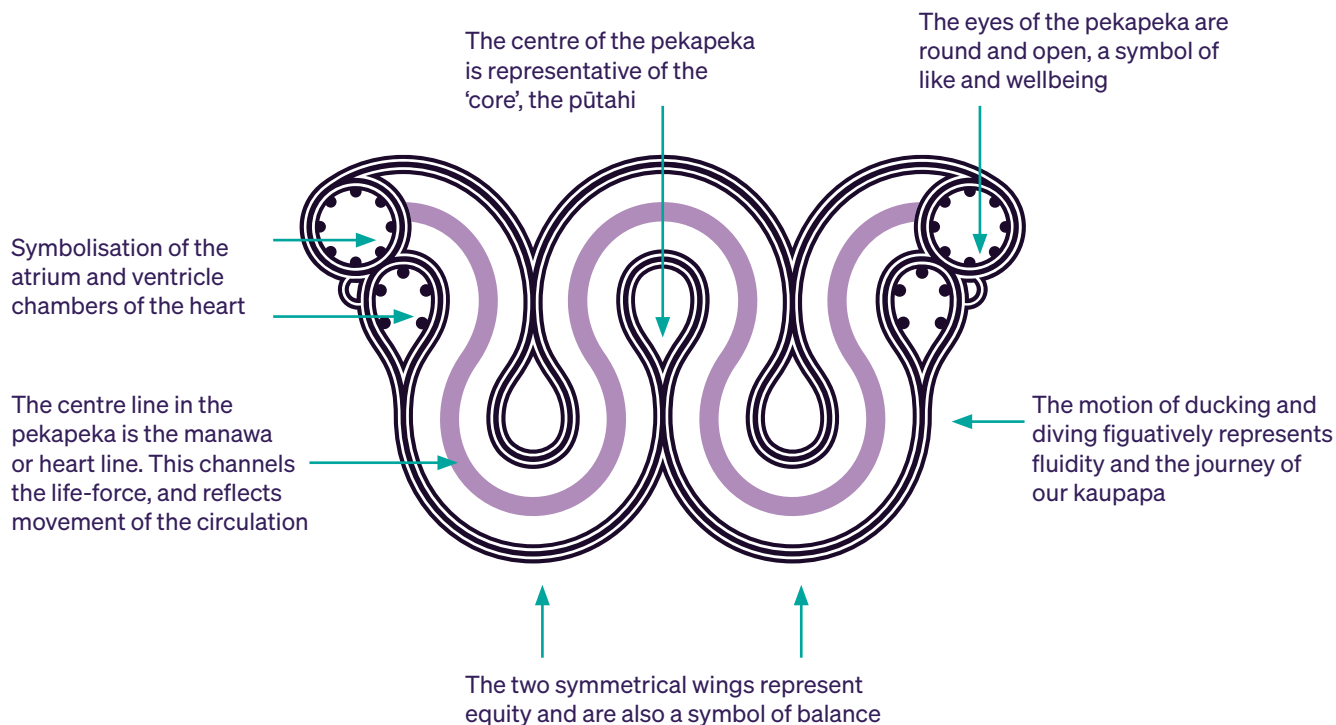
‘he kapanga manawa o te whenua,
he kapanga manawa o te tangata’
‘the heartbeat of the land is the
heartbeat of the people.’

Creating of a name and tohu

The pekapeka, or native New Zealand bat, is a powerful symbol of duality, and therefore, indivisibility. In Te Ao Māori the pekapeka are typically represented with their wings outstretched, each wing forming into an outward-facing manaia. The pekapeka with the two symmetrical wings, represent equity and are also symbolic of balance. In this instance, the balance extends from a concept of partnership between Tangata Whenua and Tangata Tiriti, to the inseparable nuances between science and culture, the respiratory and circulatory systems; and our health system and communities.



Tohu | Symbol Diagram



The two poles represented by pekapeka are not symbolic of a binary proposition, they are rather a reflection of the Māori world that acknowledges the spectrum on which all knowledge operates, and the inseparability between all living things. The eyes of the pekapeka are round and open, a symbol of life and wellbeing while the centre of the pekapeka is the pūtahi.

The pūtahi physiologically references the aorta (te pūtahi o te manawa). Simultaneously it conceptually references The Centre of Research Excellence and its origin or pū (for the journey of change and development).

The movement of the pekapeka is also frequently referenced. The motion of 'ducking and diving' figuratively represents fluidity and the journey of a

kaupapa. It can be applied to the movements of the circulatory and respiratory systems and equally to the journey of the kaupapa as it faces challenges and defines new opportunities, across research and training and relationships generally. Having said this, the pūtahi maintains a stable foundation as the journey of the kaupapa unfolds.

Healthy Hearts for Aotearoa New Zealand Centre of Research Excellence has thus been renamed Pūtahi Manawa.

- Pūtahi means 'centre' or 'place of confluence'. It is literally the 'CORE'.
- Manawa is the heart.

So figuratively, Pūtahi Manawa refers to the central systems of the heart, physiologically and conceptually.



Whakatakanga | Vision and mission statements

Pūtahi Manawa Vision

To achieve heart health equity for Māori and Pacific Peoples.

Pūtahi Manawa Mission

Through research excellence, we will progress equity in heart health outcomes for Māori and Pacific Peoples and improve cardiovascular health and well-being for all in Aotearoa New Zealand. We will reach beyond 'business as usual' and create a connected and collaborative environment for cardiovascular health research grounded within the Indigenous paradigm of Aotearoa. Our aim is to take a life course approach, guided by Māori and Pacific values and principles, to address the nation's crisis of equity for cardiovascular (CV) health in Aotearoa by earlier, more precise and personalised prevention, prediction, detection/diagnosis, and treatment of CV disease (CVD).



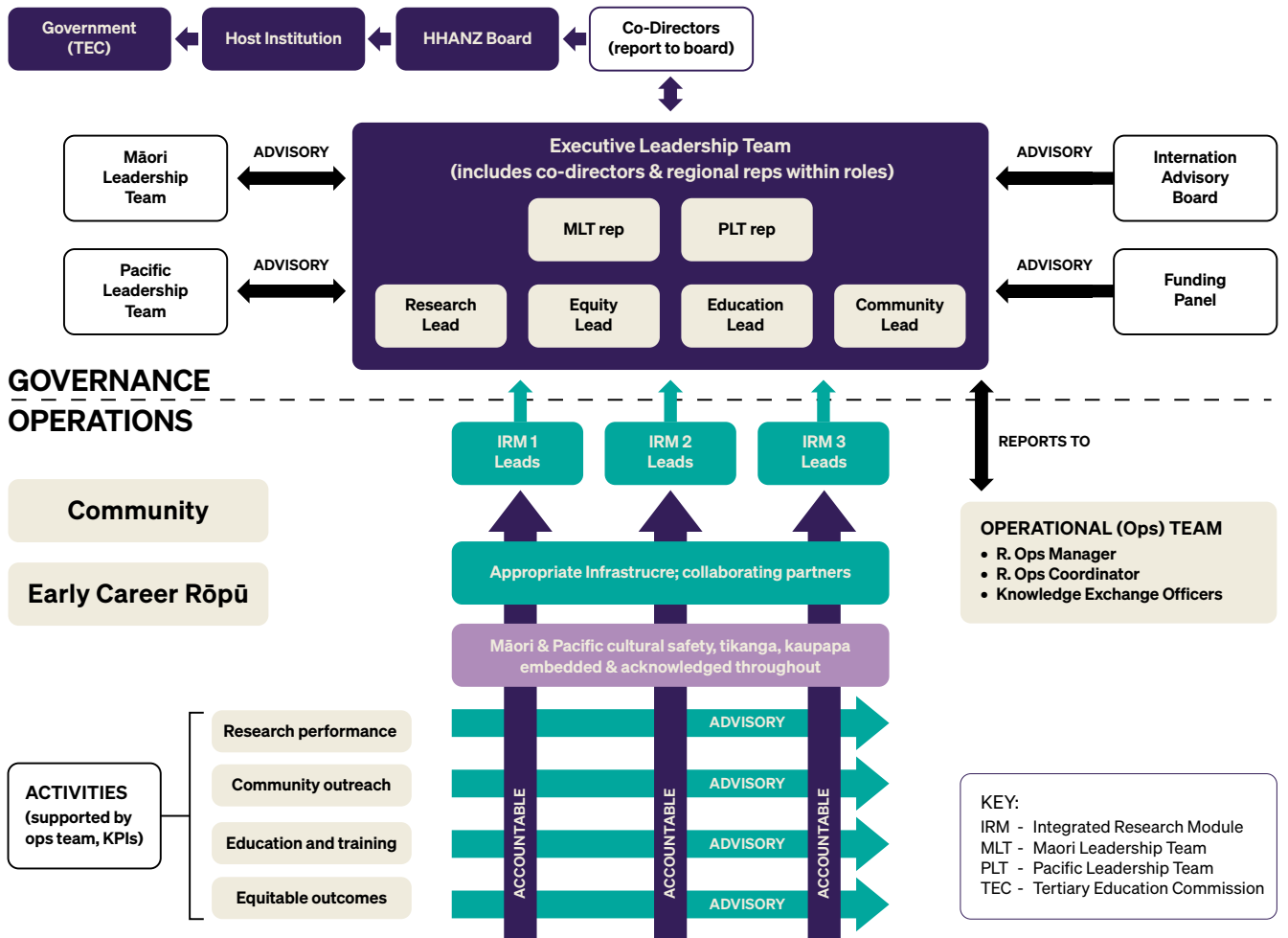
Ko Ngā Iho Manawa | Our People

Equity in heart health outcomes for Māori, Pacific People and women can only be achieved if those that we want to have impact for are involved at all levels of Pūtahi Manawa. We are proud of the diversity in our leadership which includes equitable representation of Māori, Pacific and women on the Board. Our Māori Leadership Team is integral to maintaining our connection and grounding in the articles of Te Tiriti o Waitangi and ensuring our processes are tika and pono. Our Pacific Leadership Team guide us to ensure that Pacific diversity is acknowledged and that our intentions and actions support the aspirations of Pacific people both here in Aotearoa and in the Pacific itself.

One of the strengths of Pūtahi Manawa is its diversity and inter-disciplinarity of membership. Sitting within the same whare as our Māori and Pacific

cardiovascular scientists, we have world renowned expertise in the following sciences: analytical, biomedical/discovery, biomarker, bioengineering, clinical science (including trials), epidemiological, data analytics and genetics. Never have we amassed such inter-disciplinarity to address equity for heart health. Moreover, our membership includes academics at all levels of seniority including early career scientists (students, post-doctorates and fellows), nurses, medical trainees and consultants and community workers. These are based across the entire country including the three national heart research centres of Manaaki Manawa (Auckland), Heart Otago (Dunedin) and Christchurch Heart Institute. Finally, we have representation from a number of stakeholders and community hauora.

Anga | Our Structure



Pūtahi Manawa Board

“ In business we speak of 'disruption'. That's an innovation that radically and lastingly changes an industry. It's exactly what we're seeking here. It's a business 'not as usual' approach. What's the point of doing research if it doesn't cause a radical and lasting shift? If it doesn't impact people and their everyday lives? As a team we're working together to bring balance back into health and academia. ”

Mr. Kent Gardner, Chair

Governance Board

CHAIR



Mr. Kent Gardner
CE Evans Randall
Investors.



Prof. Sue Crengle
General Practitioner,
Professor, Public Health Physician,
University of Otago.
Kāti Māmoe, Waitaha to Kāi Tahu



Prof. Palatasa (Tasa) Havea
ONZM
Dean, Professor Pacific Success
Office, Massey University.



Dr. Mataroria Lyndon
Sr. Lecturer,
University of Auckland,
Co - Founder and Clinical Director
of Tend Health, Deputy Chair of
Te Hiringa Hauora health Promotion
Agency, Board Member of the
Māori Health Authority.
Ngāti Hine, Ngāti Whātua, Waikato



Prof. James Metson
DVC Research,
University of Auckland.



Ms. Sharon Shea
MNZM
Principal, Shea Pita & Associates Ltd.
CEO,
Manawaroa Ltd.
Ngāti Ranginui, Ngāti Haua, Ngāti Hine, Ngāti Hako

Māori Leadership Team

“ Being a research participant can be seen as a privilege, because you've got the time and space to participate. And that's partly why we don't see a wide diversity of research participants because it really is only open, traditionally, to a group of people who are able to engage.

Drs. Anna Rolleston and Mataroria Lyndon, Co-Chairs



Māori Leadership Team



Dr. Justine Camp

Research Fellow,
University of Otago.
Kāi Tahu, Kāti Mamoe, Waitaha



Dr. Wil Harrison

Interventional Cardiologist,
Counties Manukau DHB.
Ngāti Porou, Rongowhakaata



Dr. Matire Harwood

GP, Papakura Marae Health Clinic, Associate Professor,
University of Auckland.
Ngāpuhi



Mr. Jeremy Hema

Kaiahi, University of Auckland.
Ngāti Paoa, Ngāpuhi



CO-CHAIR

Dr. Anna Rolleston

Dir. Centre for Health.
Ngāti Ranginui, Ngai Te Rangi, Ngāti Pukenga



CO-CHAIR

Dr. Mataroria Lyndon

Sr. Lecturer, University of Auckland,
Co - Founder and Clinical Director of Tend Health, Deputy Chair of Te Hiringa Hauora health Promotion Agency, Board Member of the Māori Health Authority.
Ngāti Hine, Ngāti Whātua, Waikato



Dr. Anthony Jordan

Clinical Immunologist,
Auckland DHB.
Ngāti Wai



Dr. Rāwiri Keenan

MBChB, FRNZCGP, GP, Senior Research Fellow,
University of Otago, Wellington and Adjunct Senior Fellow, University of Otago.
Te Atiawa, Taranaki



Ms. Takiwai Russell-Camp

Dept of Medicine Kaipūtahi,
University of Otago.
Ngāi Tahu



Dr. Karaitiana Taiuru

Māori Research Adviser,
Christchurch Heart Institute.
Ngāi Tahu, Ngāti Toa and Ngāti Kahungunu



Ms. Bren Tai-Rakena

Charge nurse of Cardiac Care,
Waikato DHB.
Tainui

Pacific Leadership Team

“ 'O le ala i le pule o le tautua' which means, 'The journey to leadership is through serving'. Pūtahi Manawa, Healthy Hearts is navigating an exciting journey ahead through serving the people of Aotearoa. It is those that serve, that are true leaders. ”

Drs. Dianne Sika-Paotonu and Daryl Schwenke, Co-Chairs

Pacific Leadership Team

CO-CHAIR



Dr. Dianne Sika-Paotonu

Associate Dean (Pacific)
University of Otago, Wellington.
Tongan

CO-CHAIR



Dr. Daryl Schwenke

Associate Professor,
Associate Dean Pacific Biomedical Sciences,
University of Otago.
Samoan



Dr. Allamanda Faatoese

Research Fellow,
Christchurch Heart Institute, University of Otago.
Samoan



Dr. Corina Grey

Public health physician & Epidemiologist,
Auckland DHB.
Samoan



Ms. Amio Ihikele

Nurse, Innovations Lead for Moana Research, Doctoral Candidate,
University of Auckland.
Te-Whanau-a-Apanui & Niuean



Mrs. Soteria Ieremia

Project Manager,
Hamilton Science Awards Trust.
Samoan



Dr. Tua Taueetia-Su'a

Nurse & Senior Research Fellow,
Public policy & primary health care researcher,
University of Auckland.
Samoan



Sir Collin Tukuitonga

Associate Dean Pacific, University of Auckland.
Appointee Health Quality & Safety Commission.
Niuean



Ms. Julie Winter-Smith

Doctoral candidate,
University of Auckland.
Tongan

Outreach and Education (OnE) Team

“ He rau ringa e oti ai (many hands make light work). ”

Outreach and Education Team



Dr. Anuj Bhargava

Professional Teaching Fellow, University of Auckland.



Prof. Chris Bullen

Professor, University of Auckland, Director of the National Institute for Health Innovation.



Dr. Allamanda Faatoese

Research Fellow, Christchurch Heart Institute, University of Otago. **Samoan**



Ms. Ata Mauigoa

Research Operations Coordinator, Pūtahi Manawa HHANZ CoRE.



Dr. Susie Stevens

Senior Lecturer, University of Canterbury, Director of Physical Education New Zealand.



Dr. Karaitiana Taiuru

Māori Research Adviser, Christchurch Heart Institute. **Ngāi Tahu, Ngāti Toa and Ngāti Kahungunu**



Ms. Lisa Wong

Research Operations Manager, Pūtahi Manawa | HHANZ CoRE.

Operational Team



Co-Directors,
Dr Anna Rolleston
and Professor
Julian Paton

“Never before has there been Māori and Pacific leadership to guide a nationally coordinated effort to bring about the urgent changes for achieving equity in heart health in Aotearoa New Zealand. Pūtahi Manawa now provides this exciting opportunity, and we are honoured to be part of this incredible voyage.”

Research Operations Manager, Ms. Lisa Wong



Lisa has been part of the Pūtahi Manawa team since its inception in 2019 and helped to coordinate and draft the original bid. A first generation Canadian, Lisa has experience in tertiary education and research as well as research and clinical trials across Canada, United Kingdom, and Aotearoa New Zealand. Understanding the research process from bench to bedside and beyond, Lisa is able to draw on personal and international experiences to bring multiple worldviews together, providing a unique perspective to change the status quo of how we “do” research and what that means for heart health.

Research Operations Coordinator, Ms. Ata Mauigoa



In November, Ata Mauigoa joined our team as our Research Operations Coordinator. With experience working at the hospital, municipal government, and across the university, Ata brings a unique multidisciplinary skill set. Originally from Samoa, Ata is fluent in Samoan and brings a unique perspective and contribution to our team. “I sail from the beautiful island of Samoa where our culture is rich with traditions and life is all about being part of a bigger Aiga and community that cares and looks after one another. Being Samoan is about service, action, respect and so much more – it is the Tautua (service) that I am most passionate about. It is the bridge that brings people and cultures together.”

Mahia te mahi | Getting the work done

ITEM	DATE	LOCATION
CoRE Strategy meeting	9 December 2020	Auckland
CoRE Strategy meeting	5 February 2021	Christchurch
Māori Leadership Team Strategy meeting	10 February 2021	Zoom
Branding meeting	16 February 2021	First meeting via zoom
Tertiary Education Commission Workshop	13 – 14 April 2021	Wellington
Funding Panel initial meeting	26 May 2021	Zoom
Meeting with the Heart Foundation	31 May 2021	Auckland
Board meeting (inaugural)	25 June 2021	Zoom
Board meeting	26 August 2021	Zoom
HHANZ CoRE road show	9 June 2021	Auckland
HHANZ CoRE road show	14 June 2021	Dunedin
HHANZ CoRE road show	16 June 2021	Rotorua (Cardiac Society of New Zealand Heart Foundation Fellows Forum)
HHANZ CoRE road show	29 June 2021	Christchurch
OnE Team Wānanga	23 September 2021	Zoom
Research Operations Coordinator, Ata Mauigoa, joins the team	15 November 2021	

Roadshows

In order to engage with our research community, co-directors Dr. Anna Rolleston, Prof Julian Paton, Research Operations Manager Lisa Wong as well as Funding Panel co-chair Dr. Johanna Montgomery and Outreach and Education rōpū members Drs. Allamanda Faatoese and Anuj Bhargava made a number of presentations at several locations, including Auckland, Dunedin, Christchurch, Wellington, Hamilton, and also as part of the Heart Foundations Fellows' Forum at the Cardiac Society of New Zealand (CSANZ) annual meeting in Rotorua.

We defined what a CoRE is, and discussed our mission and values, membership of leadership teams, funding principles and proposed funding rounds as well as proposed infrastructure and our outreach and education strategy. We also discussed our intended approach to our flagship projects, our Integrated Research Modules. Aiming for multidisciplinary and equity focussed projects, we encouraged our audience to begin thinking and seeding the ideas around what these projects could look like, and take a “business not as usual” approach. The audiences across all presentations were engaged and offered constructive suggestions which we have incorporated into our processes and plans.



PŪTAHI MANAWA
HEALTHY HEARTS FOR
AOTEAROA NEW ZEALAND

Grants Timeline 2021

EQUITY

Call for Proposals: 11 August
Webinar Information Session: 19 August
Proposals due: 17 September

PRIMER

Call for Proposals: 17 September
Webinar Information Session: 24 September
Proposals due: 29 October

FELLOWSHIPS

Call for Proposals: 17 September
Webinar Information Session: 24 September
Proposals due: 29 October
Short list results announced for interview:
Week of 29 November
Interview: Week of 13 December

INTEGRATED RESEARCH MODULE

Call for Expressions of Interest: 22 October
Expressions of Interest due: 29 November

Key Developments

Creation of Equity Grant

The purpose of the Pūtahi Manawa Equity Grants are to supercharge a piece of research already underway. They are meant to amplify the equity component in an ongoing, already funded study. Examples include (but not limited to):

- Increasing participant numbers to achieve equal explanatory power for a priority population
- Improving engagement and recruitment processes to engage a particular group, or establish equitable leadership/participation/opportunities
- To support translation of research findings to make them more accessible to end – users, community and whānau

Creation of Integrated Research Modules (IRMs):

Research typically operate in silos that hinders collaboration and can lead to duplicate work. The drive behind IRMs is to create a grant where collaboration and multidisciplinary is a major focus to bring and unite multiple disciplines across heart research to address a unified problem.

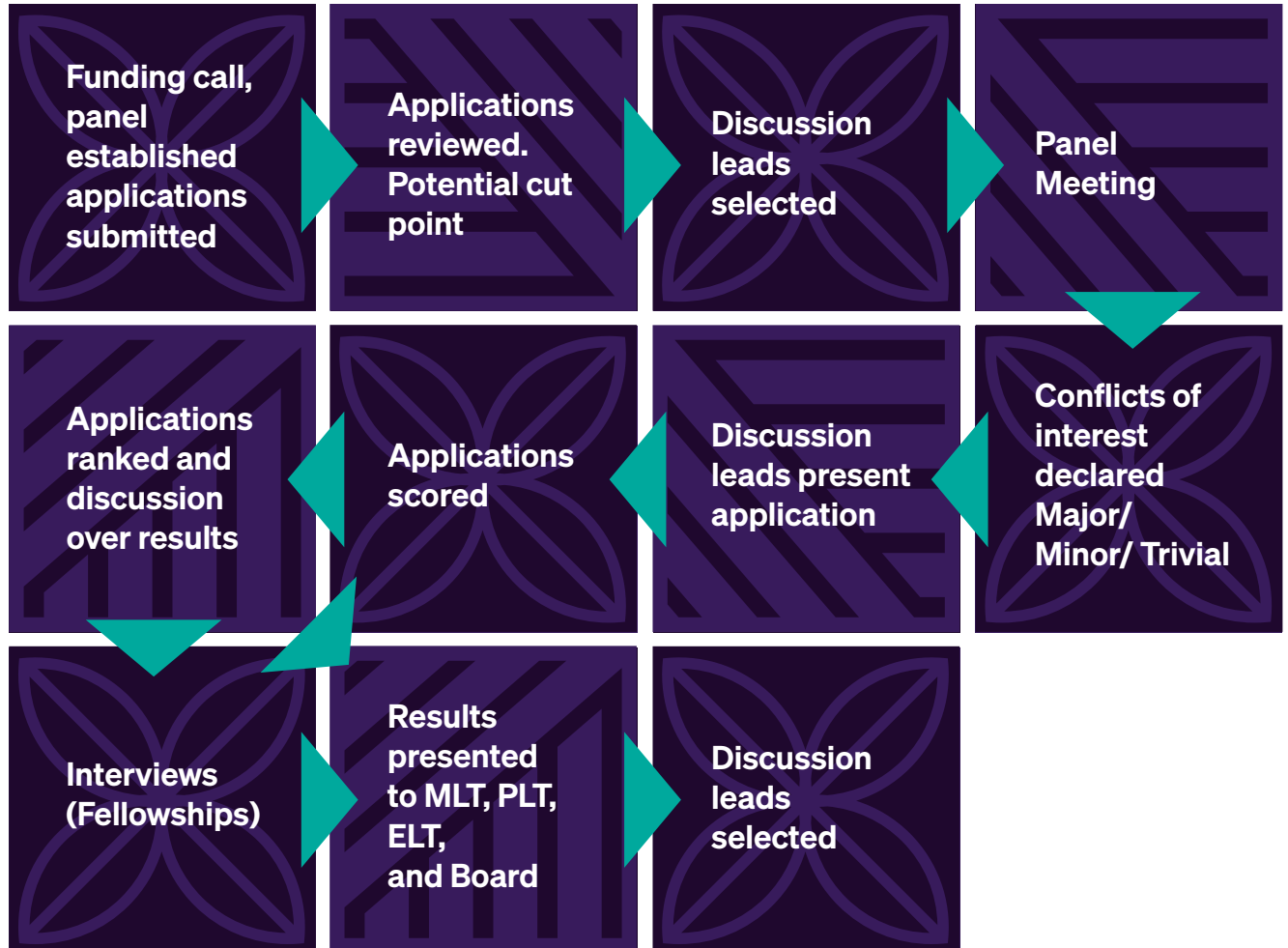
Development of Funding Criteria

The intention and purpose of Pūtahi Manawa means that the usual criteria for assessing research proposals will not be appropriate. Therefore a design process was undertaken to create new categories for assessing research grants.

Pūtahi Manawa Funding Principles

	ASSESSMENT	DESCRIPTION
Scientific Integrity	How robust is the science? How relevant is this topic to the aims of HHANZ CoRE? Evidence of peer review on background work.	Best practice or rules of professional practice in research.
Te Tiriti o Waitangi & Equity	<i>Acknowledgment and upholding of Te Tiriti o Waitangi.</i> How does the proposal have Te Tiriti o Waitangi focus? How is Māori partnership/leadership/governance included? Is data handling culturally-appropriate? (i.e. is there a data governance strategy). <i>Fairness and justice, distinct from equality.</i> How does the proposal address/enhance equity/intervene in inequality? How will this funding impact equity? What research is being included that will support equity?	<i>Te Tiriti o Waitangi embedded</i> Te Tiriti o Waitangi is the founding document of Aotearoa. The principles of Te Tiriti o Waitangi, provide a framework for how we will meet our obligations under Te Tiriti in our day-to-day work. Authentic partnership and knowledge exchange with Māori is our obligation under Te Tiriti o Waitangi. Where partnership is fledgling or not yet fully established, applications must show the pathway and intent for the partnership. Applications that do not demonstrate partnership will not be funded. <i>Equity Focussed</i> The aim of HHANZ is to improve equitable outcomes for Māori and Pacific people and women in heart health. All projects and workstreams must be able to demonstrate how equity is being advanced). Applications need to show that the work intervenes in, rather than describes, inequity.
Co-Design	<i>If not a co-design project, how are co-design principles included in the research?</i> What co-design methodology is incorporated – e.g. Kaupapa Māori, Pacific methodologies/ classic co-design.	<i>Co-design principles</i> Ensuring the voice and views of community are integrated into our work is a vital part of our business-not-as-usual approach.
Translation	<i>Translation is the process of passing research findings along the research pathway to the next user and/or end-user</i> How will you translate your findings? How will this project engage with the community and stakeholders? How will dissemination of results to Māori, Pacific communities occur?	<i>Translational</i> Closing the research-practice / research-translation gap will have a positive impact on equity.
Multidisciplinarity and Team Excellence	<i>Tell us about your team</i> <i>Describe how your team is diverse</i> Who are the key stakeholders? What research disciplines are involved? What is the track record, relative to opportunity of the team?	Multidisciplinary and Collaborative Building connections and team-work across disciplines in heart health research strengthens relationships and our ability to have impact from the work that we do. Collaboration means working together with stakeholders and communities by sharing expertise, resources and responsibility for achieving outcomes.

Pūtahi Manawa Funding Process



Code of Conduct

Te Tiriti o Waitangi is the founding document of Aotearoa. Pūtahi Manawa is committed to ensuring that Te Tiriti is embedded in our structure and in that all work performed is with genuine partnership with Māori.

Pūtahi Manawa is committed to open discussion, freedom of ideas and expression, and considerate airing of differences. Therefore, we will foster an environment that recognises and acknowledges every person and group, that fosters inclusion, dignity, understanding, and mutual respect. Pūtahi Manawa has a specific focus on equity for Māori, Pacific Peoples and women and therefore our code of conduct is cogniscent of these goals.

Pūtahi Manawa is a harassment-free environment and all parties should be able to be safe and enjoy their experience within the CoRE, regardless of gender, sexual orientation, disability, physical appearance, race, ethnicity, political affiliation, nationality, language, or religion. We have explicitly agreed to strive toward equity in heart health for Māori and Pacific and therefore our individual and collective actions, behaviours and interactions are aligned to this purpose. The nature of the activities of Pūtahi Manawa means that discussions will need to be held that highlight Māori as the Te Tiriti partner and tangata whenua, and Pacific Peoples and women as priority groups. Conversations relating to race, ethnicity, sex and gender will be commonplace, with a focus on equity and a firm shift away from equality. The values of Pūtahi Manawa will at all times guide the various conversations, interactions, decisions and behaviours.



Equity

Equity acknowledges that individuals have different backgrounds and identify with different socio-cultural constructs that include, but are not limited to; gender, ethnicity, socioeconomic status, or geographic location. Equity ensures that principles of fairness and justice guide decisions that impact on those who face inequity. Equity in health is defined as: In Aotearoa New Zealand, people have differences in health that are not only avoidable but unfair and unjust. Equity recognises different people with different levels of advantage require different approaches and resources to get equitable health outcomes (*see <https://www.health.govt.nz/about-ministry/what-we-do/work-programme-2019-20/achieving-equity>*). Equality assumes that there is fairness for all but does not acknowledge nor adjust for individual barriers or privileges that result in disparities and imbalances between individuals and groups.

The key groups who we have committed to providing equitable heart health outcomes are Māori, Pacific and women.

Māori – we acknowledge Māori as Te Tiriti partners and accept our responsibilities and obligations as partners. We will adhere to the tikanga and kawa of the communities and stakeholders with whom we engage and we will engage authentically with all formal ceremonies. We will improve our understanding and use of Te Reo Māori.

Pacific – we acknowledge the Indigeneity of Pacific Peoples to their islands, and that Pacific Peoples are culturally diverse with diverse worldviews. We will advance Pacific cultural capacity in research within Pūtahi Manawa and integrate Pacific research methods.

Women – we acknowledge the patriarchal and colonised structures of society that history and science are founded upon. We acknowledge the significance of the roles that women have within society and that the rights and voices of women are important and needed. For Māori women we acknowledge that the process of colonisation and assimilation has led to a degrading of the balance that existed between mana wāhine and mana tane. We celebrate the role of Māori women as warriors and leaders throughout history. For Pacific women

we acknowledge their role as nurturers and that they are pivotal to advancing their aiga/family.

We also acknowledge that within Pacific cultures there are differences whereby matriarchal and patriarchal systems can have dominance. HHANZ CoRE acknowledges that gender is different in different cultural groups, and our emphasis is to advance heart health outcomes for all women based on their own definition of gender.

Authenticity

To acknowledge, accept and support the worldview, values, beliefs and rights of others, we must be confident and grounded in our own identity, value and beliefs as individuals and as the collective that is Pūtahi Manawa. We acknowledge and accept the values, vision and mission of the CoRE and act authentically at all times, where our actions and behaviours are congruent with our values, vision and mission.

We are allies

An ally is a person who is not a member of a group impacted by inequity, nor are they part of an underrepresented, marginalised, or oppressed group. An ally takes action to support groups impacted by inequity. Allies are typically members of a majority group who act as champions of change and raising awareness. We all hold positions of privilege by virtue of being members of Pūtahi Manawa, and therefore can act as an ally to further our vision and mission and to keep all members safe in the Pūtahi Manawa working environment.

Acknowledging and addressing bias

Unconscious bias are social stereotypes and attitudes about certain groups of people that individuals form outside their own conscious awareness. Everyone holds unconscious beliefs about various social and identity groups, and these biases stem from the environment and influences upon us as children, and a tendency to organise social worlds into categories. We will strive to see and understand our own bias, and constantly transform our underlying beliefs about others that are detrimental to them and to our values, vision and mission.

Behaviours that support the principles of the Code of Conduct

Equity

- We actively look for avenues to uplift Māori, Pacific and women in all areas of our work.
- We seek opportunities to provide additional support and avenues for Māori, Pacific and women to succeed.
- We resource Māori, Pacific and women focussed activities as a priority.
- We will appoint Māori, Pacific, and women into leadership roles.
- We will incorporate equitable processes for CoRE decision making and appointment of roles.
- We will promote an environment where equity can be easily promoted and discussed in our conversations.

Being an ally

- We will be allies to all, calling out situations that are unjust, unfair or constitute harassment.
- People who hold positions of privilege will be active allies to those with less privilege and will take responsibility for making changes that will help others be successful.

Acknowledging and addressing bias

- We are mindful of our own worldviews and therefore the bias we bring with us to every situation and interaction.
- We take it upon ourselves individually to understand how our privileges and world views have impacted our views and stereotypes.
- We do not engage in epistemic exploitation but rather undertake the work and self-accountability to understand and learn different world views.
- We will actively seek out resources available to learn and upskill ourselves in understanding the inequities for Māori, Pacific and women in academia and research practices.

Authenticity

- We interact with each other and our communities and stakeholders with genuine care.
- We participate in open and honest communication and address conflicts and disagreement with professional attitudes, guided by the HHANZ CoRE values.
- We seek to understand another person's context, culture and worldview without judgement.

Tikanga Process

Tikanga is a concept incorporating practices and values from the Māori world. Tikanga is translated into the English language with a wide range of meanings – culture, custom, ethic, etiquette, formality, lore, manner, mechanism, method, protocol, style, customary law. Tikanga is derived from the Māori word ‘tika’ which means ‘right’ or ‘correct’ so, in Māori terms, to act in accordance with tikanga is to behave in a way that is culturally proper or appropriate.

The purpose of the Pūtahi Manawa Tikanga is to describe processes that are expected when engaging on CoRE business:

- 1) General Tikanga
- 2) Tikanga for engagements with community
- 3) Recruitment of participants for research
- 4) CoRE meetings

Separate documents cover Tikanga associated with:

- 1) Collection, use, storage, destruction of human tissue, and
- 2) Ownership, collection, use, storage, destruction of data

Creation of Pou Tikanga role

In essence the Pou Tikanga role was created to have a person who could provide cultural leadership and building capacity and capability in the application of Te Tiriti o Waitangi and te reo me ngā tikanga Māori within Pūtahi Manawa. As a newly established entity with equity in Māori heart health outcomes as a vision, Pūtahi Manawa needed the cultural guidance in the development and implementation of processes and practices in the initial stages and then throughout the life of the CoRE.

Stakeholder and Community Engagement

An engagement policy is in development to support best practice and tikanga in all aspects of interactions with communities and stakeholders. Focus has been on developing trust relationships with key Māori and Pacific community organisations, guided by Māori and Pacific Leadership Teams. Engagement to date has been to share the intent and kaupapa of Pūtahi Manawa, hear community and stakeholder thoughts and critique on plans for research, community outreach and education and understand if and where communities feel they fit. Engagement for Pūtahi Manawa is about allowing communities and stakeholders to find their place with us, not to place them where we think they should be.

Outcomes Framework

An outcomes framework connects the values of Pūtahi Manawa, the funding criteria and the articles of Te Tiriti o Waitangi to provide a structure for measuring Pūtahi Manawa success in the short, medium and long term. Development of the outcomes framework has been in conjunction with the CoRE membership, Board, Māori and Pacific Leadership Teams and the community. Future Annual Reports will report against the Outcomes Framework,

Funding

Equity Grant Recipients

Equity Grants aim to supercharge a piece of research already underway. They are meant to amplify the equity component in an ongoing study. This could include, but is not limited to:

Outcomes: Do you need more participants of a particular arm to ensure equal explanatory power and reduce inequity in health information?

Approaches: Perhaps you have found a more equitable way to engage a particular group, or establish equitable leadership/participation/opportunities.

Dissemination: A change in protocol to translate research findings to make it more accessible to end – users / community.

Integration and translation: Allow an additional study using distinct methodology to assist with translation along the pathways from bench to community.



Professor Frank Bloomfield - University of Auckland

ACHIEVING EQUITABLE OUTCOMES FROM CRITICAL CONGENITAL HEART DISEASE

"This excellent initiative has enabled us to support an early career researcher [Osita Isichei] keen on gaining research experience through contributing to a very important and challenging project addressing inequities in outcomes from critical congenital heart disease."



Osita Isichei - Medical Student, University of Auckland

"I am very grateful for the scholarship given by Pūtahi Manawa for the opportunity to learn more about cardiovascular disease alongside my medical studies. Through this internship I have become increasingly passionate about Congenital heart defects in particular and the unequitable outcomes faced by Māori and Pasifika. I hope to contribute to the great work done in Cardiovascular disease research by Pūtahi Manawa which makes difference to the lives of many New Zealanders."



Professor Suzanne Pitama - University of Otago

COMPUTED TOMOGRAPHY TO REDUCE INVASIVE CORONARY ANGIOGRAPHY IN ACUTE CORONARY SYNDROME

"We are really excited to be part of the Pūtahi Manawa CORE – the funding of this project will allow us to strive for equitable representation of Māori within our wider project through innovation in; the training of recruiters, in the recruitment design tools, and with the inclusion of Māori research nurses involved in the oversight of recruitment of participants into the study."



Dr Nikki Earle - University of Auckland

IMPROVING CLINICAL OUTCOMES FOR PEOPLE WITH CORONARY ARTERY DISEASE IN NZ

"Our team received a Pūtahi Manawa Equity Grant alongside equal co-funding from the Auckland Medical Research Foundation, with this partnership enabling sufficient funding to run our clinical study aiming to improve outcomes for women experiencing their first heart attack. We are really excited to be funded to prioritise women in heart health research."

Primer Grant Recipients

The purpose of Pūtahi Manawa primer grants is to support small projects aimed to obtain pilot data to develop an application to a larger grant (such as HRC, or a HHANZ CoRE Integrated Research Module). Grants are up to a maximum of \$50,000 per award. One of these grants was funded by the Heart Foundation in partnership with Pūtahi Manawa | HHANZ CoRE.

Associate Professor Troy Merry - University of Auckland, Funded by Heart Foundation



UNTANGLING THE CONTRASTING EFFECTS OF IL-6 ON CARDIOVASCULAR FUNCTION

Māori are underrepresented in most genetic studies undertaken abroad and this could result in inequities in future healthcare delivery. To help overcome this, we have been studying gene variants enriched in people of Māori ancestry, and whether common gene variants found in non-Māori populations have the same effect in people of Māori ancestry.

"I'm excited to have the opportunity to study a potential interaction between exercise, genetics and heart disease in a New Zealand context. Māori are underrepresented in most genetic studies undertaken abroad and this could result in inequities in future healthcare delivery. To help overcome this, we have been studying gene variants enriched in people of Māori ancestry, and whether common gene variants found in non-Māori populations have the same effect in people of Māori ancestry".



Dr Kate Thomas - University of Otago



OPTIMISING HEAT THERAPY FOR IMPROVING INEQUITIES IN THE TREATMENT OF HYPERTENSION

The aim of this project is threefold: 1) is to determine the optimal dosage of heat therapy (bathing duration and water temperature) for lowering blood pressure, 2) to further investigate the physiological mechanisms driving this change, and 3) to examine how heat therapy might improve non-physical aspects of hauora. Hypertension disproportionately impacts Māori and this funding is enabling us to work in partnership with Māori healthcare providers, iwi, patients and whānau to ensure our approach to using heat therapy is accessible and culturally-appropriate. Findings from this research will inform a larger clinical trial that will investigate the role of heat therapy in treating hypertension and improving all aspects of hauora.

"We are looking forward to examining the role of heat therapy (spa bathing) in lowering blood pressure and investigating the physiological mechanisms driving this effect, alongside examining the potential of heat therapy to improve non-physical aspects of hauora."

Professor Alan Davidson - University of Auckland



FUNCTIONAL ANALYSIS OF THE HYPERTENSION-ASSOCIATED SNP

"Gene variants can alter the risk of getting cardiovascular and metabolic illnesses that include hypertension, type 2 diabetes and kidney disease. Understanding the molecular basis of these gene variants provides insights into the pathogenesis of disease and opportunities for developing precision medicine approaches for treatment. Māori are underrepresented in most genetic studies undertaken abroad and this could result in inequities in future healthcare delivery. To help overcome this, we have been studying gene variants enriched in people of Māori ancestry. We have identified a variant in the CALCRL hormone receptor gene that hyperactivates this pathway and associates with more severe kidney disease in the setting of diabetes. Future drugs targeting CALCRL have the potential to be used in a precision medicine approach that will be beneficial to diabetic Māori with the variant."

Fellowships

Pūtahi Manawa acknowledges the major shortage of fellowship funding opportunities nationally. We had 12 applications of which 8 were reviewed and 3 advanced to interview. However, no candidate adequately demonstrated alignment to the CoRE mission and values. Although each applicant scored highly in these areas in their written proposals, significant deficits in these areas were evident in the interview process. It is with regret that the panel did not recommend any of the applicants be funded and instead, specific feedback be given to all applicants to enhance co-design, community engagement, and equity in their research plan, and be invited to apply in another round next year. This decision was endorsed and approved by MLT, PLT, and our Board.

What we learned

It was noted that the only Māori applicant was shortlisted but not interviewed. It appeared that the application was dichotomous; while having a strong Kaupapa Māori aspect to it, it also had a very biomedical heavy aspect too, which was neither aligned nor complementary. A lengthy discussion both at the panel meeting and after discussed on how this candidate may require additional support in their institution, as they are the only Māori researcher in their group. The Panel recommended and supported that this candidate receive an invitation to speak with Māori and Pacific mentors from the panel who could help to guide and support this researcher in their development.

The Panel also recommends having an additional Fellowship Awards, for Māori and Pacific applicants only. No candidates this round identified as Pacific.

There will be further review around what professional development we can provide for applicants around co-design, community engagement and how to embed equity in their projects. The OnE team are facilitating this process with creating an educational webinar series to help address some of the knowledge gaps, including creating resources specifically geared towards Māori and Pacific candidates

A further fellowship round is to be announced 14th April 2022.

Integrated Research Module Expressions of Interest

IRMs will be awarded the majority of contestable funds (up to a total of \$2M per year) over a three-year period in the first instance.

A unique feature of Pūtahi Manawa is the integration of numerous research disciplines to address a common question. Traditionally, many cardiovascular researchers have worked in silos or where collaborations have been formed these have been relatively limited in number and diversity due to cost and lack of sustaining infrastructure. This CoRE provides the opportunity to assemble “integrated research modules” that can comprise multi-disciplinary approaches (e.g. Māori and Pacific methodology, epidemiology, epigenetics, physiology, bioengineering and clinical science). We propose to fund IRMs that will become Pūtahi Manawa’s forerunner research areas. The intention is that the funded IRMs may be renewed for a further three years if the project has achieved its aims and if the renewal bid obtains a sufficiently high enough priority score. However, Pūtahi Manawa will also consider new IRMs at the mid-point of the life of the CoRE (2024-2028), which will compete with those being renewed. This permits flexibility and versatility to accommodate unexpected changes within Aotearoa New Zealand during the lifetime of the CoRE. The process has been imitated with an expression of interest round and six applications are being considered.

OnE Team Values

Equitable education opportunities
throughout a life course

Ensure heart health educational programmes
with community engagement at its core

Empowerment of Aotearoa New Zealand
with relevant heart health information

Co design - co create from inception to execution
Accessibility of appropriate
heart health information

Outreach and Education

Traditional approaches whereby a one-size fits all attitude is failing at all levels, from public policy to delivery. This has been made even more apparent in our current COVID - 19 era. However, what has also been made apparent is that by listening to and working directly with our community organizations and leaders, Aotearoa has the ability to pivot and be agile to deliver effective, responsive, and meaningful solutions, improving outcomes and saving lives. It is within our reach to achieve this.

Pūtahi Manawa| Healthy Hearts for Aotearoa New Zealand (HHANZ) CoRE sees outreach and education occurring in both formal and informal settings through a life course lens. Taking an integrative approach enables a holistic perspective that identifies the areas of highest need and therefore greatest potential impact.

The aim of the OnE team is to raise heart health awareness and the importance of heart health research with communities of greatest need. To this end, the scope of the group is to understand and evaluate opportunities and networks that currently exist to amplify or support areas of existing success and those that align with our kaupapa and values. Guided by our principles, the team aims to support and facilitate the development of cultural safety and communication skills of all researchers affiliated with HHANZ CoRE. This requires a level of cultural competency, awareness and trust.

Additionally, the OnE team will work with successful Integrated Research Modules to develop a cohesive and inclusive strategy around outreach and education by collaborating and building networks with individuals and organizations to support these activities and advance our mission.

Wānanga September 23rd 2021

This was the first hui hosted by the OnE team. Held on 23rd Sept, 2021, we wanted to hear from our wider OnE team group across the CoRE and to get a better understanding of their needs and aspirations. Over 40 attendees participated this online hui.

During this hui, a general overview of the CoRE and the aspirations on Outreach and Education were shared with the attendees. We then led a series of breakout room discussions on a number of topics which included: Mātauranga Māori, Pacific Values, Primary and Secondary schools, Student Ambassadors, and Online Outreach.

Some leading questions were asked in each of these groups:

- What is our current understanding of heart health?
- How do we embed this within our outreach and education projects?
- What are some of the challenges?
How do we overcome them?
- Where are the opportunities/needs?
Strengths/weaknesses?
- How can this align with curriculum?
- What can we achieve in this space?
- Are there exemplars already?

Planning for Ako series

Drawing on feedback from our Wānanga and also feedback from the Funding Panel after reviewing applications, themes and common topics began to emerge where there was a desire to learn more or there was a lack of knowledge/understanding. This was particularly evident in our Fellowship Applications. The major topics included the obligations of Te Tiriti o Waitangi and the concept of Co-Design and Community Engagement were lacking.

To address this, the OnE team have proposed a series of webinars called Ako to provide some foundational learning and support. Each series will build upon the previous to layer on the foundational knowledge, starting with history and Te Tiriti o Waitangi. The rest of the series will cover other topics such as Co-Design, Community Engagement, and Pacific Diversity in Aotearoa.

Infrastructure

Heart health research and resources have been traditionally siloed across the country, resulting in disparate access and cohesion of data sets. Pūtahi Manawa wishes to explore how we might integrate these resources better, not only from an efficiency perspective but also to enhance governance and protection of this taonga. Drs Katrina Poppe (University of Auckland; data) and Pete Jones (University of Otago; tissue) have been driving this effort.

Heart Health Data Infrastructure

Health data comes in many forms and from a diverse range of sources (see *The Inter - woven Data Infrastructure of Pūtahi Manawa diagram on the following page*). Using our unique New Zealand data and associated expertise, and drawing on the best of international expertise, we aim to create and inform a heart health data ecosystem and infrastructure that meets not just our current needs, but that becomes a continually improving and evolving resource for future generations.

A national stocktake of cardio-vascular-metabolic data is underway, with clinical leads and researchers being contacted to outline the scope of data available in their research and registry cohorts. Operating principles of the data ecosystem will be guided by an infrastructure working group made up of people with knowledge of how the data were collected at source. We have spoken with key people in the Northern Regional Alliance, have existing contacts in the Digital Health and Data group of the Ministry of Health, Pharmac, and will work with the host's Centre for eResearch to ensure an appropriate technical infrastructure is in place for data management. Māori and Pacific data sovereignty will be woven throughout all processes. The full working group have not met yet but will once we have a better sense of available data through the stocktake, and once the needs of research in the IRMs is known.

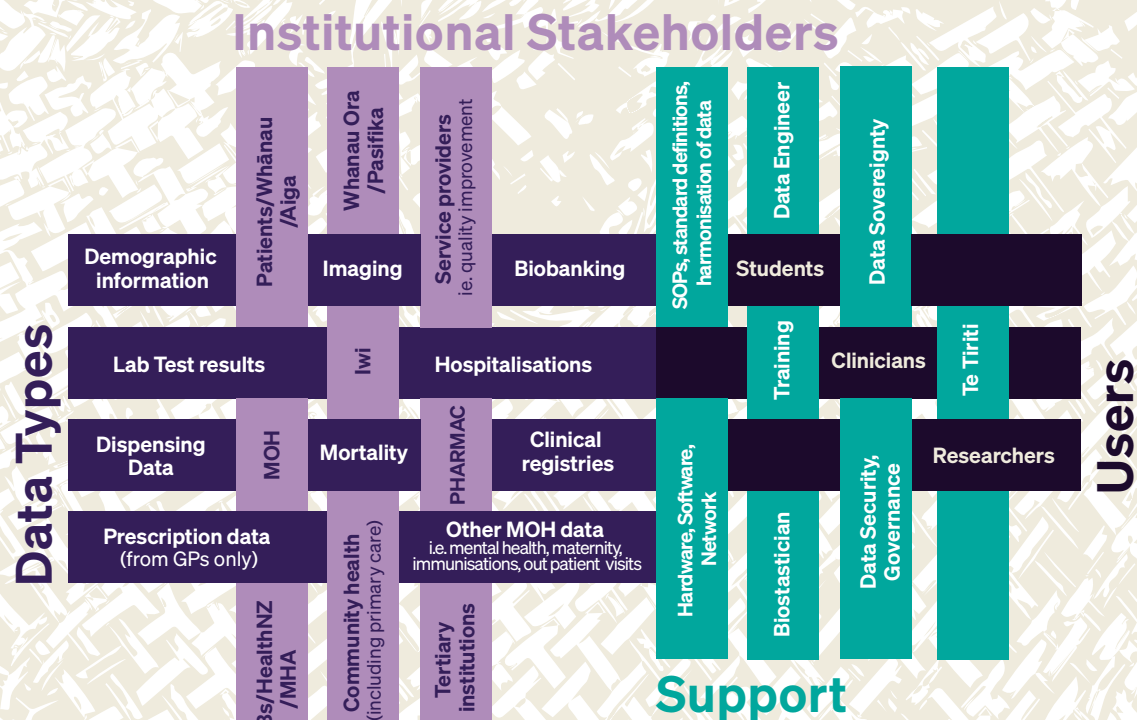
Biobanking/human tissue update

Access to human tissue is a major advantage for the CoRE. Across New Zealand there are several discrete tissue repositories containing a large number and variety of tissue types from a diverse population. A goal is to make these valuable samples as accessible as possible for researchers across the CoRE. The major repositories have been identified and the curators have met to discuss ways to share the resources. There was general support to share resources where possible. However, the discussions identified several hurdles to sharing the tissue widely, including: different consent processes, restrictions on tissue use (specified project vs unspecified research), tissue management and governance, and tissue storage and data sovereignty. We are currently performing a detailed stocktake to determine how best to work within these restrictions and if changes in process can be made to avoid them going forward.

Reference

Walsh M, Grey C. (2019). *The contribution of avoidable mortality to the life expectancy gap in Māori and Pacific populations in New Zealand-a decomposition analysis.* NZ Med J. 132:46-60.

The Inter-woven Data Infrastructure of Pūtahi Manawa



Financials

STATEMENT OF FINANCIAL PERFORMANCE 2021

			Actual / Original Budget Comparison							Projections		Variance Explanations	
(NZ\$000s)			[2021]	[2021]	[2021]	% variance	[2021]	[2021]	[2021]	[2022]	[2023]		
			Unaudited Actual	Budget	Variance	(+ = fav ; - = unfav) against budget	FTE Actual	FTE Budget	Variance	Forecast	Forecast	Major Variances (+/- 10%) budget vs actual	
			\$000	\$000	\$000	%				\$000	\$000		
CoREs Funded Income													
Government Funding													
CoRE Funding			2,700,000	2,700,000	0	0.00%				5,400,000	5,400,000	This period was spent setting up projects that will commence in 2022.	
Surplus/Deficit carried forward					0	-				2,392,359	2,441,793		
Total CoRE funding			2,700,000	2,700,000	0	0.00%				7,792,359	7,841,793		
CoRE Funding Expenditure													
Salaries													
Salaries funded by CoRE			83,382	302,948	(219,566)	-72.5%		2.75	(2.8)	1,451,645	1,393,603		
Total Salaries & Salary-related costs	A		83,382	302,948	(219,566)	-72.5%	0.00	2.75	(2.8)	1,451,645	1,393,603		
as % of Total Expenditure			27.1%	27.6%						27.1%	25.1%		
Other Costs													
Indirect Costs:													
Overheads			179,614	311,950	(132,336)	-42.4%				1,337,052	1,287,258		
as % of Total Expenditure			58.4%	28.4%						25.0%	23.2%		
Direct Costs													
Project Costs			44,150	413,000	(368,850)	-89.3%				1,762,000	1,622,000		
as % of Total Expenditure			14.4%	37.6%						32.9%	29.2%		
Travel			495	71,000	(70,505)	-99.3%				187,000	187,000		
as % of Total Expenditure			0.2%	6.5%						3.5%	3.4%		
Postgraduate students			0	0	0	-			0.0	612,869	1,069,590		
as % of Total Expenditure			0.0%	0.0%						11.5%	19.2%		
Equipment depreciation/rental			0	0	0	-				0	0		
as % of Total Expenditure			0.0%	0.0%						0.0%	0.0%		
Subcontractor(s) specified			0	0	0	-				0	0		
as % of Total Expenditure			0.0%	0.0%						0.0%	0.0%		
Extraordinary Expenditure (specified)			0		0	-				0	0		
as % of Total Expenditure			0.0%	0.0%						0.0%	0.0%		
Total Other Costs	B		224,259	795,950	(571,691)	-71.8%				3,898,921	4,165,848		
as % of Total Expenditure			72.9%	72.4%						72.9%	74.9%		
Total CoRE Expenditure													
Total Expenses	C= A+B		307,641	1,098,898	(791,257)	-72.0%				5,350,566	5,559,451		
as % of Total Expenditure			100.0%	100.0%						100.0%	100.0%		
Less Funds contributed by collaborative partners (i.e. returned overheads net of GST)													
Total Net Expenditure (after recoveries and GST exclusive)			307,641	1,098,898	(791,257)	-72.0%				5,350,566	5,559,451		
Net Surplus/(Deficit)													
			2,392,359	1,601,102	791,257	49.4%				2,441,793	2,282,342		

STATEMENT OF FINANCIAL PERFORMANCE 2021 continued												
			Actual / Original Budget Comparison							Projections		Variance Explanations
(NZ\$000s)			[2021]	[2021]	[2021]	% variance	[2021]	[2021]	[2021]	[2022]	[2023]	
			Unaudited Actual	Budget	Variance	(+ = fav ; - = unfav) against budget	FTE Actual	FTE Budget	Variance	Forecast	Forecast	Major Variances (+/- 10%) budget vs actual
			\$000	\$000	\$000	%				\$000	\$000	
Underspend/(Overspend) - Any underspend of CoREs funding must be returned to TEC. Any overspend on CoRE budget must be funded from other sources (non TEC)			2,392,359	1,601,102	791,257	49.4%				2,441,793	2,282,342	
Total approved CoRE funding			2,700,000	2,700,000	0	0.0%	0.00	2.75	(2.8)	7,792,359	7,841,793	
			ok	ok						ok	ok	
as % of Total Income			100.0%	100.0%						99.4%	100.0%	
Co-Funding:												
Other Government Funding												
Other Government Funding (specify funding by source)			0	0	0	-						
FY22 -\$50k will be received from Heart Foundation										50,000		
					0	-						
Total Other-government funding			0	0	0	-				50,000	0	
as % of Total Income			0.0%	0.0%						0.6%	0.0%	
Non-Government Funding												
Domestic - Private Sector Funding (specify funding by source)			0	0	0	-						
Domestic - Other non-NZ government Funding (specify funding by source)			0	0	0	-						
International - Private Sector Funding (specify funding by source)			0	0	0	-						
International - Public Sector Funding (specify funding by source)			0	0	0	-						
					0	-						
Host/partner Support (specify funding by source)			0	0	0	-						
Total Non-government funding			0	0	0	-				0	0	
as % of Total Income			0.0%	0.0%						0.0%	0.0%	
Total Income												
			10.00%	100.0%						100.0%	100.0%	
Percent of Budget Received			10.00%									

TERTIARY EDUCATION COMMISSION - CORES' FINANCIAL MONITORING

Reporting Instructions – Statement of Financial Performance

As set out in the funding letter, each host institution must ensure that each Centre of Research Excellence (CoRE) supplies an annual report to the TEC. The annual report must comply with the reporting requirements specified in the Performance Measurement Framework.

These instructions specify:

- (a) the financial information (statement of financial performance) that each host institution must provide to the TEC in an annual report in respect of each CoRE it hosts; and
- (b) how to categorise information in the statement of financial performance.

The TEC will use the information to monitor the CoRE's use of the funding, and to ensure that the host institution is complying with the funding conditions specified in its funding letter. The Ministry of Education will use the data to assess the overall value of CoRE funding over time. Please note that individual host and partner organisations are responsible for the accuracy of their own data.

Required information

Each annual report must include the following information in its statement of financial performance:

- (a) the CoRE's annual results;
- (b) the CoRE's budget; and
- (c) the CoRE's forecast financial statements.

This information must be:

- (a) provided in accordance with the template;
- (b) accurate;
- (c) the latest available at the date of submission;
- (d) approved by the host institution of the CoRE; and
- (e) internally consistent.

Forecast financial statements

A CoRE's forecast financial statements set the research plans and the intended spending on funded research activities and programmes. Therefore, the forecast financial statements must:

- (a) accurately reflect the likely state of the entire CoRE in the coming years;
- (b) incorporate any changes deemed necessary to implement and complete its plans; and
- (c) as far as possible, be in accordance with the CoRE's own internal forecasting models. If the forecast financial statement is different from the host institution's public annual report, the information provided must match as closely as practicable to the category provided.

Budget

The statement of financial performance must include budget information. This budget information must be the same as the budget information that the TEC has agreed with the host institution in accordance with paragraphs 5 and 6 (CoRE plan and Impact Statement) of the funding letter (unless the TEC has agreed to amend the budget information).

Categorising information – instructions

Completing the statement

Please complete the statement for the entire CoRE by entering the CoRE's financial and other data into the colour shaded cells. When completing the form, please:

- (a) do not enter formulas into the template provided;
- (b) only enter data into the colour shaded cells (this is because many of those cells are formula-driven);
- (c) do not "net off" revenue items against expense items; and
- (d) take into account that the dollar figures are actual dollars (and GST exclusive). EFTS and FTE data can be expressed as a part of a whole number.
- (e) Note that for the purposes of this document, sub-contractors are considered to be those providing third-party services and not collaborative partners.

Consolidated information

The statement of financial performance must include consolidated information, and information about all of the CoRE's collaborative partners and other co-funders that provide some funding contributing to the CoRE activities specified in the Plan. Please provide a list of the collaborative partners.

If an activity is also funded from other sources, the figures in the statement of financial performance must only relate to the CoRE funded portion of the activity.

TERTIARY EDUCATION COMMISSION - CORES' FINANCIAL MONITORING

Reporting Instructions – Statement of Financial Performance *continued*

Consolidated expenditure

SALARIES

The figures in the salaries category must cover only the costs of personnel employed by the CoRE. This includes:

- (a) direct costs (for example, salaries); and
- (b) salary related costs (for example, superannuation, ACC, and fringe benefits).

The CoRE should only insert FTE figures in respect of CoRE funded FTEs. This is different from the non-financial reporting template, which requires CoREs to report on the contribution of all researchers, even if some of those researchers are not funded. If AI and PI data cannot be separated due to the financial systems used by the Host, these can be rolled into a single entry.

OTHER COSTS

Overheads must be directly proportional to the time spent on the research activities and programmes specified in each annual plan. Please include:

- (a) managerial time;
- (b) the cost of financial and accounting systems and corporate activities; and
- (c) the cost of premises and other indirect costs.

The cost of premises may be either the annual rental cost or the depreciation cost of premises, and should be proportional to the project's use of the institution's premises for the annual plan. As specified in COR015, the cost of depreciation of a capital item purchased with the funding must not be included as a cost.

A CoRE may collaborate with researchers from outside New Zealand. Costs associated with collaboration (for example, travel and accommodation) may be covered under project costs. Other project costs include:

- (a) generating operating expenses associated with the research plan such as consumables; and
- (b) other miscellaneous costs associated with the research plan (including travel and accommodation for conferences and collaboration).

Extraordinary costs are those that are not related to ordinary activities and are unlikely to reoccur.

Postgraduate students may be awarded scholarships.

Explanation of major variance

If there has been a material variation (for example, plus or minus 10% between actual costs and what has been budgeted), an explanation must be provided in the column that is to the right of the financial numbers.

Other Government/non-Government Funding

These sections should only be completed for co-funding of CoRE activities specified in the Plan.

Unspent funding

Unless it is the last year for which the CoRE will be funded, any unspent funding should be carried forward to the next year's budget. If the CoRE has not used all of the funding by the end of the funding period, the host institution must repay the unspent funding to the TEC.

Submitting the financial information and feedback

When submitting the statement of financial performance to the TEC, the CoRE must include the sign-off worksheet that has been completed by the CFO of the host institution. This sign-off document must be sent to the TEC in an email (as a pdf).

When the TEC has received the information, it will review it. The TEC may contact the host institution or the CoRE to discuss the financial information.

Confidentiality

The TEC acknowledges that a CoRE's statement of financial performance may be commercially sensitive.

Subject to its obligations under the Official Information Act 1982, the TEC will only disclose the information for the following purposes:

- (a) to monitor the host institution;
- (b) to provide advice to the Minister of Tertiary Education, Skills and Employment;
- (c) to enable the Ministry of Education and the Treasury to prepare the Crown Accounts; and
- (d) to enable a government department or government agency with a proper interest in the information to carry out its functions.

Any requests for the information may be transferred directly to the host institution, in accordance with the Official Information Act.

Variances

If there is any inconsistency between this information and the conditions specified in a host institution's funding letter, the host institution must comply with the funding conditions.

SIGN-OFF SHEET

The following collaborative partners have been included in the figures:

	Anna Rolleston - Co-director (SOW- \$304,157)

Contact details for TEC enquiries (e.g. Chief Financial Officer)

Name:	Allister Jennings
Position:	Research and Trust Accounting Manager
Telephone number:	
Email address:	allister.jennings@auckland.ac.nz

SIGN-OFFS

I certify that the information contained in this statement of financial performance is, to the best of my knowledge, a true and correct representation of the financial performance and position of the CoRE for which I have responsibility, and the figures correspond to those which appear in the host institution's financial statements, the budget approved by the TEC, internal forecasts, and year end reforecasts.

Insert electronic signature	
Director (or other designation)	
Date	





PŪTAHI MANAWA

HEALTHY HEARTS FOR
AOTEAROA NEW ZEALAND

Lisa Wong

Research Operations Manager

lisa.wong@auckland.ac.nz