

TE NGIRA: INSTITUTE FOR POPULATION RESEARCH

ANNUAL REPORT 2021





THE UNIVERSITY OF WAIKATO



Private Bag 3105, Hamilton, New Zealand 3240 http://www.waikato.ac.nz/te ngira Phone: +64 7 8384040 Email: tengira@waikato.ac.nz

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Annual Report from the Director

Welcome to the 2021 annual report of Te Ngira: Institute for Population Studies. This report is the first published under the name Te Ngira, following the official renaming of the National Institute of Demographic and Economic Analysis (NIDEA) in December 2021. For over ten years, NIDEA has been a centre of excellence in population, demographic and economic research and teaching. As Te Ngira, the institute continues this record of work while also advancing our focus on multidisciplinary population research that aims to be transformative and recognises our commitment and relationship to the Kingitanga and Waikato-Tainui.

Two significant events were marked at Te Ngira in 2021. On March 17th, we celebrated the 10th anniversary of NIDEA. Organised under the theme Ka Mua, Ka Muri (walking into the future with an eye to the past), the anniversary recognised the achievements that NIDEA has had since launching in 2010 and identified the future challenges for population research in Aotearoa.

Building on the anniversary, on 16th December 2021 NIDEA was renamed Te Ngira: Institute for Population Research, culminating a process that took over a year as we sought to identify an appropriate name that epitomised the institute's work and through multiple delays caused by Covid-19 restrictions. Launched online by koro Taki Turner, matua Tom Roa, Francis Collins, Tahu Kukutai and Linda Te Aho, the new name draws on a tongikura (proverbial sayings made famous by Māori monarchs) from the first Māori King, Pootatau Te Wherowhero. Both the 10th anniversary and the renaming event are highlighted in this annual report and videos of the events are available on Te Ngira's website..

There have been many other developments over the course of 2021 beyond these significant events marking past and future directions. The institute farewelled Dr Arama Rata early in 2021 as she left the institute and the university to pursue independent research. Arama has made enormous contributions to research, teaching and public engagement over her time at Te Ngira and will be sorely missed, although we look forward to our ongoing relationships through research in the coming years. Te Ngira welcomed three new Research Fellows in 2021, Dr. Jessica Terruhn and Dr. Tāwhanga Nopera who will work on the WERO: Working to End Racial Oppression research programme, and Dr Jesse Whitehead who recently finished a PhD with NIDEA and will work on multiple projects focused on geospatial accounts of population health and community wellbeing.

2021 has been another year when we have had to navigate the challenges presented by the Covid-19 global pandemic, its local impacts and the effects of government and community responses. Now two years old, the pandemic continues to impact research and our ability to interact face to face with each other and to connect regularly with international research partners and networks. Te Ngira researchers have also played a significant role in the response to the pandemic, notably Shefali Pawar and Dr Jesse Whitehead who spent significant time and effort in the latter part of 2021 preparing regular updates on Covid-19 vaccination rates and accessibility in a way that allowed providers and public to observe the intricacies of vaccine roll-out and the equity issues that need to be addressed.

Notwithstanding the impacts of Covid-19 and other challenges in 2021, Te Ngira researchers continue to be highly productive, generating innovative and impactful research. During 2021, Te Ngira researchers published 34 journal articles, 8 book chapters, 9 reports and working papers and gave 26 keynote or invited conference presentations and talks. The variety of these outputs and their contribution to advancing knowledge in Aotearoa New Zealand and internationally demonstrate the institute's ongoing position at the forefront of multidisciplinary population research.

I hope that you enjoy reading this annual report and learning about Te Ngira's recent activities.

KK

Professor Francis L. Collins

Te Ngira Directorate - Staff

Director

Professor Francis Collins BA, BA(Hons), MA, PhD Auckland

Professors

Professor Tahu Kukutai BA BA(Hons) MSocSc Waik MA PhD Stanford

Emeritus Professors

Professor David Ian Pool CNZM BA MA NZ PhD ANU FRSNZ

Professor Richard D. Bedford QSO BA MA Auck PhD ANU FRSNZ

Professor Peggy Koopman-Boyden CNZM BA MA DipEd Massey

Professor Jacques Poot Drs VU Amst PhD Well HonFRNAAS MAE FRSAI

Associate Professors

Dr. Polly Atatoa Carr MBChB, MSc, MPH, FNZCPHM

Senior Research Fellow

Jonathan Kilgour MBA (Dist), LLM (Hons), BSocSc (to 23rd April 2021)

Senior Lecturer

Dr Yara Jarallah BA Birzeit University, MSc American University Beirut, PhD Brown University

Research Fellows

Dr Shemana Cassim BSc; MAppPsyc(Comm); PhD

Dr Tawhanga Nopera PhD with creative practices, MFA, Dip. Art and Design, Dip. Māori and Pacific Studies

Dr Jessica Terruhn MA Free University Berlin, Germany, PhD University of Auckland

Dr Jesse Whitehead BSci, BSocSci (Hons), PhD Waikato

Moana Rarere BMS GradCert (SocPol) BSocSc(Hons) MSocSc(Hons) Waikato

Senior Research Officer

Shefali Pawar BE Pune University GradDip(Stats) Waikato MSocSc(Hons) Waikato

CaDDANZ Research Manager

Renae Dixon BSocS Waik (to 31 March 2021)

Administrator

Ms Sheree Findon

Te Ngira Research Associates

Internal

Dr Lars Brabyn BA(Hons), BSc(Hons), PhD Cant, Geography Programme

Dr Michael Cameron BMS(Hons), PhD Waik, WMS Economics

Dr William Cochrane BSocSc, MSocSc, PhD Waik, Sociology Programme

Prof Lynda Johnston BA *Otago*, MSocSc PhD *Waik*, Deputy Dean and Associate Dean Academic FASS

Dr Naomi Simmonds BSocSc MSocSc PhD *Waik*, Lecturer, Geography and Environmental Planning Programme

Prof Nicola Starkey BSc(Hons) *C.Lancs*, PhD *Leeds*, Dean Research, Faculty of Arts and Social Sciences

Dr Sarah Jane Tiakiwai MA(Hons) *Auck*, PhD *Waik*, Deputy Vice-Chancellor Maori **Prof Iain White** BA(Hons), Mtpl, MRTPI, PhD *Manchester*, Environmental Planning Programme

Dr Waikaremoana Waitoki PhD, PGDipPsych(Clin) Waikato, MNZPsS

Dr Ominiyi Alimi PhD in Economics; MMS in Economics, Waikato

External

AProf Per Axelsson MSocSc PhD *Umeå*, Researcher Cedar - Centre for Demography and Ageing, Umeå University

Dr Hayley Bennett MPH MBChB BHB *Auck*, Public Health Medicine Specialist consultancy work

Dr Sarah Knowles BSc MSc Waik, PhD Virginia Tech, Research Manager, Auckland Museum

Dr John Bryant BA, BA(Hons) Cant PhD ANU, Statistics New Zealand

AProf John Campbell BA MA Cant, PhD Hawaii, formerly Geography Programme FASS

Prof Yves Charbit BA, MA *Paris-Sorbonne*, Dip Sciences *Po*, PhD *Oxf*, Doctorat d'Etat ès-Lettres *Sorbonne*

Len Cook BA(Hons) *Otago* CBE, Victoria University of Wellington/Families Commissioner SUPERU

Dr Robert Didham MSc Cant PhD Tubingen, Statistics New Zealand

Dr Natalie Jackson DipNZIMR, BSocSc, MSocSc *Waik*, PhD *Anu*, Natalie Jackson Demographics Ltd

Prof Te Kani Kingi MA *Waik*, PGDipReoMāori *Waiariki*, PhD PGDipMaori *Massey*, Executive Director – Research and Innovation, Te Whare Wānanga o Awanuiārangi

Dr David Maré BA, BCom, MCom Auck PhD Harvard, Motu

Prof Philip Morrison MA Well PhD Toronto, Victoria University of Wellington

Prof Susan Morton *FAFPHM*, PhD GradDipPH *LSHTM*, BHB MBChB *Auck*, DipED *Chch Teachers College*, Foundation Director: Growing Up in NZ/Centre Longitudinal Research

Dr John Ryks BSocSc, MSocSc, PhD Waikato, Aria Research

Dr Lynda Sanderson BA, BSc Cant BCA Well MPhil, PhD Waik, MBIE/MOTU

Dr Janet Sceats MSc, LSHTM, PhD Lond, Medical demographer

Dr Rachel Simon-Kumar PhD *Waikato, NZ*; MPhil. in Applied Economics JNU, New Delhi, India; M.A. in Psychology Kerala University, India; B.A. in Psychology Kerala University

AProf Victor Thompson BA *UIUC*, MA PhD *SU*, Director of Law and Justice Program Rider University

Background to Te Ngira

Te Ngira: Institute for Population Research was launched on the 16th of December 2021 as the new name of the National Institute of Demographic and Economic Analysis (NIDEA). Since 2010, NIDEA's mission has been to undertake research that will help inform choices and responses to the demographic, social and economic forces that are shaping New Zealand's future. Initially an informal collaboration of researchers at the University of Waikato's Population Studies Centre, Waikato Management School and Wellington-based Motu Economic and Public Policy Research Trust, NIDEA has linked together a community of leading national and international researchers working at the interface of demography and economics.

The name Te Ngira was inspired by a well-known tongikura (proverbial sayings made famous by Māori monarchs) from the first Māori King, Pootatau Te Wherowhero:

Kotahi te kōwhao o te ngira e kuhuna ai te miro ma, te miro pango, te miro whero

There is but one eye of a needle, through which white, black and red cotton are threaded

These words capture the institute's commitment to undertaking excellent and transformative population research that draws on multiple knowledges, disciplines and methodologies.

Te Ngira's research is widely used by decision-makers in Te Ao Māori, government agencies, communities, and the private sector to help inform choices and responses to the demographic, social and economic interactions that are shaping Aotearoa's future. Te Ngira also offers a unique research-led major in population studies and graduate degrees in population studies and demography. Our graduates are highly sought after for academic, Iwi, government and NGO research and leadership roles in Aotearoa and internationally.

The Year in Perspective

Highlights

- NIDEA, now Te Ngira, celebrated its first ten years at a one day symposium held on 17th March 2021
- On the 16th of December 2021, NIDEA was renamed Te Ngira: Institute for Population Research in an online ceremony
- Te Ngira welcomed three new staff members to the role of Research Fellow:
 - Dr. Jessica Terruhn
 - Dr. Tāwhanga Nopera
 - Dr. Jesse Whitehead
- Moana Rarere was promoted to Research Fellow
- Te Ngira staff led the development of a Covid Vaccination Dashboard and Accessibility Spatial Analysis to support the Covid-19 vaccination rollout and highlight equity issues.
- Te Ngira researchers are lead investigators in two major MBIE Endeavour fund research programmes running from 2020-2025:

- Tikanga in Technology: Indigenous approaches to transforming data ecosystems (Tahu Kukutai, Shemana Cassim)

- WERO: Working to End Racial Oppression (Francis Collins, Polly Atatoa Carr, Jessica Terruhn, Tāwhanga Nopera)

- The six year Capturing the Diversity Dividend in Aotearoa New Zealand (CaDDANZ) research programme concluded in March 2021, culminating in a key insights document that is highlighted in this report
- Te Ngira researchers participated in 13 externally funded research projects in 2021
- Te Ngira researchers and students published 34 journal articles, 8 book chapters, 9 reports and working papers and gave 26 keynote or invited conference presentations and talks
- Four PhD students based in or associated with Te Ngira successfully completed and defended their PhD theses in 2021: Dr. Renee Shum, Dr Patrick Broman, Dr Prabin Shakya and Dr Mohana Mondal
- There were 18 PhD students based in Te Ngira or supervised by Te Ngira staff and based in other Schools or Universities

NIDEA 10th Anniversary Symposium

The National Institute of Demographic and Economic Analysis was launched in November 2010 as an extension of the University's population and migration studies centres. Its establishment recognised the need for a national centre of research focused solely on understanding New Zealand's population to help in planning for its future.

To celebrate 10 years since the institute was established, NIDEA held a one day symposium on the 17th of March 2021, attended by invited guests including current and past students, Emeritus Professors, research affiliates, associated research organisations and stakeholders.

In his opening speech, NIDEA Director Professor Francis Collins described how the institute's core focus has been providing vital research to inform both local and national policy makers and planners on topics ranging from how and where people live, to how we address our aging population, manage migration, and how we provide health services and operate our schools.

> "As we reach our 10th anniversary, those functions are still vital and relevant to informing responses to our changing population, but the institute has also become more focused on driving the critical conversations we need to have on the future of our population,"

As a national institute, NIDEA has a responsibility to be at the forefront of leading challenging discussions as a nation, including how issues such as how we address racism in New Zealand to rethinking technology use from an indigenous perspective.

The keynote address for the event was given by Professor Tahu Kukutai, who spoke about the need for a holistic, intergenerational Te Ao Māori approach to addressing Aotearoa's population challenges and opportunities:











"What is the legacy that we wish to leave for our mokopuna's mokopuna? That's the long-term mindset that is desperately needed but is currently missing in discussions about population".

The anniversary symposium also included panel sessions on the future of migration and regional population issues in the Waikato, reflections from past students and a special presentation given by Emeritus Professor Ian Pool on the history and foundation of the institute. Footage of the 10th anniversary event is available on the Te Ngira website: <u>https://tengira.waikato.ac.nz/</u>

Launch of Te Ngira: Institute for Population Research

On the 16th of December 2021, The University of Waikato's National Institute of Demographic and Economic Analysis, commonly known as NIDEA, relaunched as Te Ngira: Institute for Population Research.

Te Ngira means the needle in te reo Māori. The name was inspired by a well-known tongikura (proverb) attributed to Pootatau Te Wherowhero, a Waikato chief and the first Māori King.

"Kotahi te kōwhao o te ngira e kuhuna ai te miro mā, te miro pango, te miro whero".

This translates to "there is but one eye of the needle, through which white, black and red cotton must pass".

King Pōtatau's words and the Institute's new name resonate strongly with the vision for population research at Te Ngira. The multiple threads reflect our collaborative approach

and the multiple knowledges, disciplines and methodologies we draw through the lens of population studies.

The name also underscores the important relationship that the University has with Waikato-Tainui and the Kīngitanga, and the centrality of the Institute's research on Māori and Indigenous populations.

The renaming launch ceremony was held online due to the impacts of the Covid-19 global pandemic. The ceremony was opened by University of Waikato Kaumātua Koro Taki Turner and included contributions from Associate Professor Tom Roa, Te Ngira's Professors Francis Collins and Tahu Kukutai, as well as Associate Professor Linda Te Aho, Associate



Associate Professor Tom Roa at the launch ceremony for Te Ngira: Institute for Population Research

Dean Māori of ALPSS and Chair of Te Arataura (Waikato-Tainui tribal executive). A video of the renaming ceremony is available on the Te Ngira website: <u>https://tengira.waikato.ac.nz/</u>.

As part of the rebranding process, the Institute consulted with Māori staff and consultants, and received the support and endorsement of the Kīngitanga.

Te Ngira's new logo depicts the three threads going through the eye of a needle. Once through the needle, the threads begin to grow and flourish.



THE UNIVERSITY OF WAIKATO

Te Ngira's new logo, designed by Tapu Design

The koru and mangopare symbols represent

transformation and strength. The threads also take the shape of a person, and the centre red thread reflects the core intention of Te Ngira, which is people.

Te Ngira Staffing Developments

There have been significant changes in staffing at Te Ngira over the course of 2021. Early in the year we farewelled Dr. Arama Rata who resigned from Te Ngira and from the University of Waikato. Arama has made an enormous contribution to the institute since she joined in 2017, initially as a Research Officer and subsequently being promoted to Senior Research Fellow in 2018. During this time, Arama made substantial contributions through work on the CaDDANZ research programme, a range of commissioned research projects, through the teaching of undergraduate population studies and postgraduate supervision and as a theme leader for the WERO: Working to End Racial Oppression research programme. Through WERO and other activities we hope to maintain a close relationship with Arama in the years to come.

Two new Research Fellows joined Te Ngira during 2021 to work on the WERO: Working to End Racial Oppression research programme. Dr. Jessica Terruhn joined Te Ngira in April, moving from her prior role at Massey University where she was a key researcher on the CaDDANZ research programme. Jessica has a PhD in Sociology from the University of Auckland; her research expertise lies at the intersections of urban studies and racism, migration and settler colonialism. Within WERO, Jessica is involved in research on racism in housing and residential mobility. In addition, Jessica is the co-convenor of the Aotearoa Migration Research Network.



Dr. Tāwhanga Nopera (Ngāti Whakaue, Ngāti Wahiao, Tuhourangi, Ngāti Tuwharetoa, Ngāti Tarawhai, Ngāti Whaoa, Ngāti Amaru, Ngāi Tawake) joined Te Ngira in December. Prior to this Tāwhanga has been Health Promotions Coordinator at Student Health at the University of Waikato, a role that will continue on a fractional basis. Tāwhanga's research and art investigates marginality and is grounded by te pā harakeke, through raranga – a creative Māori approach toward socially accountable communities. Tāwhanga has a particular interest in ways that individuals are impacted upon by notions of power, and seeks out transformative pathways from traumatic experiences. Within WERO, Tāwhanga is involved with research on racism, employment and inequality.



Moana Rarere was promoted to the position of Research Fellow during 2021. Moana has made substantial contributions to Te Ngira (and NIDEA before that) over many years and is now the principal investigator of the He Pa Harakeke: Thriving Regions North research programme funded by National Science Challenge 11: Building Better Homes, Towns and Cities.

Dr. Jesse Whitehead also joined Te Ngira as a Research Fellow in 2021. Jesse is well known to staff at Te Ngira as he recently completed and defended his PhD at the institute with a focus on the geographies of population health and equity. Jesse is involved in several research projects including He Pa Harakeke: Thriving Regions North Island (funded by National Science Challenge 11) and research exploring how residential mobility trajectories influence child wellbeing within the Growing Up in New Zealand study funded by the Ministry of Social Development.





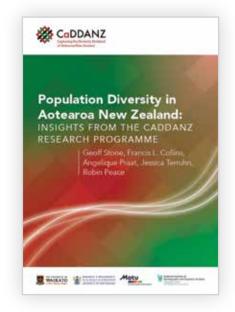
CaDDANZ Insights on Population Diversity in Aotearoa

The Capturing the Diversity Dividend in Aotearoa New Zealand (CaDDANZ) research programme was funded by the Ministry of Business, Innovation and Employment's Endeavour Fund and hosted by Te Ngira from 2014 to 2021. The programme was based on an established collaboration between Te Ngira, other researchers at the University of Waikato, Massey University, Motu Economic and Public Policy research trust and independent researchers.

CaDDANZ explored changing patterns of ethno-demographic diversity, societal impacts and outcomes and institutional responses in Aotearoa. The programme involved research exploring perspectives from Te Ao Māori on diversity and ethno-demographic change, accounts of immigration and diversity as part of population change, the economic impacts of diversity and the lived experience of diversity in Aotearoa.

As the project concluded in 2021, the CaDDANZ team produced a final report, *Population Diversity in Aotearoa New Zealand: Insights from the CaDDANZ research programme*, which provides an integrative overview of the key insights from the six years of CaDDANZ research.

The report, which is available on Te Ngira's website, introduces CaDDANZ and its key findings, before discussing insights in relation to population trends in Aotearoa, reconceptualising ethno-demographic diversity from Māori perspectives, diversity in context and lastly providing a series of conclusions and recommendations. Each of the sections and subsections make reference to reports and other publications that can be accessed to gain more detailed insight into particular issues, as well as identifying key CaDDANZ researchers who have led particular studies within the programme.



Vaccination Rates Dashboard



Covid Vaccination Rates Dashboard as at 14th December 2021

With increased attention to COVID-19 vaccination as a critical component of Aotearoa's COVID-19 elimination strategy, Te Ngira developed a vaccination rates dashboard to ensure upto-date vaccination rates can be viewed for our population by age, ethnicity and DHB region. Led by Te Ngira Senior Research Officer Shefali Pawar, the user-friendly dashboard allowed visualisation of age-specific, crude and agestandardised vaccination rates for first and second doses, and for users to understand the equity implications of our vaccination delivery strategies. Population distributions and rate ratios were also presented.

The dashboard was updated weekly between October and December 2021, using vaccination data from the Ministry of Health, with population denominator from the Health Service User database. Ethnicity data was prioritised, and age bands starting at 12 years to align with vaccination eligibility.

Access to Covid-19 Vaccination Services

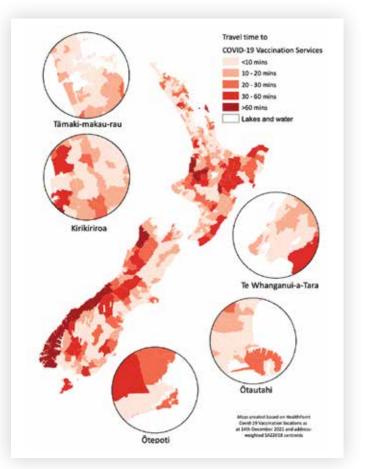
Complimenting the Vaccination Rates Dashboard, Dr Jesse Whitehead produced a series of weekly maps to demonstrate how spatial accessibility to Covid-19 vaccination services varied across Aotearoa. In the midst of the Covid-19 vaccination rollout, these maps demonstrated the stark differences in accessibility that people experienced, alongside mapping of 1st and 2nd dose vaccinations for Māori, Pacific and the Total Population.

It is important to contextualise and interpret neighbourhood-level vaccination rates carefully. Many places with 'low' levels of vaccination uptake have also had low accessibility to vaccination services, significant distances to travel, and are also likely to have younger

population age structures meaning that they have been eligible to receive the Covid-19 vaccination for a shorter period of time than other neighbourhoods.

For instance, Murupara was identified in the media as the nation's "slowest town". However, town has one of the lowest levels of spatial access to vaccination services in the country, the nearest permanent vaccination site is a 50+ minute drive away, and the median age of the town in 2018 was 29 years.

The maps pull together vaccination service data from HealthPoint and vaccination rates from the Ministry of Health. The data underlying these maps was made available for download to help Māori, Iwi, Pacific, and community organisations target their outreach at a micro-scale. While the data is no longer updated, the maps and other data as at 14th December 2021 remains available on the Te Ngira website: <u>https://tengira.</u> <u>waikato.ac.nz/access-to-vaccination-</u> <u>services</u>.



Map 1: Travel time to Covid-19 Vaccination Services 14 December 2021

Seminar Series

Te Ngira hosted three seminars in 2021, two of which were delivered online due to Covid-19 related restrictions.

Rethinking residential segregation through an anti-racist lens Presenter: Jessica Terruhn, Te Whare Wānanga o Waikato/The University of Waikato

Re-thinking how we measure socioeconomic position in the population aged ≥65 years Dan Exeter, Michael Browne, Tommi Robinson-Chen, Ngaire Kerse, Arier Lee School of Population Health, the University of Auckland Presenter: Associate Professor Dan Exeter

Determinants of ethnic identity among adolescents in Auckland Presenter: Mohana Mondal, PHD Candidate, Research Officer

Integrated Data Infrastructure Lab

The IDI (Integrated Data Infrastructure) continues to be widely used among Te Ngira researchers and also researchers from other faculties at the University of Waikato and outside organisations such as the Ministry of Social Development. The Data Lab adjoins Te Ngira offices and provides an enormously valuable and powerful resource for exploring population change. The IDI, and our ability to access microdata in the Data Lab, have become increasingly important as a wider range of statistical data has become available and relevant for a variety of fields of research.

Externally Funded Research

Te Ngira's staff devote the majority of their time to research. This includes actively seeking new grant applications and on-going or new funded programmes from major external funders: Health Research Council (HRC), Ministry of Business, Innovation and Employment (MBIE), and the Marsden Fund Council. Te Ngira's researchers also participate in a number of commissioned reports and consultancies. Te Ngira staff have also been involved in leading, collaborating with and advising research projects funded by the National Science Challenges (NSC).

WERO: Working to End Racial Oppression

Ministry of Business Innovation and Employment Endeavour Fund, 2020-2025 Waikaremoana Waitoki (Science Leader) Te Ngira Staff: Francis Collins, Polly Atatoa Carr, Jessica Terruhn, Tāwhanga Nopera

Racism, as a social structure that underpins forms of interpersonal and institutional discrimination, has had deleterious effects on Aotearoa New Zealand, evident in inequitable outcomes across almost every indicator of wellbeing, including those within health, education, housing, employment and justice. Working to End Racial Oppression is an interdisciplinary research programme that investigates the costs of racism, the systems that produce and reproduce racism, and transformative responses to reduce racism.

In addition to collating and communicating extant evidence of racial inequalities across multiple domains, the costs of racism will be investigated through specific projects analysing: income distribution over time; employment outcomes; housing disadvantage; geospatial segregation and exposure to environmental risk; and the impact of racism on health education and training, and health systems.

Systems through which racism is (re)produced will also be identified through analyses of: the settler colonial racialisation of differentially positioned communities of colour (including tangata whenua, tangata Moana, and migrants of colour); the maintenance of settler colonial narratives through national commemorations; the role of privileged populations in excluding racialised minorities; the significance of employment and housing systems in maintaining inequalities; and the role of technologies (e.g.social media) in exacerbating inequalities. Finally, responses to racism will include (but not be limited to) the development and dissemination of: toolkits to audit and address institutional racism; protocols to promote inclusive online communication; strategies for building relationships between racialised communities; and guidelines for the ethical remembering of New Zealand history.

The programme assembles knowledge experts in Māori studies, health, Pacific studies, immigration, economics, data science, human geography, sociology and psychology, and will amplify innovation by bringing these knowledge systems into dialogue, towards the transformational long-term agenda of ending racial oppression in Aotearoa.

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Tikanga in Technology

Ministry of Business, Innovation and Employment, Endeavour Fund, 2020-2024. Te Ngira Staff: Tahu Kukutai

Tikanga in Technology (TiNT): Indigenous approaches to transforming data ecosystems focuses on how tikanga M_aori (customary protocols) and M_atauranga M_aori (Indigenous knowledge) can inform the construction of digital identities and create a better understanding of relational responsibilities to data. TiNT is the first large multi-year Indigenous data sovereignty project and builds on several years of IDSov research undertaken by Professor Tahu Kukutai and colleagues. The three research strands focus on Indigenous data in governance, Indigenous data in systems, and Indigenous data in Artificial Intelligence. The interdisciplinary programme will explore tools and processes that can help IT workers understand and incorporate Indigenous perspectives when working on data sets, not only in terms of storage and data processing but also in the creation of algorithms that have the potential for bias. TiNT has strong support from key data stakeholders across Te Ao Māori and Government. The research team includes

University of Waikato researchers Associate Professors Maui Hudson (Te Kotahi

Research Institute) and Te Taka Keegan (Computer Science), as well as anthropologist Associate Professor Marama Muru-Lanning, economist Dr Jason Mika, privacy scholar Professor David Watts and cryptographer Dr Vanessa Teague.

CaDDANZ: Capturing the Diversity Dividend of Aotearoa/New Zealand

Ministry of Business Innovation and Employment Endeavour Fund, 2014-2021 Te Ngira Staff: Francis Collins (Science Leader), Tahu Kukutai (Key Researcher), Arama Rata (Key Researcher), Renae Dixon (Project Manager)

Te Ngira Associates and Affiliates: Lars Brabyn (Key Researcher), Michael Cameron (Key Researcher), Natalie Jackson (Key Researcher), Dave Mare (Key Researcher)

CaDDANZ investigates how Aotearoa New Zealand can better prepare for, capture and maximise the benefits of an increasingly diverse population. The research measures, maps and analyses the complex societal impacts of diversity and the implications for businesses, households and communities of mobility, migration, indigeneity, ethnic identity, demographic change (including structural ageing and fertility) and urban/regional disparities. A significant component of the research is concerned with the implications of diversity for Māori and with how Māori engage with diversity. The research programme is comprehensive, multi-phased and organised around three themes: ethno-demographic diversity; societal impacts and opportunities; and institutional implications and responses.

As the project closed on 31st March 2021, the CaDDANZ team would like to thank the range of stakeholders, end users, contractors, students, researchers, community organisations, government agencies and publishers who all played a role in the successful execution of the project. Details on project findings and publications are available at: <u>https://www.waikato.ac.nz/caddanz/</u>

He Pā Harakeke: Thriving Regions

Building Better Homes Towns and Cities National Science Challenge, MBIE, 2020-2024 Te Ngira Staff: Moana Rarere, Jesse Whitehead.

He Pā Harakeke is comprised of three workstreams: Matariki Hunga, Matariki Ahunga Nui; Whakamanahia te Rangatiratanga o Mana Whenua; and He Raraunga Hāpori. The first is a project focused on developing four case studies in the Hawkes Bay; and projects two and three are an integrated project in the Waikato, focusing on Pōkeno and Waharoa. The programme team consists of Moana Rarere, Dr Jesse Whitehead, Kym Hamilton, Aramanu Ropiha, James Whetū, Amy Whetū, Haupai Montgomery, and Judith Hattie.

He Pā Harakeke is focused on developing Māori perspectives of regional regeneration. The project principally aims to amplify Māori aspirations in local and regional development and to understand how existing systems can empower those aspirations. We are also concerned with the vulnerability of Māori communities in the regions considering the disproportionate social, economic, cultural and environmental impacts on Māori communities. This project is looking at the relationships between regeneration aspirations, regional planning, Māori design and community outcomes, Covid-19 recovery and related social, cultural and economic impacts through a range of regional data, regional development activities and Kaupapa Māori case studies.

Key outputs from the project will include toolkits for mana whenua and local governments; policy advice; and dissemination through academic articles and webinars. This project is connected to the South Island arm of Thriving Regions (led by researchers at AgResearch and Lincoln University). As a whole, both projects aim to reveal what practical approaches are most effective at creating real-world change in different community, settlement and regional settings, and document examples where residents, local governments, community groups, and businesses have collaborated to create change.

Nation and Migration: population mobilities, desires and state practices in 21st century Aotearoa/New Zealand

Rutherford Discovery Fellowship, Te Apārangi Royal Society of New Zealand, 2015-2021 Te Ngira Staff: Francis Collins, Richard Bedford

In a context of increasing temporary and circular migration, there is evidence that the relationship between nation and migration is being reworked in ways that challenge our conceptions of the stability of national populations and the capacity for the state to influence national futures. This programme of research re-examines the relationship between nation and migration in this context of increasing mobility, temporariness and circularity through

three studies that address the changing patterns of migration into New Zealand, the trans-Tasman mobility of New Zealanders, and the role of migration in governmental imaginings and enactments of national futures.

Does a Whānau Ora approach improve outcomes for hospitalised tamariki?

Health Research Council Rangahau Hauora Māori, 2017-2021 Te Ngira Staff: Polly Atatoa Carr

This research aimed to measure the impact of a comprehensive and holistic Māori approach to assessing and addressing needs for children and their whanau within the paediatric department at Waikato District Health Board (DHB). The proposal built on pre-existing collaboration between NIDEA, Te Puna Oranga (Māori Health) at the DHB, and Waikids (Waikato DHB Paediatrics), and involved Dr Bridgette Masters-Awatere in Community Psychology at the University of Waikato, and Dr Rebekah Graham. A Whānau Ora assessment instrument (the Harti Hauora Tamariki, HHT) tool was developed, and paediatric patients and their whanau randomised into the HHT intervention in order to determine the level of unmet need and assess the ability of the HHT to improve whanau outcomes and reduce hospital readmissions for tamariki Māori. In addition, gualitative interviews of whānau with children who had required a hospital admission further developed our understanding of their experience in hospital, their needs and opportunities to support. The HHT significantly increased the assessment and documentation of health and non-health needs. While the HHT did not reduce readmission risk for hospitalised children (Māori nor non-Māori), increased access to and utilisation of preventative health services was experienced following the intervention, particularly for: oral health, smoking cessation, and housing support. Further, the HHT process significantly improved whanau satisfaction with hospital experience. The need for system level changes to enhance wellbeing support for whanau, the quality of care received, and equitable health outcomes were demonstrated. Since the trial was completed, the HHT has been used to develop the Whānau Hauora Assessment to support the COVID response in 2020 and 2021, and more recently the Whānau Hauora Integrated Response Initiative to support Māori health outcomes in both health services and community.

2021: Ngā Pae o te Māramatanga Research Fellowship

Ngā Pae Tautoko Covid-19 Research Programme, Ngā Pae o te Māramatanga Te Ngira Staff: Shemana Cassim

The Nga Pae Tautoko Covid-19 research programme aimed to document, interrogate and communicate significant COVID-19 prevention strategies and messages for current and future generations. Through the research fellowship role, Dr Cassim supported and advanced the Tautoko Covid-19 research programme, including managing and supporting the 11 research projects led by 13 Māori researcher across Aotearoa New Zealand.

Exploring Muslim migrant women's experiences of accessing primary healthcare

Emerging Researcher Grant 2019, Waikato Medical Research Foundation, 2019-2021 Te Ngira Staff: Shemana Cassim

Promoting equity and improving the health and wellbeing of refugee communities is an increasing global priority, spurred on by the inequities evident in global responses to the recent Covid-19 pandemic. This project explored the experiences of refugee Muslim women as they accessed and navigated the healthcare system in Aotearoa New Zealand. Findings identified various structural barriers to accessing healthcare such as cost and barriers relating to interpreters, as well as instances of othering in the healthcare space experienced by these women.

Monitoring and Evaluation of the Multicultural Affairs and Social Cohesion Division's (2018-2021)

(MASC) Family Violence Work Package (2018-2021) Victorian Department of Premier and Cabinet

Te Ngira Staff: Yara Jarallah (with Karen Block, Cathy Vaughan, Humaira Maheen, and Meghan Bohren from the University of Melbourne)

The overarching goal of the MASC Family Violence package is to promote safety from violence for women and families from culturally and linguistically diverse backgrounds. This project will develop, guide and oversee implementation of an overarching evaluation of the Family Violence Work package.

Internally Funded Research

The Effect of Civil War and Forced Displacement on Syrian Refugees' Key Life Course Transitions

University of Waikato Strategic Investment Fund, 2020-2021 Te Ngira Staff: Yara Jarallah (Primary Investigator)

To date, no research has been able to investigate the effect of war and forced displacement on key life course transitions of refugees due to lack of data. This project fills this gap by piloting the use of Life History Calendars (LHCs) to collect such data from the recently arrived Syrian Refugee Population in New Zealand (Dunedin). By focusing on the period of young adulthood– a period critical for human capital accumulation, the project is able to identify potential pathways that link civil war with marital and family formation behaviour through disruption to human capital formation in the form of school drop-out, unemployment, and displacement. Understanding this link improves our ability to tailor government programs where they are most needed especially considering evidence from non-refugee populations on the generational disadvantage and the intergenerational transmission of disadvantage from loss of human capital.

Te Ngira Research Associate activity

AProf. Michael Cameron has continued to develop and apply path-breaking methods for demographic projections, including for small areas and small ethnic groups. He has completed new 2018-base demographic projections for the Waikato Region, at the territorial authority and SA2 level, which have been key inputs into local authority planning processes. He has also contributed to a number of health research projects.

Key outputs:

Cochrane, W., Alimi, O., and Cameron, M.P. (Eds.). (2021). *Labor Markets, Migration, and Mobility – Essays in Honor of Jacques Poot*, Singapore: Springer.

Tran, N.T.M., Cameron, M.P., and Poot, J. (2021). The importance of political and economic institutions to the decisions of international migrants to return to their home countries. In Kourtit, K., Newbold, B., Nijkamp, P., and Partridge, M. (Eds.) *The Economic Geography of Cross-Border Migration*, (pp. 403-420). Dordrecht: Springer,

Cameron, M.P., and Cochrane, W. (2021). 2018-base Population, Family and Household, and Labour Force Projections for the Waikato Region, 2018-2068, research report commissioned by Waikato Regional Council, Hamilton: University of Waikato.

Te Ngira Students and Graduates

Te Ngira is committed to capacity building through teaching, supervision and the provision of meaningful research opportunities for students. The core second year Population Studies undergraduate paper continues to attract a substantial number of students, including those seeking to major in Population Studies as well as students from across the BSocSci, BA and BEnvPlan. In 2021, Dr Yara Jarallah and Professor Francis Collins launched a new third year paper offering, POPST305 Migration Mobilities and Displacement, which provides an advanced introduction into the patterns, experiences and politics of migration. The PhD programme at NIDEA has continued to be successful, with 18 PhD candidates based in Te Ngira or supervised by Te Ngira staff and based in other schools or universities.

Postgraduate Completions

Te Ngira staff were delighted to congratulate four PhD students as they successfully completed and/or defended their PhD theses in 2021. The breadth, relevance and impact of the research undertaken by these students speaks to the quality of research undertaken at Te Ngira, as is their success in post-graduation careers. We wish all of these students well in their future activities and hope to maintain strong relationships as they continue to develop their research careers.

Dr. Renee Shum defended her thesis on *Geographies* of Homelessness: A Case Study of the People's Project in Hamilton in May 2021. Renee was supervised by Colin Mcleay (Geography), Polly Atatoa Carr (Te Ngira) and Damian Collins (University of Alberta). Since completion, Renee has taken up a role as Policy Analyst - Housing Policy at the Ministry of Social Development.



Dr Patrick Broman defended his thesis on *European Identity in the Aotearoa New Zealand Census* in August 2021. Patrick was supervised by Tahu Kukutai (Te Ngira) and Patrick Barrett (Political Science and Public Policy). Since completion, Patrick has taken up a role as a Lead Advisor at the Ministry of Education.



Dr Prabin Shakya defended his thesis on *Premarital Sexual Behaviour among Adolescents and Youth in Nepal* in November 2021. Prabin was supervised by Tahu Kukutai (Te Ngira) and Priya Kurian (Political Science and Public Policy).

Dr Mohana Mondal defended her thesis on *Ethnic Mobility and the Spatial Distribution of Ethnicity in Auckland* in November 2021. Mohana was based in the Waikato Management School and supervised by Michael Cameron (WMS and Te Ngira Research Associate) and Jacques Poot (Te Ngira). Since completing her PhD, Mohana has returned to India while also continuing in her role as a Research Officer for the University of Waikato's Medical Research Centre.

PhD Supervision

Polly Atatoa Carr

Carole McMinn (PhD in Population Studies) Co-supervisors: Professor John Oetzel, Professor Damian Collins

- Topic: Homeless Families of Hamilton: Exposing the Invisible Homeless of Hamilton and Their Journey to Sustained Tenancies Under a Housing First Approach
- Supported through PhD Scholarship as part of the MBIE funding "Housing First" research programme

John Natua (PhD in Population Studies) Co-supervisor: Professor John Oetzel

• Topic: Understanding drivers towards better health and wellbeing for Cook Island families in the Waikato and Midland regions

Shum (PhD in Geography)

Chief supervisor: Dr Colin McLeay (Geography)

• Topic: Geographies of Homelessness: A case study of The People's Project Supported through the MBIE funding "Housing First" research programme



Megan Lenny (PhD in Psychology)

Chief supervisor: Professor Nicola Starkey and Co-supervisor Kate Curtis (Psychology)

• Topic: The use of technology and the development of distress tolerance skills in adolescents

Nikki Barrett (PhD in Health, Sport and Human Performance) Chief supervisor: Professor Lisette Burrows (Health, Sport and Human Performance)

• Topic: Maori co-designed approach to refocus New Zealand health service delivery for improved engagement and responsiveness with Maori mama hapu and pepi.

Sarah Bashir (PhD in Human Resource Management) Chief supervisor: Professor John Oetzel and Co-supervisor Mark Harcourt (Management)

• Topic: Exploring the role of work-environment factors in the management of bullying of New Zealand's junior doctors.

Francis Collins

Kate Sewell (PhD in Geography) Co-supervisor: Professor Iain White

- Topic: Power, participation and everyday politics within state-led urban renewal in Hong Kong
- University of Waikato Doctoral Scholarship recipient

Joke Methorst (PhD in Geography)

Co-supervisor: Professor Lynda Johnston

- Topic: Digital Nomadism and Digital Geographies of Work
- University of Waikato Doctoral Scholarship recipient

Zohirul Islam (PhD in Population Studies) Co-supervisor: Dr. Omoniyi Alimi

- Topic: Temporary Migration and Income Inequality
- University of Waikato Doctoral Scholarship recipient

Byron Williams (PhD in Sociology) Co-supervisor: Dr. Jessica Terruhn

- Topic: An African Experience of Structural Racism in the Wellington Rental Sector
- Funded by PhD Scholarship from WERO: Working to End Racial Oppression research programme

You Jeong Jang (PhD in Geography) Co-supervisor: Professor Priya Kurian

- Topic: The gap between policy rhetoric and lived reality of Korea's policies on urban diversity
- University of Waikato Doctoral Scholarship recipient

Rachael Boswell (PhD in Geography, University of Auckland) Chief supervisor: Professor Robin Kearns

• Topic: The role of artist's creative spatial practices in urban regeneration after disasters

Harry Shi (PhD in Geography, University of Auckland) Co-supervisor: Dr. Nicolas Lewis

- Topic: Cooking desires, living aspirations: the migration and everyday life of Chinese chefs in Auckland, New Zealand
- Funded by PhD Scholarship from Nation and Migration research programme

Tahu Kukutai

Patrick Broman (PhD, Demography)

- Topic: In pursuit of the 'we': Analysing demographic 'New Zealandness'
- University of Waikato Doctoral Scholarship recipient

Moana Rarere (PhD, Demography) (co-supervised by Yara Jarallah and Naomi Simmonds)

• Topic: Māori fertility patterns and whānau formation in the 21st century.

Prabin Shakya (PhD, Demography)

- Topic: Premarital sexual behaviour of adolescents in Nepal.
- University of Waikato Doctoral Scholarship recipient

Love Umesi (PhD, Demography) (co-supervised by Yara Jarallah and Ian Pool)

- Topic: Underlying and state-level Contextual causes of early childhood mortality in Nigeria.
- University of Waikato Doctoral Scholarship recipient

Yara Jarallah

Co- supervisor, Love Umesi (PhD, Demography); (co-supervised with Tahu Kukutai and Naomi Simmonds)

- Topic: Underlying and state-level Contextual causes of early childhood mortality in Nigeria.
- University of Waikato Doctoral Scholarship recipient

Moana Rarere (PHD, Demography) (co-supervised with Tahu Kukutai)

• Topic: Māori fertility patterns and whānau formation in the 21st century

Jacques Poot

Mohana Mondal (PhD in Economics)

• Topic: Future Spatial Distribution of Ethnicity in Auckland

Jessica Terruhn

Byron Williams (PhD in Sociology) Chief supervisor: Professor Francis Collins

- Topic: An African Experience of Structural Racism in the Wellington Rental Sector
- Funded by PhD Scholarship from WERO: Working to End Racial Oppression research programme

Professional and Editorial Roles

Polly Atatoa Carr:

- Member Public Health Advisory Committee, Health Research Council
- Co-chair Health Research Council Science Advisory Committee
- Member, Waikato Medical Research Foundation Grants Committee
- Member, Steering Group, NZ Child and Youth Epidemiology Service
- Member, Anglican Action Trust Board
- Founding Member, Pacific Data Sovereignty Committee
- Culture and Identity Domain Lead, Growing Up in New Zealand

Shemana Cassim

- Editorial Board Member of the Journal of Community and Applied Social Psychology.
- Research Associate and Honorary Lecturer in the Māori and Psychology Research Unit, School of Psychology, University of Waikato.
- Co-convener of the Aotearoa Migration Research Network.
- Member of the executive council of The International Contemporary Ethnographies Across the Disciplines Association (CEAD).
- Summer Research Project: Supervision: (2019-2020) Lead supervisor on a UoW Summer Research Scholarship project entitled: Designing a website for improving awareness of Lung Health – student: Joshua Fellingham

Francis Collins

- Human Geography Editor, New Zealand Geographer
- Series Editor, Pacific Rim Geographies book series (Routledge)
- Series Editor, Global Migration in the Asia-Pacific book series (Anthem Press)
- Editorial Board, Asian Migrations book series (Routledge)
- Editorial Board, Asian and Pacific Migration Journal
- Editorial Board, Social and Cultural Geography
- Advisory Board Member, Constructing Transnational Spaces of Higher Education Research Project (Leibniz Institute for Research on Society and Space)
- Advisory Board Member, Youth Mobilities, Aspirations & Pathways Project (Australian Research Council)

Yara Jarallah

- Honorary Research Fellow, Centre for Health Equity, Melbourne School of Population and Global Health, University of Melbourne
- Honorary Research Fellow, Australian Research Council Centre of Excellence for Children and Families over the Lifecourse, University of Queensland.
- Member, Lancet Palestinian Health Alliance
- Member, Public Health in the Arab World
- Population Sturdies undergraduate Advisor, University of Waikato
- Member of the Academic Planning Committee within the ALPSS Division, University of Waikato

Tahu Kukutai

- Member, Chief Science Advisor Forum
- Member, Prime Minister's MacDiarmid Emerging Scientist Prize Selection Panel
- Editorial Board, Genealogy
- Editorial Board, Big Data and Society
- Co-Director, Ngā Pae o te Māramatanga Centre of Research Excellence
- Co-Chair, Māori Data Governance Ohu Raraunga
- Member, Health Research Council of New Zealand Ethics Committee
- Co-Chair, Health Research Council of New Zealand panel
- Vice President, Population Association of New Zealand
- Co-Chair, Research Data Alliance International Indigenous Data Sovereignty Interest Group
- Member, Technical Advisory Group to Iwi Data Leadership Group, Iwi Chairs Forum
- Founding member, Te Mana Raraunga Māori Data sovereignty Network
- Founding member, Global Indigenous Data Alliance

Shefali Pawar

• Secretary - Population Association of New Zealand (PANZ)

Jessica Terruhn

- Editor, New Zealand Sociology journal
- Co-convenor, Aotearoa Migration Research Network
- Member of Ethics committee of the ALPPS Division, University of Waikato

Richard Bedford

- Member, Auckland War Memorial Museum Trust Board
- Member, Antarctic Heritage Trust Board
- Member, Committee on Freedom and Responsibility in Science (CFRS), International Science Council
- Chairperson, National Centre for Lifecourse Research Advisory Board

Jacques Poot

- Member, European Science Foundation College of Expert Reviewers
- Lead Assessor, New Zealand Ministry of Business, Innovation and Employment (MBIE) Endeavour Fund applications (Smart Ideas and Research Programme)
- Journal Editor, special issue of *Journal of Geographical Systems* on Spatial Demography in Regional Science.
- Visiting Professor, Department of Spatial Economics, School of Business and Economics, Vrije Universiteit Amsterdam, The Netherlands
- Honorary Professor, School of Accounting, Finance & Economics (SAFE), University of Waikato (July 2019 – June 2021)
- Reviewer for papers submitted to PLOS One, Journal of Economic Surveys, Economia Internazionale, Review of Regional Research: Jahrbuch für Regionalwissenschaft, Applied Spatial Analysis and Policy, Annals of Regional Science, Cities, Economics
- Member, Programme Committee, RSAI World Congress, Marrakech, Morocco, May 25-28, 2021; and co-organiser of the New Zealand hybrid satellite sessions, Wellington, May 28, 2021.
- Editor, Applied Spatial Analysis and Policy; Asia-Pacific Journal of Regional Science; Italian Journal of Regional Science (Scienze Regionali); Region, Journal of the European Regional Science Association; Review of Regional Research (Jahrbuch für Regionalwissenschaft); IZA Journal of Development and Migration; Papers in Regional Science; Australian Journal of Labour Economics; Studies in Regional Science; Australasian Journal of Regional Studies

Keynote Addresses, Plenary and Invited Presentations

- Atatoa Carr, P. (2021). Invited Keynote. "Navigation for success for children and families" Pacific Early Childhood Education Research Association (PECERA) conference, Wellington, July 2021.
- Cassim, S., Ali, M., Kidd, J., Keenan, R., Begum, F., Jamil, D., Abdul Hamid, N., Lawrenson, R. (2021). "So what if it's my arm? Still, I want a female nurse.": The experiences of refugee Muslim women in healthcare. Paper presented at the Contemporary Ethnographies Across Disciplines Online Hui, Auckland University of Technology, Auckland, New Zealand, November 2021.
- Collins, F.L. (2021). Delayed, disrupted or reconfigured? Aspirations and infrastructures for migration in pandemic times. *Migration and the Future of Work*, Ryerson University (held online), 22-25 February 2021.
- Collins, F.L. (2021). Diversity in Aotearoa New Zealand: population change, migration and future challenges. *Engaging Diverse Communities and Stakeholders*, Wellington, 29-30 November 2021.
- Kidd, J., Cassim, S., Black, S., Rolleston, A., Wharakura, M-K. (2021). Mahitahi: a kaupapa Māori approach to co-designed data analysis. Paper presented at the Contemporary Ethnographies Across Disciplines Online Hui, Auckland University of Technology, Auckland, New Zealand. November 2021
- Kerrison, C., Cassim, S., Weilert, F., Scott, N., Koea, J. (2021). *Exploring Māori perspectives on Endoscopy*. Paper presented at the New Zealand Society of Gastroenterology Annual Scientific Meeting November 2021, NZGNC, Christchurch, New Zealand.
- Kukutai, T. (2021). Invited keynote panel on Indigenous data sovereignty. Digital Humanities Australasia 2021 conference - *'Ka Renarena Te Taukaea: Creating communities'*, virtual. 22 November.
- Kukutai, T. (2021). Invited keynote. *All of our relations: Māori data sovereignty in Aotearoa New Zealand*. Access 2021, Canada's premier library technology conference, virtual. 19 October.

Other Invited Presentations

- Atatoa Carr, P. & Mc Minn, C. (2021). *Homelessness in Hamilton, points of lost intervention.* Invited speakers for the Centre for Homelessness Impact, United Kingdom. 3 November.
- Cassim, S. (2021). No theory? then make one. Indigenous approaches to local issues in the academic area. Paper presented at the Bringing Indigenous and Women Issues Seminar, Psychology Department, Universitas Negeri Semarang, Indonesia. July.
- Jarallah. Y. (2021). Invited speaker. *Settler Colonialism through an Apartheid Regime: The Case of Palestine*. Palestine Solidarity Network Aotearoa. 40th Anniversary of the 1981 Springbok Tour: Celebrating the fight against South African Apartheid in 1981 and stepping up the fight against Israeli Apartheid in 2021. 25 July.

- Kukutai, T. & Carroll, S. R. (2021). Invited speaker. *Sovereignty and governance for Indigenous data futures*. National Science Foundation (NSF) Education New Zealand multiplier planning and virtual exchange information session. 30 September to 1 October.
- Kukutai, T. (2021). Invited speaker. *Indigenous data sovereignty*. Ngā Taonga Sound and Vision, virtual. 2 September.
- Kukutai, T. (2021). Invited speaker. Fulbright NZ and Fulbright-Ngā Pae o te Māramatanga discussion panel. Good Works seminar series, virtual, 9 August.
- Kukutai, T. (2021). Invited speaker. The Live Virtual ANZ. *Panel on Indigenous knowledge and the western academy: Reflections from the field*, virtual, 5 August.
- Kukutai, T. (2021). Invited keynote. *Māori data sovereignty*. Open Repositories 2021 global conference, virtual, 9 June. (withdrew due to illness).
- Kukutai, T. (2021). Invited speaker. *Indigenous data sovereignty*. Gloknos annual lecture series, University of Cambridge, UK, virtual, 3 June.
- Kukutai, T. (2021). Invited speaker. *Indigenous data sovereignty*. Data Then and Now seminar series. University of Washington, USA, virtual, 27 May.
- Kukutai, T. (2021). Invited speaker. Privacy Forum 2021. Panel on COVID-19, Wellington, 14 May.
- Kukutai, T. (2021). Invited speaker. Norwegian National Human Rights Institution & Sami Parliament. UNPFII 2021 side event. A human rights-based approach to Indigenous statistics: The role of data in building effective, accountable and transparent institutions, virtual, 28 April.
- Kukutai, T. (2021). Facilitated webinar. Te Putahitanga: A Tiriti-led science-policy approach for Aotearoa, Ngā Pae o te Māramatanga, virtual, 28 April.
- Kukutai T. (2021). Invited presentation. Indigenous and Maori data sovereignty: Key developments and opportunities. Te Ara Taura (Waikato Tainui), Tuakau, 8 April.
- Kukutai, T. (2021). Invited keynote. Aotearoa 2100: A whenua for our mokopuna. National Institute of Demographic and Economic Analysis 10th anniversary symposium 'Ka mua, ka muri', Hamilton, 19 March.
- Kukutai, T. (2021). Invited speaker and convenor. APEC 2021 Policy Partnership on Science, Policy and Innovation Meeting, Policy discussion, 'Leveraging diverse knowledge systems for inclusive and sustainable growth', Wellington, 24 February.
- Kukutai, T. (2021). Invited speaker. Indigenous data sovereignty. Atlantic Fellows for Social Equity, virtual, 12 February.
- Poot, J. (2021). Economic perspectives on international migration in the post-pandemic world. Invited online lecture at the Hochschule der Bundesagentur für Arbeit (HdBA) / University of Applied Labour Studies, Germany (579 participants), May.
- Poot, J. (2021). Economics of Migration. Invited lecture, POLS 488 "Approaches to Migration Studies", Victoria University of Wellington, April.

Publications and Research Output

Peer reviewed Journal Articles

- Alimi O, Maré D.C. and Poot J (2021) Who Partners Up? Homogamy and Inequality in New Zealand Cities. *Journal of Regional Science, 62*(1) 171-193. DOI: 10.1111/jors.12558.
- Bird, A. L., Underwood, L., Berry, S., Grant, C. C., Gulliver, P., Fanslow, J., Atatoa Carr, P., Fa'alili-Fidow, J. & Morton, S. M. B. (2020). Physical conflict during pregnancy: A socioecological, cross-cultural examination of risk and protective factors for New Zealand women. Violence Against Women, 27(11), 1930-1956. 107780122097135. doi:10.1177/1077801220971356
- Broman, P., Kukutai, T. & Bell, A. (2021). The (not so) silent centre: European ethnicity in the Aotearoa New Zealand Census. *Ethnic and Racial Studies*. 1-23. doi: 10.1080/01419870.2021.1992467
- Broman, P. & Kukutai, T. (2021). Fixed not fluid: European identification in the Aotearoa New Zealand census. *Journal of Population Research*. *38*(2), 103-138. https://doi.org/10.1007/s12546-021-09262-4
- Carroll, S.R., Akee, R., Chung, P., Cormack, D., Kukutai, T., Lovett, R., Suina, M., & Rowe, R. (2021). Indigenous Data During COVID-19: From external to internal. *Frontiers in Sociology.* 6, 62. https://doi.org/10.3389/fsoc.2021.617895
- Collins, F. L. (2021). 'Give me my pathway!': Multinational migration, transnational skills regimes and migrant subjectification. *Global Networks*, *21*(1), 18-39. https://doi. org/10.1111/glob.12294
- Collins, F. L. (2021). Geographies of migration I: Platform migration. *Progress in Human Geography*. 45(4), 866-877. doi:10.1111/glob.12294
- Collins, F. L. (2021). Migration ethics in pandemic times. *Dialogues in Human Geography*. 11(1), 78-72. https://doi.org/10.1177/2043820620975964
- Collins, F. L. (2021). Temporary migration and regional development amidst Covid-19: Invercargill and Queenstown. *New Zealand Geographer*. 77(3), 191-205. https://doi. org/10.1111/nzg.12307
- Franklin R and Poot J (2021). Guest Editorial: Spatial Demography in Regional Science. *Journal of Geographical Systems 23*(2): 139-141. https://doi.org/10.1007/s10109-021-00354-6
- Kidd, J., Cassim, S., Rolleston, A., Chepulis, L., Hokowhitu, B., Keenan, R., Wong, J., Firth, M., Middleton, K., Aitken, D. & Lawrenson, R. (2021). Hā Ora: Secondary care barriers and enablers to early diagnosis of lung cancer for Māori communities, *BMC Cancer.* 21(1), 1-9. doi: https://doi.org/10.1186/s12885-021-07862

- Kukutai T., Mahuika, N., Kani, H., Ewe, D., & Kukutai, K. (2021). Survivance as narrative identity: Voices from a Ngāti Tiipa oral history project. *MAI Journal*. doi 10.20507/MAIJournal.2020.9.3.11
- Kukutai, T., Prickett, K., Atatoa-Carr, P., & Rata, A. 2021. Family structure and change in early childhood and the wellbeing of Tamariki Māori. New Zealand *Population Review*, *46*, 71-100.
- Lee, S., Collins, F. L., & Simon-Kumar, R. (2021). Blurred in translation: The influence of subjectivities and positionalities on the translation of health equity and inclusion policy initiatives in Aotearoa New Zealand. *Social Science & Medicine*, *288*, 113248. https://doi.org/10.1016/j.socscimed.2020.113248
- Mahuika, N. & Kukutai, T. 2021. Indigenous perspectives on genealogical research. *Genealogy.* 5(3), 63. https://doi.org/10.3390/genealogy5030063
- Malihi, Z., Portch, R., Hashemi, L., Schlichting, D., Wake, M., Morton, S., Fa'alili-Fidow, J., Mensah, F., Olds, T., Atatoa Carr, P., Kingi, T.K., Grant, C. & Denny, S. (2021). Modifiable Early Childhood Risk Factors for Obesity at Age Four Years. *Childhood Obesity*, 17(3), 196-208. https://doi.org/10.1089/chi.2020.0174
- Masters-Awatere, B., Cassim, S.,_Tamatea, J., Scott, N., Simpson, C., Paekau, C. (2021). The Kimi Ora lifestyle programme: Case study of a successful community-based Indigenous diabetes intervention, *New Zealand Medical Journal, 134* (1545), 68-78. https://pubmed. ncbi.nlm.nih.gov/34788273/
- McGregor, R., Tay, M. L., Carlton, L. H., Hanson-Manful, P., Raynes, J. M., Forsyth, W. O., Brewster, D.T., Middleditch, M.J., Bennett, J., John Martin, W., Wilson, N., Atatoa Carr, P., Baker, M.G. & Moreland, N. J. (2021). Mapping Autoantibodies in Children With Acute Rheumatic Fever. *Frontiers in Immunology*, *12*. https://doi.org/10.3389/ fimmu.2021.702877
- Mondal M, Cameron MP and Poot J (2021) Cultural and Economic Residential Sorting of Auckland's Population, 1991-2013: An entropy approach. *Journal of Geographical Systems 23*(2): 291-330. https://doi.org/10.1007/s10109-020-00327-1
- Nixon, G., Whitehead, J., Davie, G., Fearnley, D., Crengle, S., de Graaf, B., Smith, M.S., Wakerman, J. & Lawrenson, R. (2021). Developing the geographic classification for health, a rural-urban classification for New Zealand health research and policy: A research protocol. *Australian Journal of Rural Health 29*(6): 939-946. https://doi.org/10.1111/ ajr.12778
- Prickett, K. C., Habibi, H., & Atatoa Carr, P. (2021). COVID-19 Vaccine Hesitancy and Acceptance in a Cohort of Diverse New Zealanders. *The Lancet Regional Health -Western Pacific*, *14*, 100241. https://doi.org/10.1016/j.lanwpc.2021.100241
- Robertson, O., Nathan, K., Howden-Chapman, P., Baker, M. G., Atatoa Carr, P., & Pierse, N. (2021). Residential mobility for a national cohort of New Zealand-born children by area socioeconomic deprivation level and ethnic group. *BMJ Open*, *11*(1), e039706. https://doi.org/10.1136/bmjopen-2020-039706

- Sidhu, R., Cheng, Y. E., Collins, F., Ho, K. C., & Yeoh, B. (2021). International student mobilities in a contagion: (Im)mobilising higher education?. *Geographical Research*. *59*(3), 313-323. https://onlinelibrary.wiley.com/doi/10.1111/1745-5871.12471
- Terruhn, J., & Ye, J. (2021). Encountering neighbours: coexisting with difference in Auckland's Avondale. *Urban Geography*. 1-19. https://doi.org/10.1080/02723638.2021.1883922
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Te Ngira Staff 2021





Private Bag 3105, Hamilton, New Zealand 3240 | www.waikato.ac.nz/te ngira Phone: +64 7 8384040 | Email: tengira@waikato.ac.nz