



Ngaa Hua Rangahau o Te Koopuu Maania

**Research and Rangahau Report
2023-2024**



Contents

5	Executive Summary
7	Research Office
9	Rangahau
11	Research Leader Forum
12	Notable Achievements
14	Research Projects
16	Dr. Andre McLachlan
18	Luke McConnell
20	Dr. Mohammad Al-Rawi
22	Rotopiko
24	Dr. Sujani Thrikawala
26	Te Kotahi Oranga: Student/Ākonga-assisted Health and Wellness Centre
28	Outputs
29	Funding
31	Events
32	Ethics
33	Appendices





Dr. Shelley Wilson (Executive Director Teaching and Learning)

Executive Summary

Research has continued to grow at Wintec with approximately 110 kaimahi engaged in research, including around 70 who were working towards submission for a PBRF rating during 2023-2024. With the current uncertainty about how national research funding will be allocated, we have continued to focus on the quality of outputs to ensure Wintec is well placed to adapt to any changes in the funding mechanisms.

The research culture has grown over the last two years which has resulted in an increase in the number of outputs. Research outputs increased from 190 in 2023 (including 64 journal articles) to 221 in 2024 (including 81 journal articles). This has been achieved by better supporting our researchers but also through refining the way we allocate funding and manage projects. The focus continues to be on applied research that is responsive to the needs of industry and the community.

It is pleasing to see that there has been an increase in the number of areas that are involved in research. The researchers profiled in this report have come from the following areas: Biological sciences, Business and Economics, Creative and Performing Arts, Early Childhood Education, Engineering, Information Technology, Languages, Mātauranga Māori, Nursing, Pacific, Physical Sciences, Public Health, Social Sciences, and Sport and Exercise Science.

External collaboration has increased over the last two years through the introduction of research associates which facilitates collaboration between institutes. This has been particularly successful in the nursing and public health space and has raised the profile of our researchers.

Wintec continues to support Māori and Pacific research through both tagged funding and additional support for emerging researchers. This has been supported by our Māori Achievement Unit and also the Oire Pacific team in terms of engaging in research and advising Rangahau and Ranga'ao practice.



Research Office

2025 marks 35 years since research was established as a sustained activity within the New Zealand ITP sector. The catalyst was legislation in the form of the Education Amendment Act (1990) which allowed for polytechnics to offer degree programmes—conditional on the majority of teaching staff being research active. At Wintec, a modest research budget was approved for the first time in 1993.

We've come a long way.

In this biennial report we present a snapshot of this still growing research culture for the period of 2023-2024, celebrating the outputs and achievements of our researchers and reflecting on Wintec's evolving contribution to applied research and innovation.

We should acknowledge the considerable disruptions that researchers have faced in recent years, from the establishment and the current and ongoing process of disestablishment of Te Pūkenga to the cancellation of the PBRF system of performance-based research funding. Nor should we ignore the lingering impact of COVID-19, which created hold-ups in the research pipeline that are still felt to this day. It is therefore a source of pride for Wintec that a number of our researchers continued to perform admirably on the international stage through this period.



From left Dr. Peter Maulder, Aimee Pilkington, Dr. Jono Ryan.



Rangahau

Tōia mai ngā tauira,
 Tōia mai ngā Kaimahi,
 Tōia mai ngā mana nō ngā hau e whā,
 Tōia mai i runga i te aroha, me te rangimārie,
 Kia mau, kia ita,
 Haumi e, Hui e,
 Tāiki e!

Rangahau

Rangahau is an inquiry undertaken by Māori, with Māori, for Māori, as Māori, in pursuit of conveying a Māori empirical perspective of the world. Rangahau enhances a Māori worldview that endorses Māori solutions and ways of knowing by empowering Māori people, voice, and knowledge.



Te Pae-haumako: The Wintec Rangahau Strategy

Te Pae-haumako, as a framework, is the name given to the Wintec rangahau strategy. Te Pae-haumako establishes itself as the home of rangahau within the institution. Te Pae-haumako enables kairangahau to grow, develop and be fruitful in their pursuit of gathering knowledge and understanding.

Acknowledgement

The research office would like to acknowledge Dr. Marrin Haggie (Kaihautū Rangahau 2022-2023) for his contributions to growing Rangahau within Wintec. Notable works are highlighted below.

1. Te Pae-haumako: The Wintec Rangahau Strategy 2022-2026
2. Te Pūkāea “Whāia te aka a Tawhaki” (Hakihea 2022)
3. Tuia Te Here Tangata (Wintec | Te Pūkenga Framework for Engagement in Mātauranga Māori-based Research and Inquiry) 2023

Te Pūkāea: Rangahau Hui Taumata 2024

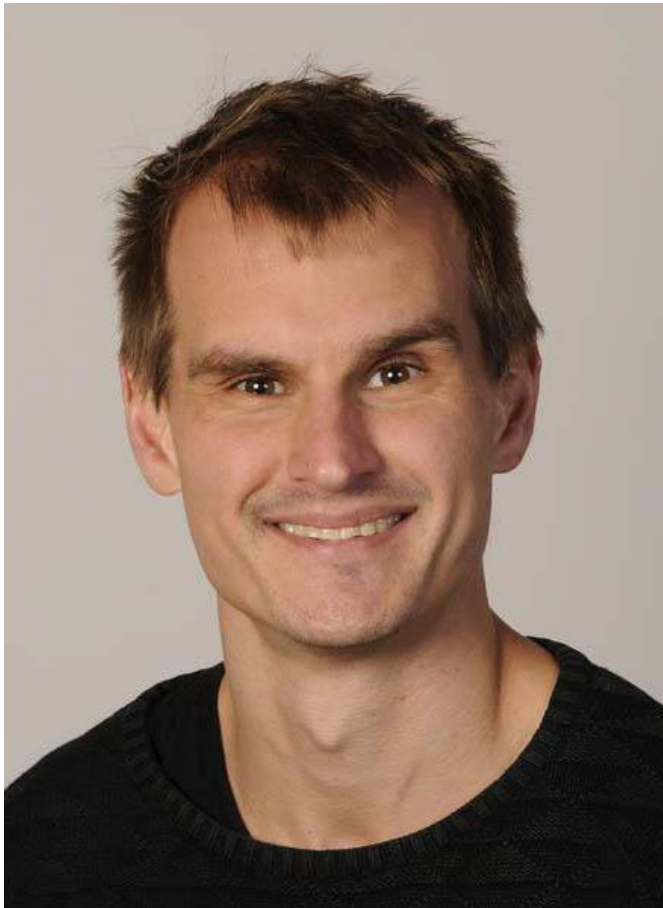
The rangahau symposium was held Thursday 28 November 2024 in Wintec's Gallagher Hub. This was the second iteration of the event first held in 2022. The event was well supported by speakers and attendees, highlighting the rangahau environment at Wintec is growing.

Dr. TeUrikore Biddle (Executive Director Strategy, Performance and Enterprise) was the guest speaker for the event and provided an insightful kōrero entitled Transformation as a catalyst: Leadership Lessons And Strategies For Resilience.

Seven (7) speakers from Faculty and Pouārahi directorates also contributed to the event:

- Hamiora Te Momo – Principal Academic Staff Member: Centre for Information Technology
- Dr. Andre McLachlan – Principal Academic Staff Member: Centre for Health and Social Practice
- Te Wai Collins – Pouārahi (Executive Director Māori)
- Hoani Yates – Kaihautū
- Alroy Walker – Principal Academic Staff Member: Centre for Health and Social Practice
- Nesca Heitapu Bowlin – Academic Staff Member: Centre for Health and Social Practice
- Dr. Peter Maulder – Kaihautū Rangahau: Research Office

Research Leader Forum



Dr. Nick Braae.

Wintec's research support system includes a Research Leader (RL) in each of our teaching centres. The RL role encompasses a range of mentoring, advocacy and reporting activities.

RLs meet monthly as part of the Research Leaders Forum to discuss developments and share initiatives. The Forum is chaired by Dr. Nick Braae of the School of Media Arts.

Research Leaders during 2023-2024 were:

- Dr. Nick Braae, School of Media Arts
- Dr. Anthea Fester, Centre for Languages
- Dr. Chan Kim, Centre for Engineering and Industrial Design
- Dr. Eliapesi Havea, Centre for Education and Foundation Pathways
- Hami Te Momo, Centre for Information Technology
- Dr. Khadijehbeigom (Sanaz) Ghoreishi, Centre for Applied Science and Primary Industries
- Dr. Patricia McClunie-Trust, Centre for Health and Social Practice
- Dr. Ninitha Koya, Centre for Business Enterprise
- Dr. Russ Best, Centre for Sports Science and Human Performance
- Dr. Sujani Thrikawala, Centre for Business Enterprise

Other members of the Forum in 2023-2024 were:

- Dr. Jonathon Ryan, Research Office
- Leni Lolohea, Kaiārahi Pacific
- Dr. Peter Maulder, Research Office, Kaihautū Rangahau
- Rachel Axcell, Liaison Librarian



Notable Achievements



Louise Deane explains the NOW Project to residents at Richmond Villas. Photo: ALICE PARMINTER.

Dr. Russ Best and his collaborators have achieved considerable impact and international attention with their article Limits of Ultra: Towards an Interdisciplinary Understanding of Ultra-Endurance Running Performance, which was published in the prestigious journal Sports Medicine. Their findings were the subject of a feature story in the magazine Outside, another in the French daily newspaper Le Monde, and a 73-minute episode of the popular daily podcast Koop Cast. The host of Koop Cast described the paper as likely “to have influence in the ultra-marathon space for years and maybe even decades from now.”

Dr. Elisapesi Havea of the Centre for Education and Foundation Pathways had the honour of representing The Climate Justice Committee of the Methodist Church of New Zealand at the 2023 World Methodist Council Conference on Migration, in Manila, Philippines. Dr. Havea completed her PhD on climate change education in Tongan secondary schools in 2020 and is currently addressing issues at the intersection of climate change, forced migration, and youth mental health. She is active across a range of initiatives addressing climate change, including within the Advisory Committee for the Regional Environment (Waikato Regional Council).

Dr. Matthew Bannister has achieved significant recognition for both his academic work and creative output in music. A founding member of the group Sneaky Feelings, Dr. Bannister's current band The Changing Same released their second album in 2023 to very positive reviews. Alongside his journal articles, he also published his fourth book, Songs from The Front Lawn with Bloomsbury Press as part of the 33 1/3 series. The book has been widely praised, with reviewers highlighting its combination of insightful analysis and appealing readability.

Louise Deane, graduated in 2022 from Wintec's Master of Applied Innovation programme for a study into the use of black soldier fly larvae to reduce nutrient run-off from dairy farms and to provide additional farm income as a source of animal feed. Louise's project has recently been awarded \$900,000 for a three-year trial of her innovation, mainly supported by the Ministry for the Environment's Waste Minimisation Fund. The project has received wide media coverage and is described as “a potential game changer”.

Dr. Mohammad AL-Rawi was awarded 2022 Reviewer of the Year for the Journal of Engineering and Science in Medical Diagnostics and Therapy by the American Society of Mechanical Engineers. This award was conferred in 2023.

Rory Christopherson was awarded funding from Arthritis NZ's Mateponapona Aotearoa Research Summer Scholarships 2024/2025 to employ two students as research assistants on his project Mō te katoa te oranga – Exploring the experiences and perceptions of kiritaki Māori engaged in physiotherapy services for hip and knee Osteoarthritis: A qualitative study guided by Kaupapa Māori principles.



Dr. Matthew Bannister.



Wintec researchers David Sidwell and Luke McConnell.

David Sidwell received a gold award for his work Upon Returning: A Collection of Piano Pieces in the publications category at the Pride in Print Awards. The work is a collaboration with a number of Waikato-based composers, many of whom are researchers and tutors from Wintec: Abby Pinkerton, David Sidwell, Debbie Nisbet, Jeremy Mayall, Martin Lodge, Megan Rogerson-Berry, Nick Braae and Wayne Senior. The introductory essay was written by Wintec's Sarah Munro the publication design was created by Luke McConnell.

We congratulate the following recent PhD graduates:

2023

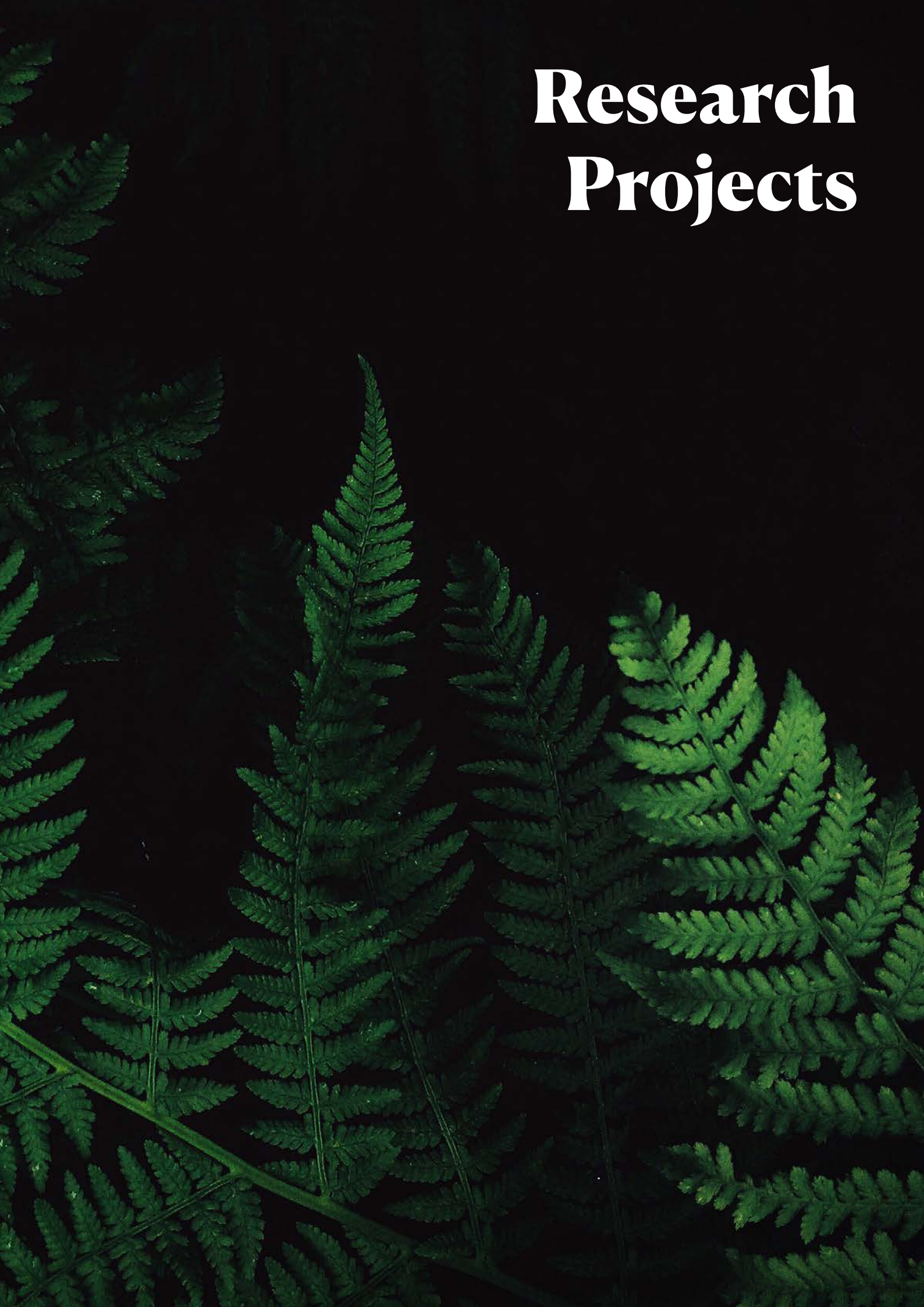
- Dr. Farzana Ahmed, Centre for Education and Foundation Pathways
- Dr. Sina Enteshari, Centre for Engineering and Industrial Design
- Dr. Emela Fenmachi, Centre for Education and Foundation Pathways

2024

- Dr. TeUrikore Biddle, Executive Director – Strategy, Performance and Enterprise
- Dr. Katrina Fyers, Centre for Health and Social Practice



Research Projects



Dr. Andre McLachlan

Dr. Andre McLachlan is a Clinical Psychologist and Addictions practitioner based in the Waikato. He lectures on the Post Graduate Mental Health and Addictions programme at Wintec, and also has a range of research and lecturing roles and has a role as the Clinical Specialist Design and Development at Te Rau Ora, Māori workforce development.

McLachlan is of Ngāti Apa (Ngāti Tauira, Ngāti Kauae) and Muaūpoko (Ngāti Pariri) and Scottish whakapapa. He is a father of six and an avid carver.

McLachlan has specialist interests in indigenous approaches to mental health, trauma, addictions and kanorau-ā-lo (Neurodiversity). This is spurred on by three decades of working various roles in social services, addictions, forensics and mental health, but more importantly as a person with lived experience of neurodivergence and as a father of two tamaiti with Te Iho Tātai-ā-Rongo (incorporating FASD).

McLachlan is designing and developing two primary projects. The first is a Māori brief and early intervention model utilised in addictions and mental health called Pae Tata Pae Tawhiti. This was recently articulated within the article 'Tawhiti: An Indigenous Trauma Informed Harm Reduction Approach to Alcohol and Other Drug Use.' This also included the development of the training skills observation app Pari Kawau.

The current phase of the project is the development of an intergenerational rational trauma scale, the Au-Its. This was developed through a Delphi study utilising a robust literature review and a series of

online feedback and in person wānanga from a large group of multi-professional Māori practitioners. This is currently being submitted for publication. The Au-Its has been developed to work alongside the Pae Tata Pae Tawhiti model and the recently released TOHU trauma framework developed by McLachlan and his colleagues. This was recently published within 'The TOHU framework: Sensing and interpreting tohu to heal from trauma.'

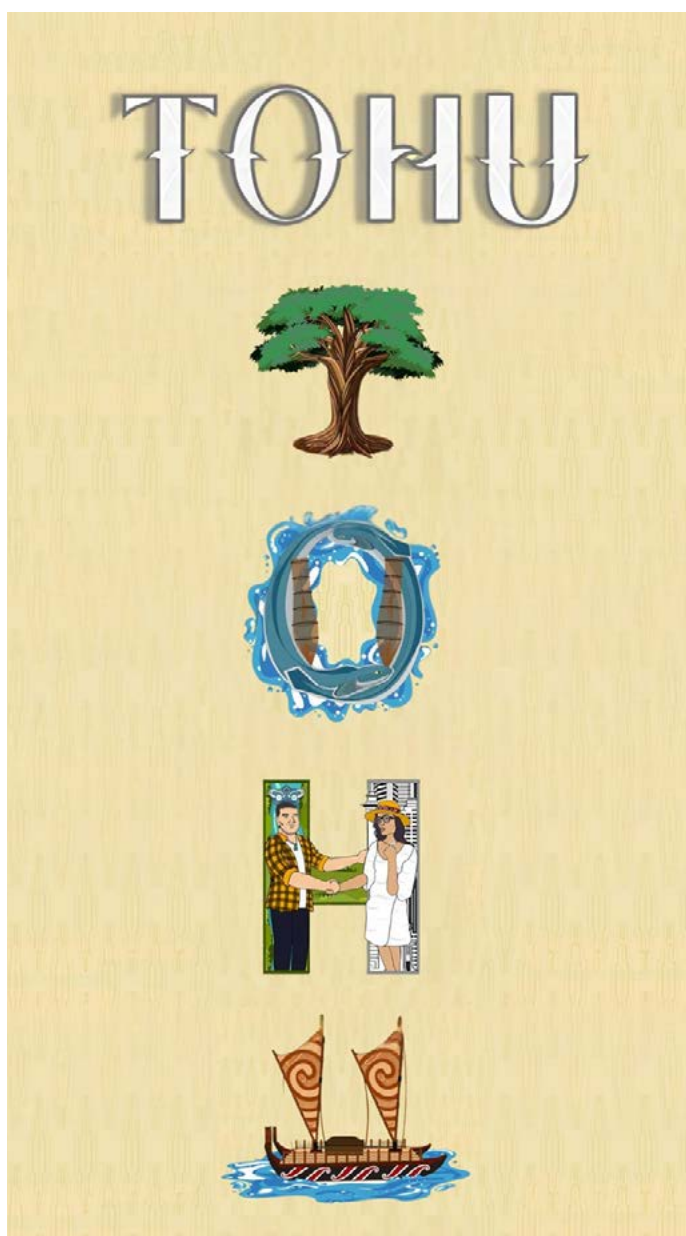
His second area of focus is the development of a Māori model of neurodevelopment. This is called Te Whare o Oro and was developed alongside Te Atawhai o Te Ao as part of the national science challenge. This model has been utilised in education with whānau and practitioners regarding Te Iho Tātai-a-Rongo (incorporating FASD) and kanorau-ā-lo (neurodiversity).

The next phase in this project is the publication of a series of neurodevelopmental screening cards and development guide to support whānau and kaiako (teachers) to identify and respond to kanorau-ā-lo in an effective mana enhancing manner.

McLachlan encourages researchers to be a conduit for the aspirations of community and whānau, to be guided by their needs and aspirations with an intent to wānanga in a way that we all learn and develop together. Mauri ora!



Dr. Andre McLachlan.



TOHU trauma framework.



"Hear Us Out" project.

Luke McConnell

Luke McConnell, a researcher in the School of Media Arts, investigates the intersection of design, digital technology, and public art installation, focusing on enhancing community engagement and encouraging reflection. Collaboration serves as a driving force behind much of his work, leading to innovative insights at the crossroads of creative disciplines.

Early in his research career, McConnell explored how tools, ideas and processes from graphic design could extend beyond conventional practices. This exploration inspired him to create installations for museums and festivals, igniting his interest in audience engagement and innovative interaction strategies. In 2023, he developed a light installation titled "Socially Distant," which utilises proximity sensors to replicate the experience of social distancing. This work invites audiences to reflect on the impact of COVID-19 on social interactions, emphasising the tension between the desire for closeness and the necessity of maintaining distance.

In the past two years, McConnell has shifted his focus from public installations—such as building projections and interactive light sculptures—to more traditional graphic design outputs, including publications and posters. This pragmatic shift was influenced by the COVID-19 pandemic, which resulted in the cancellation of light festivals and the closure of museums, allowing him to align his research more closely with his teaching in graphic design.

The “Hear Us Out” project exemplifies this transition. It explores how poster design can serve as a tool for fostering intergenerational exchange, both locally and globally, within the context of public good. The primary question addressed is: How can posters facilitate intergenerational dialogue and empower elders to share their voices with the community? This research examines design as a social instrument, encouraging students to look beyond conventional client-designer relationships and leverage their skills for positive change. By collaborating with elders, students are challenged to translate meaningful advice into visually engaging typographic posters, which are then displayed publicly to promote connection and understanding.

The research employs a mixed-method approach, combining qualitative and quantitative data collection. Student-elder interviews provide observational data, offering qualitative insights into the stories and advice shared by participants aged 65 and older. Additionally, thematic analysis is conducted on the advice given. This methodology facilitates comparisons of design processes, outputs, and messaging among students from diverse cultural contexts, including New Zealand, Ecuador, Indonesia, Singapore, England and the USA. The project’s impact lies in its potential to strengthen community bonds through intergenerational dialogue, empower marginalised voices, and expand design education by illustrating the social relevance of design practice.

Locally designed posters were exhibited in the Hamilton CBD in October 2024, showcasing the advice shared by local elders, and this will be followed by a curated exhibition of posters from participating countries. After its debut, the international exhibition will travel to partner institutions worldwide for further dissemination. This ongoing research, now in its second year, reflects a growing interest in socially conscious design. The public display and community involvement have generated positive feedback, affirming the value of design in building connections and fostering meaningful conversations across generations.

The next phase of the project will prioritise expanding its reach by engaging more design schools from diverse cultural backgrounds and increasing the visibility of the work. McConnell recently presented the research at the Creative Research Symposium, aiming to deepen the conversations sparked by the project and cultivate new insights within the design and education communities. Ultimately, this initiative seeks to inspire a broader understanding of how design can effect social change, strengthen community ties, and empower individuals across generations.



“Socially Distant”



Luke McConnell.



“Hospitalization at Home” (HaH) concept.



Dr. Mohammad Al-Rawi.

Dr. Mohammad Al-Rawi

The Environment and Air Quality Lab (EAQL) at Wintec is an applied research group collaborating with institutions across New Zealand and Australia, including the University of Auckland, AUT, EIT, and Swinburne University of Technology. Founded by Dr. Mohammad Al-Rawi, a Principal Academic Staff Member in the Centre for Engineering and Industrial Design, the lab combines expertise from mechanical, mechatronic, chemical, and materials engineering, as well as microbiology and mathematics, to focus on improving health outcomes in indoor environments with poor air quality in the Waikato Region.

Amidst the COVID-19 pandemic, heightened attention was drawn to the “Hospitalisation at Home” (HaH) concept, especially when healthcare systems became overwhelmed. To support this, EAQL applies Computational Fluid Dynamics (CFD) modeling, using ANSYS CFX 2022R2, to assess ventilation efficiency and validate the use of air-cleaning devices like HEPA filters. Their studies focus on reducing CO₂ concentrations and improving air quality in HaH spaces while maintaining thermal comfort according to ASHRAE 55 standards. CFD simulations revealed that CO₂ age-of-air (AoA) was improved in just 105 seconds in spaces of up to 140 m², offering significant benefits during critical care periods. This research underscores the importance of accessible air treatment systems for home-based care, particularly during crises like pandemics or natural disasters when hospital capacity is limited.

The potential community benefits of this work are striking. According to Habitat for Humanity, approximately 300,000 homes in New Zealand suffer from issues related to dampness and poor indoor air quality. Nearly 500,000 New Zealanders, including many children, live in overcrowded conditions, which exacerbates respiratory illnesses. Poor air quality disproportionately affects Māori and Pacific communities in New Zealand.

Ultimately, Al-Rawi’s team aims to design an affordable, solar-powered device that improves indoor air quality by regulating ambient air temperature, removing moisture and using UV filtration to prevent mould and bacteria growth. The project addresses two major concerns: poor indoor air quality (IAQ), particularly in older housing stock, and the effects of overcrowding due to high housing and electricity costs. These issues contribute to cold, damp living conditions, leading to severe respiratory problems.

The device is intended to mitigate poor IAQ caused by the built environment, offering a low-cost solution without requiring expensive infrastructure. Key objectives include refining the prototype, testing and validation of effectiveness, improving performance using computational fluid dynamics (CFD) modeling and machine learning, and conducting end-user validation in homes across the Waikato community.



Rotopiko

Wetlands provide vital ecosystem services, such as water purification, flood control, and nutrient cycling, which are recognised in New Zealand governmental policies to protect and restore them. In the Waikato region, the Rotopiko wetland complex is highly valued for its cultural and ecological significance, with its preservation a key goal within the Waikato River catchment.

Rotopiko East, one of three interconnected peat lakes near Ōhaupō, New Zealand, is a pest-free wetland sanctuary that features a lake and two kahikatea forest stands: one approximately 400 years old (the 'old' stand) and the other around 35 years old (the 'young' stand). A drain flows through the reserve, carrying water during the winter and spring seasons.

Rotopiko is a taonga (treasure) for Ngāti Apakura, who serve as kaitiaki (guardians). The wetland supports endangered species like black mudfish and at-risk species such as longfin eels, as well as undisturbed native aquatic plant communities. However, nutrient enrichment has degraded other nearby lakes, and Rotopiko's native vegetation has also declined possibly due to increased nutrient levels.

A restoration project led by the National Wetland Trust (NWT) established the Wetland Discovery Centre at Rotopiko and constructed a pest-exclusion fence. However, the removal of mammalian pests and the creation of the fenced sanctuary have led to a dramatic increase in roosting birds, whose waste is contributing to excessive nutrient loading in the lake and soil, which now threatens the wetland ecosystem.

Current monitoring efforts are focused on understanding the effects of this nutrient input and evaluating the effectiveness of existing riparian management strategies. To assess the impact of roosting birds on nutrient levels, water and soil samples were collected and tested across three seasons both inside and outside the fenced reserve. Water samples were tested for nutrients (nitrogen and phosphorus) and microbial contaminants (coliforms and *E. coli*), and soil samples were analysed for total nitrogen, phosphorus and potassium.

Initial analysis indicated that roosting birds were having a significant negative impact on the ecosystem's quality. Elevated concentrations of nitrogen and phosphorus, likely from bird droppings, have contributed to



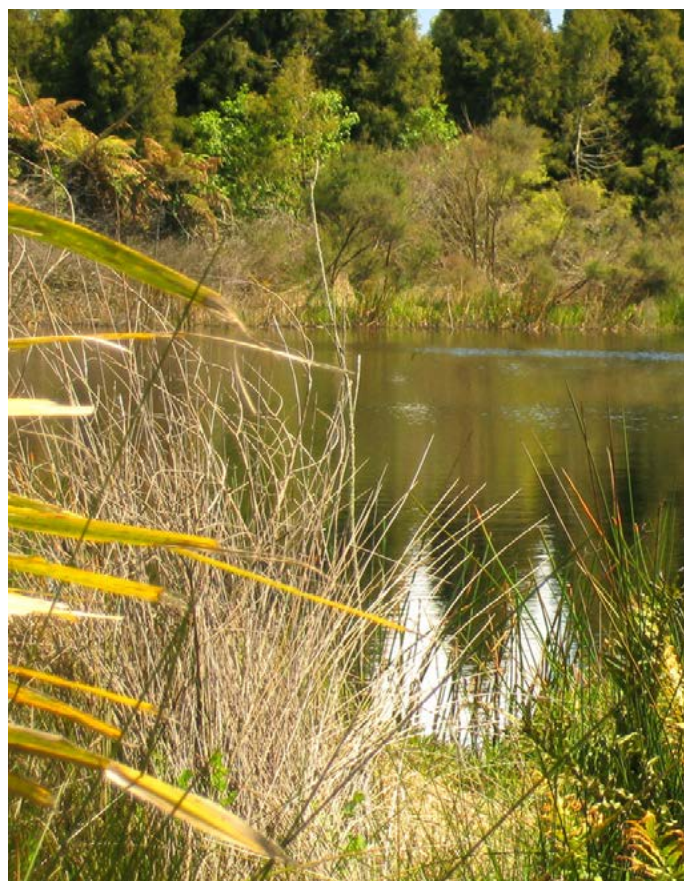
From left Dr. Sara Farahani, Nicolas Sandoval, Dr. Anna Matuszek, Dr. Sanaz Ghoreishi.



Photo: Rohan Wells (NIWA)

nutrient accumulation in both soil and water. Over time, this disrupts the ecological balance, potentially degrading water quality, supporting invasive species, and jeopardising the native biodiversity of the Rotopiko wetland ecosystem.

The next steps involve further soil and water quality monitoring, along with the implementation of mitigation strategies. These measures aim to improve understanding of ongoing nutrient loading and reduce its adverse effects on the ecosystem. Potential strategies included improving riparian management, reducing nutrient runoff, and implementing bird population control methods to mitigate the long-term environmental damage and help restore the ecological balance of the Rotopiko wetland. A completed pilot study explored the effectiveness of activated carbon as a nutrient absorbent, which resulted in significantly reduced nitrogen levels. In the next phase of the project, the team will tackle a more comprehensive investigation of such strategies, with multiple absorbents to be tested and applied on-site.



Dr. Sujani Thrikawala

Dr. Sujani Thrikawala is a senior researcher at Wintec's Centre for Business and Enterprise (CBE), specialising in corporate governance, sustainability and women's empowerment. Her research focuses on how governance practices, firm sustainability, financial inclusion and firm-level innovation intersect, particularly in emerging economies. A central tenet of her work is the belief that empowering women is critical for fostering equitable development within organisations and society. In developing countries, women often play a key role in supporting their families, and access to greater opportunities can enhance their ability to become self-sustaining, thus breaking cycles of poverty and inequality.

Thrikawala's research underscores the importance of expanding opportunities for women. Access to essential resources such as financial services, training and advocacy empowers them to build sustainable livelihoods and make meaningful contributions to their communities. Her passion for this area stems from personal experiences growing up in a region where women face significant challenges to achieving equality. This commitment has led her to collaborate with Dr. Anthea Fester, a staff member at Wintec, and the Refugee Orientation Centre (ROC) on the "ROC Incubator" project. This initiative supports migrant women in New Zealand, particularly refugees, who own or aspire to start small businesses. The project focuses

on helping them overcome barriers to entrepreneurship and achieve long-term business sustainability. It aligns with Thrikawala's broader dedication to women's empowerment and promoting sustainable business practices.

In addition to her work on gender equity, Thrikawala's research addresses critical questions about corporate sustainability, particularly the role of climate-related disclosures in enhancing organisational transparency. She is currently collaborating with Dr. Ahesha Perera from Massey University and Dr. Ninitha Koya from the University of Waikato on a project that explores how New Zealand's listed companies are adapting to new regulations on climate risk reporting. Under climate standards set by the External Reporting Board (XRB), organisations are now required to publish climate-related disclosures for financial years starting on or after January 1, 2023. This ongoing project investigates the early challenges of implementing these disclosures, providing valuable insights into how companies navigate the evolving regulatory landscape. Through qualitative interviews with various stakeholders directly involved in these changes, the team gathers data on the practical challenges and successes companies face as they comply with the new regulations. The research stands out for its depth and its potential to inform both companies and regulators on the impact of climate risk disclosures on organisational sustainability.



Although both projects are still ongoing, they have already garnered significant interest. Their impact is expected to be far-reaching, as they will likely shape corporate governance and sustainability practices in New Zealand and beyond. By examining how climate-related disclosures affect organisational performance, Thrikawala contributes to a vital area of research that will influence the future of business, as firms face growing pressure to meet sustainability goals.

Looking ahead, Thrikawala plans to continue analysing data from these projects to identify emerging themes that will guide future research. As global momentum towards sustainability continues to grow, her research will evolve accordingly, particularly in areas such as corporate accountability and environmental stewardship. Motivated by a desire to influence corporate practices and investor behaviour, Thrikawala remains committed to supporting businesses in their transition towards sustainable models and to empowering women within these shifting corporate frameworks.



Dr. Sujani Thrikawala.



Te Kotahi Oranga: Student/Ākonga-assisted Health and Wellness Centre

Contemporary health services are challenged with factors such as ageing populations, rising levels of chronic disease, and unresolved disparities in health service access and outcomes. These trends are accompanied by increasing calls to strengthen primary health care and ensure that the future health workforce develops the competency to work collaboratively in teams with other health professionals and the community. It was against this backdrop, and an initial feasibility study, that the project to establish Te Kotahi Oranga: Ākonga-assisted Health and Wellness Centre commenced in 2021 supported by a multi-year community impact grant from Trust Waikato.

Formally opened in November 2023, the development was informed by a rigorous research and evaluation framework with frequent publication of insights gained, lessons learned, and quality improvement recommendations for replication of the model and scale-up across the region. In addition to the operational responsibility to develop the Centre, the project team were tasked with responsibility to conduct research and evaluation to determine the impact of an interprofessional, ākonga-assisted health service on ākonga learning outcomes and perspectives, programme curricula and educator perspectives, and service user health outcomes and perspectives – the aim being provision of a strong evidence base from which to inform opportunities to embed this clinical education and service delivery model within collaborating community organisations. Research

activities associated with the project commenced with a report followed by twelve peer reviewed open-access publications.

Research outcomes were formally published to ensure rigour of conclusions via global peer-review processes and to ensure that the learning could be shared across the Te Pūkenga network and beyond. Initial research inquiry explored the feasibility and benefits of student-led clinics. In order to ensure that the student placement programme was established on best practice, work then undertook a cross-Te Pūkenga Delphi study to gain sector consensus in respect to the interprofessional competencies that would be taught and measured within the clinic. Detailed literature reviews then identified interprofessional assessment tools for faculty, student and student peers. Having established the competency-base for student learning, students were then engaged in the development of the three programmes identified as priorities by our community partners, specifically:

- Community health screening
- Falls prevention programme
- Pre-diabetes programme

In addition to this work, the research team also developed various course guides and an in-house Moodle-site for use by both students and teaching staff. All research outcomes are publicly available and it is our pleasure to share our learning across the network.

Feasibility Insights re Student-Led Clinics and their Benefits

Brownie, S., Smith, G., Broman, P., Tokolahi, E., Haggie, M., Pearce, A., Longhurst, G., Bell, R., Walker, A., Cook, C., Syminton, K., & Andersen, P. (2021). He Kaupapa Oranga Tahi: Working in partnership to grow the health workforce through taura-assisted health services. Wintec, Hamilton, New Zealand. ISBN 978-1-877510-21-2

Tokolahi, E., Broman, P., C. Cooke, Andersen, P., Longhurst, G. & Brownie, S. (2021). Student-led clinics in Aotearoa New Zealand: A scoping review with stakeholder consultation. *Journal of Multidisciplinary Healthcare*, 14, 2053-2066. <https://doi.org/doi:10.2147/JMDH.S308032>

Broman, P., Wilson, O. W. A., Tokolahi, E., Andersen, P. & Brownie, S. (2022). Patient outcomes from student-run health services: An integrative review. *Journal of Multidisciplinary Healthcare*, 15, 641-665. <https://doi.org/10.2147/JMDH.S348411>

Wilson, O. W. A., Broman, P., Tokolahi, E., Andersen, P., & Brownie, S. (2023). Learning outcomes from participation in student-run health clinics: A systematic review. *Journal of Multidisciplinary Healthcare*, 16, 143-157. <https://doi.org/10.2147/JMDH.S385709>

Interprofessional Competencies for Pre-registration Health Professionals

Brownie, S., Tokolahi, E., Broman, P. Haggie, M. & Andersen, P. (2024). Do regulatory and curriculum requirements for interprofessional practice align? *Journal of Multidisciplinary Healthcare*, 16, 3675- 3687 <https://doi.org/10.2147/JMDH.S438791>

Andersen, P., Broman, P., Tokolahi, E., Yap, J. R., & Brownie, S. (2023). Determining a common understanding of interprofessional competencies for pre-registration health professionals in Aotearoa New Zealand: A Delphi study. *Frontiers in Medicine*, 10, <https://doi.org/10.3389/fmed.2023.1119556>

Assessment Tools for Interprofessional Competencies

Brownie, S., Blanchard, D., Amankwaa, I., Broman, P., Haggie, M., Logan, C., Pearce, A., Kovanur Sampath, K., Yan, A-R., & Anderson Andersen, P. (2023). Tools for faculty assessment of interdisciplinary competencies of healthcare students: An integrative review. *Frontiers in Medicine*, 10. <https://doi.org/10.3389/fmed.2023.1124264>

Brownie, S., Yap, J-R., Blanchard, C., Amankwaa, I., Pearce, A., Kovanur Sampath, K., Yan, A-R., Andersen, P. & Broman, P. (2024). Tools for healthcare student self-assessment and peer-assessment of interprofessional competencies: A scoping review. *Frontiers in Medicine* <https://doi.org/10.3389/fmed.2024.1449715>

Community-based, Student-led Programs

Kovanur Sampath, K., Yan, A-R., Haggie, M., Tapara, T. & Brownie, S. (2023). Exploring the option of student-run free health clinics to support people living with type 2 diabetes mellitus: A scoping review. *Frontiers in Public Health*. <https://doi.org/10.3389/fpubh.2023.1128617>

Yap, J-R., Broman, P. Andersen, P. & Brownie, S. (2023). Learning by doing: Student's experiences of interprofessional education and community partnership in a pilot student-run clinic. *Student Success Journal*, 15(1), 122-129. <https://doi.org/10.5204/ssj.3089>

Yap, J. R., Broman, P., Longhurst, G., & Brownie, S. (2024). Student-run falls prevention for older adult community members: A pilot study. *Journal of Primary Healthcare*. <https://doi.org/10.1071/HC24057>

Yap, J. R., Zhai, W. W., Pak, C. S., & Brownie, S. (2024). The impact of student-led community health screenings on clients' health knowledge and outcomes: A qualitative study. *Journal of Preventive Medicine & Public Health*, 58(2), 167-176. <https://doi.org/10.3961/jpmph.24.366>

Sustainability

Broman, P., Fourie, L. & Brownie, S. (2024). Student-led health services in Australia and New Zealand: Comparing the costs. *The Global Journal of Business and Technology*, 19(2), 31-47.

Achievements are attributable to a very large collaborating team. Sincere acknowledgement and thanks are offered to Trust Waikato; our community partners; participating students; faculty, researchers and authors.

- **Project Research Fellows:** Dr. Patrick Broman, Dr. JiaRong Yap, Dr. Ema Tokolahi, Dr. Oliver Wilson
- **Professorial Support:** Professor Patrea Andersen
- **Contributing Researchers & Authors:** Dr. Kesava Sampath, Dr. Issac Amankwaa, Dr. Marrin Haggie, Assoc Prof Denise Blanchard, Dr. Glynis Longhurst, Dr. Ricky Bell, Dr. Kay Symington, Cassandra Cook, Leon Fourie, Amy Pearce, Carlee Logan, Wenming Zhair, Cindy Pak

Professor Sharon Brownie: Principal Investigator and Project Lead



Outputs

Outputs in the ITP sector may take a variety of forms but traditionally the vast majority have been publications (such as journal articles) or works of creative practice (e.g. exhibitions and performances). However, there is now increasing emphasis on achieving real-world impact through the delivery of applied research that is directly tailored to industry, iwi/hapu, and community partners. Such work is incentivised by government and other funding bodies and responds to the critical national and global challenges of our times.

When it comes to reporting, however, currently there is no satisfying shorthand approach to presenting the impact of research projects, and typically what is required is a brief case study. For reasons of time and space, we have opted not to go with such an approach here, and instead rely on the conventional approach of providing a list of publications and creative practice outputs.

With this narrow lens, figures for the number of research outputs provides a snapshot of research productivity for the period and indicators of a healthy research environment.

2023 saw a total of 190 recognised research outputs in total, including three books and 64 journal articles. In 2024, the total number of recognised outputs grew by 16% to a total of 221, including one book, and with the total number of journal articles growing by 26% to 81.

Digging more deeply into these data, there was a pleasing number of articles published in some of the most prestigious journals of their discipline, in fields as diverse as business, engineering, linguistics and languages, nursing, physiotherapy, sports science and elsewhere. A curated list of key outputs is provided in the appendices, organised by discipline and year.

Funding

The following projects all received Contestable Research Funding (>\$1000).

2023

Project lead: Gail Pittaway

Collaborator: Sarah Munro
Desire Lines – Poetry and Painting Collaboration

Project lead: Jordan Foster

Collaborator: Elgee Van Tonder
Tūtereinga Whare Whakairo

Project lead: Julia Booth

Collaborators: Nick Braae, David Sidwell
Song Cycle Collaboration

Project lead: Kesava Kovanur Sampath

Collaborator: Suzie Belcher
Manual Therapy and Molecular Biomarkers of Pain

Project lead: Korina Vaughn

Collaborator: De Cleaver
Te Taonga Tuku Iho – Past, Present, Future: A Guiding Framework for Midwifery Education in Aotearoa

Project lead: Laura Stratton

Collaborators: Rob Moran, Anna Mason Mackay
Cultural Responsiveness Training for Physiotherapy Clinical Supervisors

Project lead: Nick Braae et al.

Media Arts Research Writing Retreat

Project lead: Nicolas Sandoval

Collaborators: Sanaz Ghoreishi, Anna Matuszek,
Sara Farahani
Rotopiko

Project lead: Rebekah Harman

Collaborator: Emily Russell
Well Worn: Tales of Loved Clothing that Inspires Longevity Beyond the Seasons

Project lead: Anthea Fester

Collaborator: Sujani Thrikawala
How might we Better Support EAL (English as Another Language) Background Women Who are Small Businessowners in the Waikato Region, Aotearoa/New Zealand?

Project lead: Chan Kim

Collaborators: Hong Zhou, Mohammad AL-Rawi
Sustainable Materials Design and Product Development Using NZ-Sourced Materials and Cellulose Cross-Linked Polymer

Project lead: Frans van der Merwe

The Loading Demands on Male Adolescent Field Hockey Players During a Competitive Season

Project lead: Isaac Amankwaa

Collaborator: Patricia McClunie-Trust
Assisted dying policy and nursing practice: Identifying Gaps in Support and Guidance

Project lead: Mohammad Al-Rawi

Collaborators: Rhys Jones, Chan Kim
Sustainable Technologies to Overcome pandemics such as COVID-19

Project lead: Patricia McClunie-Trust

Graduate Entry Nursing (GEN) Student Development of Professional Nursing Self

Project lead: Regan Standing

Collaborators: Russell Best
Gamification of Sports Nutrition Knowledge in Youth Athletes

Project lead: Wang Yi

Collaborators: Anthea Fester, Jonathon Ryan
First Language Literacy and the Influence of Source of Planning and Focus of Planning on Task-Based Performance

2024

Project lead: Sara Farahani

1. Mysterious enhancement in the concentration of oxygen in the atmosphere of Mars
2. Photodissociation of H₂O-N₂O and its atmospheric implications
3. Absorption spectrum simulation of the C70 derivatives

Project lead: Mohammad AL-Rawi

Collaborator: Hong Zhou
Non-invasive Computational Fluid Dynamics Tools for Early Diagnosis of Cardiovascular Disease

Project lead: Paul Ewart

Collaborators: Ken Louie, Russell Best, Kent Macpherson
Sports Engineering, Equipment Testing, and Materials Development

Project lead: Kesava Kovanur Sampath

Co-Contraction of Superficial Upper Back Muscle (Trapezius) and TMJ Muscle (Masseter) in Healthy Volunteers – An Observational Study

Project lead: Suzie Belcher

Collaborators: Frans van der Merwe, Kesava Kovanur Sampath
Effects of Scanning Whilst in the Air and Ball Position on Completion of a 180-Degree Countermovement Jump on Landing Mechanics in Female 16-25-Year-Old Netball Players

Project lead: Patricia McClunie-Trust

Graduate Entry Master of Nursing Science Students' Development of a Sense of Self as a Nurse

Project lead: Frans van der Merwe

The Loading Demands on Male Adolescent Field Hockey Players During a Competitive Season

Project lead: Russell Best

Collaborator: Paul Ewart

The Thermoregulatory and Impact Attenuation Properties of Bandages and Established and Innovative Tendon Boots Upon Model and Live Equine Forelimbs

Project lead: Megan Rogerson-Berry

For Freaks and Others; Queerness of Popular Music of the 21st Century, PhD

Project lead: Megan Rogerson-Berry et al.
Diversity Work and Affective Labour in Creative Media Academia

Project lead: Tamsin Green

Collaborator: Jordan Foster

Ramp Gallery: Curating as Public Education (Collaboration Cases Study)

Project lead: Nick Braae et al.

Media Arts Research Writing Retreat

Project lead: Jordan Foster

Te Kawanui Toi

Project lead: Luke McConnell

Collaborator: Jordan Foster

Hear Us Out 2024

Project lead: Russell Best

Collaborators: Kerin McDonald, Rhys Macpherson
Performance and Physiological Effects of Menthol Ingestion or Rinsing at Exercise Intensities at and above VO_{2max} in Hot Conditions

Project lead: Heidi Austin-Crawford et al.

The Influence of Identity on Social Practice in Aotearoa: Stories from Social Practitioners

Project lead: Anthea Fester

Collaborator: Sujani Thrikawala

How might we Better Support EAL (English as Another Language) Background Women who are Small Businessowners in the Waikato Region, Aotearoa/New Zealand

Project lead: Wang Yi

Collaborators: Jonathon Ryan, Anthea Fester, Jia Rong Yap

First Language Literacy and the influence of Source Planning and Focus of Planning on Task-based Performance: A partial replication of Foster & Skehan (1999)

Project lead: Sanaz Ghoreishi

Application of the Electrocoagulation Technique in Wastewater Treatment

Project lead: Alroy Walker

Collaborator: Jon Clarke

He Ipukarea

Project lead: Patricia McClunie-Trust

Collaborators: De Cleaver, Rebecca Giles, Kesava Sampath

CHASP Research Team – support for multiple research projects

Project lead: Korina Vaughn

Collaborator: De Cleaver

Te Taonga Tuku Iho – Past, Present, Future: A Guiding Framework for Midwifery Education in Aotearoa

Project lead: Joe Citizen and Toni Herangi

Collaborator: Abby Dalgety

Te Miro Ma, Te Miro Pango, me Te Miro Whero

Project lead: Mohammad AL-Rawi

Collaborators: Rhys Jones, Nicolas Sandoval

Machine Learning Analysis of Indoor Air Quality in Waikato: Healthy Homes Standards and Hospitalization at Home Applications

Project lead: Maryam Moridnejad

Assessing the Social, Economic, and Environmental Impacts of Water Metering in Hamilton: Public Perception and Policy Implications

Project lead: Jenny Song

Collaborators: Sharon Brownie, Jia Rong Yap, Patrick Broman

Supports and Challenges Experienced by Domestic Graduate Entry Nursing Students and internationally Qualified Nurses (IQN's) Entering Practice in New Zealand

Project lead: Liam Aghazadegan

Fish Passage Culverts

Project lead: Chan Kim

Collaborator: Mohammad AL-Rawi

Prototyping and Producing Sustainable Nursery Products using a Cellulose Cross-Linked Polymer (CXP) and Activated Carbon Conjugated CXP

Project lead: Russell Best

Collaborators: Paul Ewart, Rhys Macpherson

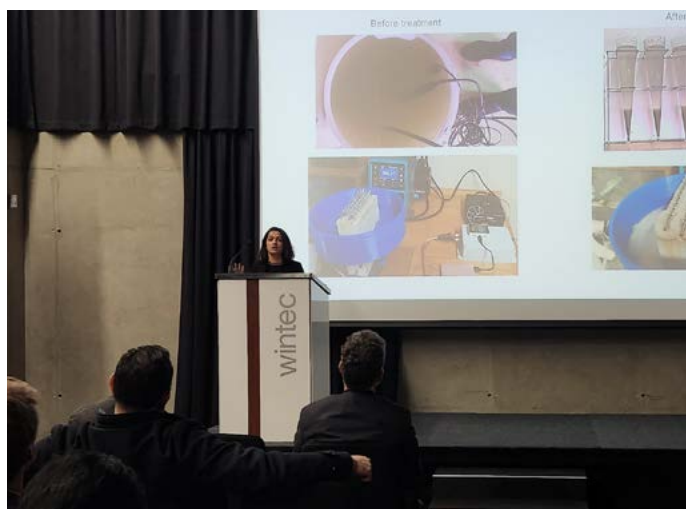
Central, Peripheral and Perceptual Responses to Equestrian Exercise

Project lead: Jeremy Mayall

Ihirangaranga – Te Hua o Koanga

Project lead: Sanaz Ghoreishi

1. Study of EC technique for Wastewater Treatment
2. Investigation of Chemical Absorbents for Water Purification in the Rotopiko Project Phase-2



Events

Wintec Research Lightning Talks

On Tuesday 13 August 2024, a Research Lightning Talks event was held in Events Room 1, with an excellent range of short presentations and Q & A. The event was attended by about 45 staff from across the institution.

Our presenters were:

Adrian France *Centre for Business and Enterprise (CBE)*
The Accountability of Olympic Sport Organisations

Patricia McClunie-Trust *Centre for Health and Social Practice (CHASP)*
Graduate Entry Nursing Students' Development of a Sense of Self as a Nurse: An Inforgraphic

Amy Pearce *Centre for Sport Science and Human Performance (CSSHP)*
How "Hip" are you? Outcomes of Total Primary Hip Replacement for Osteoarthritis

Matthew Bannister *School of Media Arts (SoMA)*
Playing Aldous Harding - "The Jim Carrey of the Indie World"

Sanaz Ghoreishi *Centre for Applied Science and Primary Industries (CASPI)*
Investigation of Liquid Smoke Applications from the Pyrolysis of Kanuka Woodchips

Mohammad AL-Rawi *Centre for Engineering and Industrial Design (CEID)*
Investigation of Type A Aortic Dissection using Computational Modelling

David Williams *Centre for Sport Science and Human Performance (CSSHP)*
How can Pākehā Authentically Embed Mātauranga Māori into their Teaching Practice

Our dynamic MC Ryan Overmayer (CSSHP) did a fantastic job of bringing the event to life, and very generously sponsored the spot prize, which was won by an observant Anna Mischefski (CEFP).

Researcher Presentation Event

The first research event of 2023 was held on Thursday, 4 May and was a great success. Around 30 staff attended and enjoyed quick-fire five-minute presentations by Nick Braae, Wang Yi, Nic Sandoval, Patricia McClunie-Trust, Anthea Fester and Sujani Thrikawala, Mohammad AL-Rawi and Sara Farahani. This was followed by the headline act, Gail Pittaway, who spoke about a forgotten legend in New Zealand cooking, Bee Nilson.

Our warm thanks to each of the presenters, to Aimee for organising this excellent event, and to Peter for his upbeat MC'ing.

Trust Waikato Presentation Evening

On 31 October 2023, we hosted our annual Wintec | Trust Waikato research event, where recipients of 2022 Trust Waikato research funding presented back on what they have achieved through their work. Our ongoing relationship with Trust Waikato is longstanding and productive. In recent years we have been successful in applying for bulk amounts to conduct research that directly addresses topics related to community wellbeing and sustainability and it was on these smaller projects that the evening focused. Our thanks to Aimee for organising this event and to each of the presenters for their fine work.

Most notably, however, Trust Waikato also granted the multi-disciplinary Student Assisted Clinic project with \$1.4m over three years, leading to both substantial community impact and an impressive range of research publications. The open day for the clinic was held on Tuesday, 28 November, followed by a fascinating series of research presentations from the team.



Ethics

All research conducted within Wintec that involves human or animal participants requires a level of ethical approval. Approvals for research involving humans are administered by the Research Office and granted by Wintec's Human Ethics in Research Group (HERG), which is accredited by the Health Research Council (HRC). There is a separate Animal Ethics Committee (AEC), which is an approved Code Holder under the Ministry for Primary Industries (MPI).

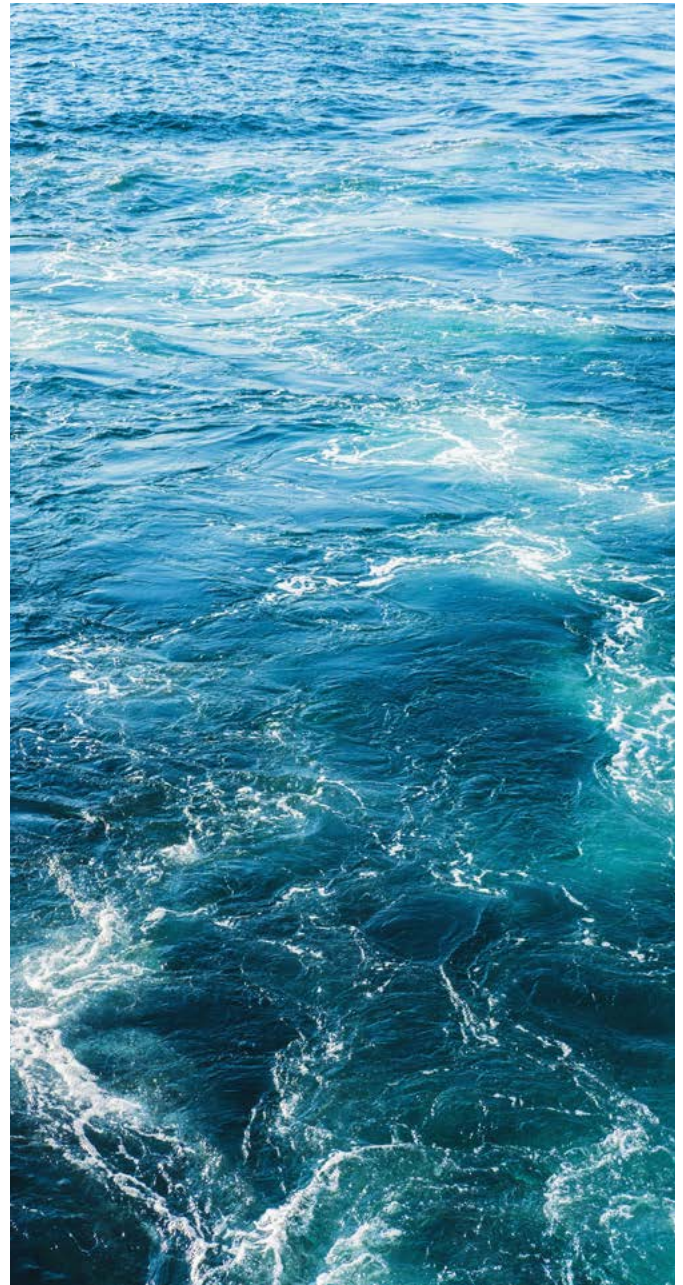
Wintec is currently the only Institute of Technology or Polytech (ITP) with a human research ethics committee accredited by HRC and one of only two ITPs with an accredited animal ethics committee.

In relation to studies involving human participants, Low Risk Ethics applications are reviewed by the Chair of HERG, a Research office delegate, and a subject matter expert from HERG when necessary. Full Ethics applications are considered monthly by all HERG members.

Throughout 2023 and 2024 the committee reviewed 144 applications for ethics approval from Te Pukenga and Wintec staff and students. In 2023, HERG met six times and approved 14 Full Ethics Applications. Outside of these meetings, the Independent Chair and Research Office delegate approved 58 Low Risk Ethics applications.

Similarly in 2024, HERG met 5 times and approved 15 Full Ethics applications. Outside of these meetings, the Independent Chair and Research Office delegate approved 57 Low Risk Ethics applications.

The majority of full applications were submitted by students, predominantly from the Centre for Sport Science and Human performance. Academic staff member applications comprised most of the low risk applications. Overall, the quality of the applications is improving with many applicants seeking support from the Research office prior to submission, leading to minor amendments being required by HERG before approval is granted.



HERG Members include

Chair: Gillian Spry – recently retired Lawyer

Dr. Peter Maulder – Research office

Leni Lolohea – Oire Pacific

Dr. Patricia McClunie-Trust – Centre for Health and Social Practice

Jenny Song – Centre for Health and Social Practice

Dr. Matthew Bannister – School of Media Arts

Dr. Sujani Thrikawala – Centre for Business and Enterprise

Amy Pearce – Centre for Sport Science and Human Performance

Dr. Wang Yi – Centre for Languages

Dr. Sara Farahani – Centre for Applied Science and Primary Industries

Aimee Pilkington – Research office

Appendices

Centre for Applied Science and Primary Industries 2023

Harman, R., Mahdihyeh, M., Sandoval, N., & Rathinaraj, P. (2023). Nonylphenols found in wastewater of activewear garments, after laundering in Aotearoa New Zealand. *International Journal of Clothing Science and technology*, 36(1), 23. <https://doi.org/10.1108/IJCST-11-2022-0157>

Samarakoon, S. M. C. S., Realini, C. E., Hamid, N. S. A., Staincliffe, M. R., Ross, A., Deb-Choudhury, S., Subbaraj, A., & Farouk, M. M. (2023). Predicting cooked beef consumer liking and sensory freshness using rapid evaporative ion spectrometry. *The 69th International Congress of Meat Science and Technology* (pp. 245-246).

Williams, K., Jones, R. J., & Al-Rawi, M. (2023). Particulate matter (PM_{2.5}) and mould characteristics in selected classrooms located in Waikato, New Zealand: Preliminary results. *Environments*, 10(10), 182. <https://doi.org/10.3390/environments10100182>

Zhang, R., Chawla, P., Samarakoon, C., & Farouk, M. M. (2023). Effects of sex, sire and in-bag dry-ageing on the physicochemical and microbial properties, colour and fatty acids stability of lamb. *Food Chemistry*, 403, 1-10. <https://doi.org/10.1016/j.foodchem.2022.134356> 2024

Xing, X., Ghoreishi, K., Mehta, S., Samarakoon, S., & Baroutian, S. (2024). Sensory evaluation of beef sirloin steak treated with fast pyrolysis liquid smoke. *European Food Research and Technology*, 250, 2211-2224. <https://doi.org/10.1007/s00217-024-04531-x>

Centre for Business 2023

Hunjra, A. I., Jebabli, I., Thrikawala, S. S., Alawi, S. M., & Mehmood, R. (2023). How do corporate governance and corporate social responsibility affect credit risk? *Research in International Business and Finance*, 102139, 1-24. <https://doi.org/10.1016/j.ribaf.2023.102139> 2024

Fester, A., & Thrikawala, S. S. (2024). Challenges facing women who are small business owners and have English as an additional language in the Waikato region, New Zealand: An explorative inquiry. *Scope: Work-based Learning*, 6, 51-61. <https://doi.org/10.34074/scop.6006006>

France, A., Dickson, G., McDonald-Kerr, L., & Ozdill, E. (2024). A scoping review of sport organisations' accountability. *Managing Sport and Leisure*, Online First, 1-36. <https://doi.org/10.1080/23750472.2024.2365208>

Li, Y., Wang, J., Wang, B., & Luo, C. (2024). A study of quantum game for low-carbon transportation with government subsidies and penalties. *Sustainability*, 16(7), 3051-3072. <https://doi.org/10.3390/su16073051>

Manasseh, S., Low, M., & Calderwood, R. (2024). Accounting academic leaders' perceptions on New Zealand's performance-based research funding system. *Journal of Accounting & Organizational Change*, 1, 22. <https://doi.org/10.1108/JAOC-09-2022-0133>

Thrikawala, S. S., Perera, R. A. A. S., & Bandara, S. (2024). ESG disclosures and market price: The moderating role of firm size and industry sensitivity. In Hunjra, A. I. & Goodell, J. W. (Eds.), *The Palgrave handbook of green finance for sustainable development* (pp. 357-382). Switzerland.

Centre for Education and Foundation Pathways 2023

Ahmad, F. (2023). Impact of digital games on early literacy skills in a developing country context. [Doctoral thesis]. University of Waikato.

Fenmachi, E. A. (2023). Parental involvement in early childhood learning: Douala, Littoral Region, Cameroon. [Doctoral thesis]. The University of Waikato.

Greyling, W. (2023). Tracking literacy development in the tertiary sector: Educationally and statistically significant learner gain. *Scope: Learning and teaching*, 12, 43-52. <https://doi.org/10.34074?scop.4012005>

Greyling, W., Ahmad, F., & Roberts, S. (2023). Culturally responsive literacy-embedding practices at a tertiary vocational training institute in New Zealand: Observations as third-party narratives. [Report]. Te Pūkenga, Wintec.

Greyling, W., Ahmad, F., Roberts, S., & Jin, F. (2023). Numeracy gains for targeted learners at Te Pūkenga (Wintec) for 2022. [Report]. Te Pūkenga, Wintec. Greyling, W., Ahmad, F., Roberts, S., & Jin, F. (2023). Reading gains for targeted ākonga at Te Pūkenga (Wintec) for 2022. [Report]. Te Pūkenga, Wintec.

Havea, E. H. (2023). Climate-induced migration and Methodist Church commitment. *Touchstone*. <https://www.methodist.org.nz/assets/Whakapapa/Touchstone/2023-24/Touchstone-November-2023-PDF.pdf>

Havea, E. H. (2023). A reflection of Vā. In *Methodist of New Zealand* (Eds.), *Rekindle the Vā of Papatūānuku: Stories and Perspectives* (pp. 29-32). Methodist of New Zealand.

Tullock, L., Andrews, M., Charteris, K., & Shorter, T. (2023). On snakes, snails and hedgehop tales: Critical reflections on early childhood education for sustainability (ECEfs) in the Anthropocene. *He Kupu*, 7(3), 87-101.

2024

Edwards, S. L. (2024). Assessment and the linguistically diverse learner. In Erlam, R. (Eds.), *Teaching the linguistically diverse learner in Aotearoa New Zealand* (pp. 275-287). Wellington, New Zealand.

Fenmachi, E. (2024). Teachers' beliefs on parental involvement in children's transition from home to ECE settings. *International Journal of Educational and Life Transitions*, 3(1). <https://doi.org/10.5334/ijelt.57>

Greyling, W., Ahmad, F., Roberts, S., & Mischefski, A. (2024). Numeracy gains for targeted ākonga at Te Pūkenga (Wintec) in 2023. Te Pukenga, Wintec.

Greyling, W., Ahmad, F., Roberts, S., & Mischefski, A. (2024). Reading gains for targeted ākonga at Te Pūkenga (Wintec) in 2023. Te Pukenga, Wintec.

Greyling, W., & Mischefski, A. (2024). Tracking the multi-year implementation of Pathways Awarua as a numeracy development intervention for Step-1 and Step-2 ākonga enrolled on Waikato Trades Academy (WTA) programmes. Te Pukenga, Wintec.

Greyling, W., & Roberts, S. (2024). Tracking the multi year implementation of Pathways Awarua as a reading development intervention for Step-1 and Step-2 ākonga enrolled on Waikato Trades Academy (WTA) programmes. Te Pukenga, Wintec.

Greyling, W., & Roberts, S. (2024). Trends in literacy embedding practices at Waikato Institute of Technology (Wintec): An AI-assisted description of two case studies. Te Pukenga, Wintec.

Havea, E. H. (2024). Migration and methodist commitment: Insights from the World Methodist Council Consultation in Manila, 2023. In *The Methodist Church of New Zealand: A Planetary Waka* (pp. 92-97). The Methodist Church of New Zealand.

Havea, E. H. (2024). Displaced: The reality of climate change-related migration. In *The Methodist Church of New Zealand: A Planetary Waka* (pp. 83-91). The Methodist Church of New Zealand.

Havea, E. H., & Tulloch, L. (2024). Reimagining climate change education in the Pacific. In Havea, J. (Eds.), *Pacific well-being: (Is)lands, theology, worldviews* (pp. 42-53). State.

Zachariah, G., & Havea, E. H. (2024). Introduction. In *The Methodist Church of New Zealand: A planetary Waka* (pp. 7-10). The Methodist Church of New Zealand. Centre for Engineering and Industrial Design 2023

Centre for Engineering and Industrial Design 2023

Aghazadegan, L. (2023). National fish passage guidelines. In *National fish passage guidelines* (pp. 35 - 91). Wellington, New Zealand.

Aghazadegan, L. (2023). Hapu Wairoa River flood modelling. (Report no. 147100.09). NZTA.

Al-Jumaily, A. M., Bin Embong, A. H., Al-Rawi, M., Mahadevan, G., & Sugita, S. (2023). Aneurysm rupture prediction based on strain energy-CFD modelling. *Bioengineering*, 10(10), 1231. <https://doi.org/10.3390/bioengineering10101231>

Al-Rawi, M., Belkacemi, D., & Al-Jumaily, A. M. (2023). Mesh independency analysis for aorta geometry using a computational modelling approach. In ASME (Ed.), *Proceedings of the ASME 2023 International Mechanical Engineering Congress and Exposition IMECE2023* (pp. 1-6).

Al-Rawi, M., Wang, L., & Zhou, H. (2023). A computational fluid dynamics approach for hospitalization at home during the pandemic. In ASME (Ed.), *Proceedings of the ASME 2023 International Mechanical Engineering Congress and Exposition IMECE2023* (pp. 1-6).

Al-Rawi, M., Zheng, L., & Best, R. (2023). Explicit and computational fluid dynamics analysis of a novel polo helmet design: A parametric study. *ASME Journal of Engineering and Science in Medical Diagnostics and Therapy (JESMDT)*, 7(4), 1-38. <https://doi.org/10.1115/1.4063650>

Al-Rawi, M., & Zhou, H. (2023). A computational fluid dynamics approach for hospitalization at home during the pandemic. *Proceedings of the ASME 2023 International Mechanical Engineering Congress and Exposition*. <https://doi.org/10.1115/IMECE2023-110371>

Asker, M., Al-Rawi, M., & Genceli, H. (2023). Numerical analysis of phase change material filled with metal foam inside a cylindrical capsule. *Energy Storage*, 2023(e479), 1-10. <https://doi.org/10.1002/est2.479>

Auckaili, A., Hayatina, I., & Al-Rawi, M. (2023). A study of flipped classroom approach in chemical engineering core courses. *34th Australasian Association for Engineering Education* (pp. 1-9).

Belkacemi, D., Abbes, M. T., Al-Rawi, M., Al-Jumaily, A., Bachene, S., & Laribi, B. (2023). Intraluminal thrombus characteristics in AAA patients: Non-invasive diagnosis using CFD. *Bioengineering*, 10(5), 540. <https://doi.org/10.3390/bioengineering10050540>

Du, Z., Zhou, H., Aghazadegan, L., & Brightwell, R. (2023). Geotechnical design for severe liquefiable ground improvement with Subsurface Compacted Rubble Raft (SCRR) technology: A Waikato Region Case Study. *NZ Geomechanics News*, 106, 68-82.

Enteshari, S. (2023). Identification of sustainability's threshold concept(s) among multi-discipline engineering students [Doctoral thesis] The University of Waikato.

- Fox-Turnbull, W. H., Moridnejad, M., Docherty, P. D., & Cooper, J. (2023).** Influencing factors on women in connection with engineering in New Zealand: A triad of lenses. *International Journal of Technology and Design Education*, 22. <https://doi.org/10.1007/s10798-023-09854-6>
- Govindan, S., Ramos, M., & Al-Jumaily, A. (2023).** A review of biodegradable polymer blends and polymer composite for flexible food packaging application. In *Material Science Forum*, 1094, (pp. 51-60). <https://doi.org/10.4028/p-DC7WkH>
- Govindan, S., Ramos, M., & Al-Jumaily, A. (2023).** On the effect of monomeric and polymeric plasticizer on polybutylene succinate (PBS), polyhydroxybutyrate (PHB), and polylactic acid (PLA) films with 20wt%PCL for flexible packaging application. In *Material Science Forum*, 1087, (pp. 3-12). <https://doi.org/10.4028/p-6t4277>
- Hwang, K., Kim, H., Al-Rawi, M., & Kim, S. (2023).** Designing foldable helmets for micro-mobility using sustainable materials. *Archives of Design Research*, 36(2), 129-143. <https://doi.org/10.15187/adr.2023.05.36.2.129>
- Kim, S., & Kim, H. (2023).** Transformable helmet design for micro-mobility. *Archives of Design Research*, 3(36), 49-65. <https://doi.org/10.15187/adr.2023.08.36.3.49>
- Partow, N., Moridnejad, M., Irannezhad, E., Parizadeh, M., & Dadpour, R. (2023).** Systematic oppression of tertiary education in Iran under the Islamic Republic. *Higher Education Policy*, 15. <https://doi.org/10.1057/s41307-023-00321-4>
- Ramos, M., Govindan, S., & Al-Jumaily, A. (2023).** Property improvement of polybutylene succinate (PBS), polyhydroxybutyrate (PHB), and polylactic acid (PLA) films with PCL (Polycaprolactone) for flexible packaging application. *Material Science Forum*, 1087, 41-50. <https://doi.org/10.4028/p-69s7ix>
- Rsetam, K., Al-Rawi, M., Al-Jumaily, A., & Cao, Z. (2023).** Finite time disturbance observer based on air conditioning system control scheme. *Energies*, 16(14), 1-28. <https://doi.org/10.3390/en16145337>
- Rsetam, K., Al-Rawi, M., Cao, Z., & Man, Z. (2023).** Sliding mode control based on high-order extended state observer for flexible joint robot under time-varying disturbance. In *AIP Conference Proceedings (Ed.)*, 8th Engineering and 2nd International Conference for College of Engineering – University of Baghdad, Vol. 050011 (pp. 1-9). <https://doi.org/10.1063/5.0105416>
- Wang, L., & Al-Rawi, M. (2023).** Holographic terahertz imaging for breast cancer detection. In *ASME (Ed.), Proceedings of the ASME 2023 International Mechanical Engineering Congress and Exposition IMECE2023* (pp. 1-6).
- Wang, L., & Al-Rawi, M. (2023).** Holographic terahertz imaging for breast cancer detection. *ASME Journal of Engineering and Science in Medical Diagnostics and Therapy (JESMDT)*, 7(4), 1-19. <https://doi.org/10.1115/1.4063599>
- Williams, K., Jones, R. J., & Al-Rawi, M. (2023).** Particulate matter (PM2.5) and mould characteristics in selected classrooms located in Waikato, New Zealand: Preliminary results. *Environments*, 10(10), 182. <https://doi.org/10.3390/environments10100182>
- Wright, C., & Al-Rawi, M. (2023).** One-way fluid structure interaction of a utility vehicle splitter using CFD modelling. *CFD Letters*, 15(12), 34-43. <https://doi.org/10.37934/cfdl.15.12.3443>
- ## 2024
- Aghazadegan, A. A. (2024).** Three-dimensional numerical simulation of mixing patterns at open channel confluences. *Water Science and Engineering [Online first]*. <https://doi.org/10.1016/j.wse.2024.08.001>
- Aghazadegan, L. A. (2024).** Hopuhopu mainstream culvert fish passage assessment [Report]. Hamilton City Council.
- Al-Jumaily, A. M., Al-Rawi, M., Belkacemi, D., Sascău, R. A., Stătescu, C., Țurcanu, F. E., & Anghel, L. (2024).** Computational modeling approach to profile hemodynamical behavior in a healthy aorta. *Bioengineering*, 11(9), <https://doi.org/10.3390/bioengineering11090914>
- Al-Rawi, M., Belkacemi, D., & Al-Jumaily, A. M. (2024).** Comparison of laminar and turbulent k-omega shear stress transport models under realistic boundary conditions using clinical data for arterial stenosis. *Journal of Engineering and Science in Medical Diagnostics and Therapy*, 8(3), 031001. <https://doi.org/10.1115/1.4066258>
- Al-Rawi, M., Belkacemi, D., Lim, E. T. A., & Khashram, M. (2024).** Investigation of type A aortic dissection using computational modelling. *Biomedicines*, 12(9). <https://doi.org/10.3390/biomedicines12091973>
- Al-Rawi, M., Kim, H., & Kim, S. (2024).** Assignment to engagement to employability. In *The engineer and the world: 35th Australasian Association for Engineering Education [Vol. 1]*, (pp. 1-10).
- Du, Z., & Zhou, H. (2024).** Geotechnical design for severe liquefiable ground improvement with SCRR technique: Waikato case study. *NZSEE 2024 Annual Conference* (pp. 1-11).
- Enteshari, S., Fox-Turnbul, W., Scott, J., & Male, S. (2024).** Correlation between engineering students' perceptions of sustainability and their understanding of the threshold concepts in their disciplines. In *35th Australasian Association for Engineering Education (AAEE)*, Christchurch.
- Heidarnejad, P., Genceli, H., Hashemian, N., Asker, M., & Al-Rawi, M. (2024).** Biomass-fueled organic rankine cycles: State of the art and future trends. *Energies*, 17(15), 1-30. <https://doi.org/10.3390/en17153788>
- Hill, D., Tito, S. R., Walmsley, M., & Hedergren, J. (2024).** Techno-economic optimization of a hybrid energy system with limited grid connection in pursuit of net zero carbon emissions for New Zealand. *Electronics and Energy*, 8, 100564. <https://doi.org/10.1016/j.prime.2024.100564>

- Iarriccio, G., Zippo, A., Eskandarymalayery, F., Ilanko, S., Mochida, Y., Mace, B., & Pellicano, F. (2024). Tunable high-static-low-dynamic stiffness isolator under harmonic and seismic loads. *Vibration*, 7(3), 829-843. <https://doi.org/10.3390/vibration7030044>
- Moridnejad, M., Fox Turnbull, W., & Rangarajan, S. (2024). Experiences of indigenous women of New Zealand (Māori) in engineering and engineering trades. *Australasian Journal of Engineering Education* [Online first]. <https://doi.org/10.1080/22054952.2024.2430156>
- Opperman, A., & Carlyon, T. (2024). Supporting academic staff through internal secondments in tertiary education: The role of leadership. *Leading and Managing*, 30(1), 24-35. <https://search.informit.org/doi/10.3316/informit.T2025011100011090264936948>
- Parkash, B., Lie, T. T., Li, W., & Tito, S. R. (2024). End-to-end top-down load forecasting model for residential consumers. *Energies*, 17, 2550. <https://doi.org/10.3390/en17112550>
- Pasandideh, M., Taylor, M., Tito, S. R., Atkins, M., & Apperley, M. (2024). Predicting steam turbine power generation: A comparison of long short-term memory and Willans line model. *Energies*, 17, 352. <https://doi.org/10.3390/en17020352>
- Rsetam, K., Al-Rawi, M., Cao, Z., Alsadoon, A., & Wang, L. (2024). Model based smooth super-twisting control of cancer chemotherapy treatment. *Computers in Biology and Medicine*, 169(2024), 1-12. <https://doi.org/10.1016/j.combiomed.2024.107957>
- White, D. E., Kim, H. C., Al-Rawi, M., Yuan, X., & Sojan, T. (2024). Pilot study investigating effects of changing process variables on elastic and energy-absorbing characteristics in polyurethane/agglomerated cork mix for use in micro-transport helmet. *Materials*, 17(8). <https://doi.org/10.3390/ma17081925>
- Centre for Health and Social Practice**
2023
- Andersen, P., Broman, P., Tokolahi, E., Yap, J-R., & Brownie, S. (2023). Determining a common understanding of interprofessional competencies for pre-registration health professionals in Aotearoa New Zealand: A Delphi study. *Frontiers in Medicine*, 1-13. <https://doi.org/10.3389/fmed.2023.1119556>
- Belcher, S., Whatman, C., Brughelli, M., & Borotkanics, R. (2023). Improved performance in youth netballers using two different length netball specific warm-ups. *International Journal of Sports Science & Coaching*, 18(1), 231-239. <https://doi.org/10.1177/17479541221077252>
- Brownie, S., Blanchard, D., Amankwaa, I., Broman, P., Haggie, M., Logan, C., Pearce, A., Kovanur Sampath, K., Yan, A-R., & Andersen, P. (2023). Tools for faculty assessment of interdisciplinary competencies of healthcare students: an integrative review. *Frontiers in Medicine*, 10, 1124264, 1-19. <https://doi.org/10.3389/fmed.2023.1124264>
- Brownie, S., Yan, A-R., Broman, P., Comer, L., & Blanchard, D. (2023). Geographic location of students and course choice, completion, and achievement in higher education: A scoping review. *Equity in Education & Society* [Online first], 1-21. <https://doi.org/10.1177/27526461231200280>
- Chu, J., Dymus-Kurei, J., McCormack, J., McLachlan, A., Marsh, S., Wilson, H., & Newcombe, D. (2023). Identifying strategic research priorities of stakeholders for fetal alcohol spectrum disorder in Aotearoa. *Journal of the Royal Society of New Zealand* [Online first], 1-16. <https://doi.org/10.1080/03036758.2023.2241847>
- Cleaver, D. (2023). Decolonising midwifery education in Aotearoa: A case study approach [Master's thesis]. University of Waikato.
- Collins, C. M., van der Merwe, F. H., Rainey, A. J., Kovanur Sampath, K., & Belcher, S. C. (2023). Youth field hockey coaches' perspectives and use of sports recovery strategies. *The Journal of Sports and Exercise Science*, 7(3), 37-44. <https://doi.org/10.36905/jses.2023.03.05>
- Greenwood, J., & McClunie-Trust, P. (2023). The lived experience of adults with psoriasis: A meta-synthesis. *Kaitiaki Nursing Research*, 14(1), 25-40.
- Kovanur Sampath, K., Ann-Rong, Y., Haggie, M., Tapara, T., & Brownie, S. (2023). Exploring the option of student-run free health clinics to support people living with type 2 diabetes mellitus: A scoping review. *Frontiers in Public Health*, 11, 1-8. <https://doi.org/10.3389/fpubh.2023.1128617>
- Kovanur Sampath, K., Belcher, S., Hales, J., Thomson, O. P., Farrell, G., Gisselman, A. S., Katare, R., & Tumilty, S. (2023). The role of micro-RNAs in neuropathic pain—a scoping review. *Pain Reports*, 8(6), e1108. <https://doi.org/10.1097/PR9.0000000000001108>
- McLachlan, A. (2023). Pari kawai live skills [app]. Waikato: Te Rau Ora. Retrieved from <https://terauora.com/pari-kawai/>.
- McLachlan, A., Kingi, T., Waitoki, W., Cribb-Fox, M., & Cribb-Fox, W. (2023). Te Whare o Oro: A mātauranga Māori framework for understanding the roro. Te Atawhai o Te AO.
- McLachlan, A., Pitama, S., & Adamson, S. (2023). Māori preferences and practices in systemic health and social service collaborative practice. *AlterNative: An International Journal of Indigenous Peoples*, [Online first], 1-13. <https://doi.org/10.1177/117718012311938>
- Sibley, E., & Mercer, C. (2023). Management of behavioural and psychological symptoms of dementia (BPSD): An integrative review. *Kaitiaki Nursing Research*, 14(1), 41-49.
- Valentine, H., Waitoki, W., McLachlan, A., & Roche, M. (2023). Mauri Ora – Remembering the essence of wellbeing for Māori. In Pihama, L., & Smith, L (Eds.), *Ora: Healing ourselves – Indigenous knowledge, healing and wellbeing* (pp. 159-176). Wellington.

- Valentine, H., Waitoki, W., McLachlan, A., & Roche, M. (2023). Tangihanga – Culture and healing in Māori psychology. In Pihama, L., & Smith, L. (Eds.), *Ora: Healing ourselves – Indigenous knowledge, healing and wellbeing* (pp. 177-192). Wellington.
- Wilson, O. W. A., Broman, P., Tokolahi, E., Andersen, P., & Brownie, S. (2023). Learning outcomes from participation in student-run health clinics: A systematic review. *Journal of Multidisciplinary Healthcare*, 16, 143-157. <https://doi.org/10.2147/JMDH.S385709>
- Winnington, R., Shannon, K., Turner, R., Jarden, R., McClunie-Trust, P., Jones, V., Merrick, E., Donaldson, A., & MacDiarmid, R. (2023). Learning experiences of first year graduate entry nursing students in New Zealand and Australia: A qualitative case study. *BMC Nursing*, 22(74), 1-12. <https://doi.org/10.1186/s12912-023-01233-9>
- Yap, J. R., Broman, P. D., Andersen, P., & Brownie, S. (2023). Learning by doing: Students' experiences of interprofessional education and community partnership in a pilot student-run clinic. A Practice Report. *Student Success [Online First]*, 1-8. <https://doi.org/10.5204/ssj.3089>
- ## 2024
- Belcher, S., Kearney, S., Brughelli, M., Hardaker, N., & Whatman, C. (2024). NetballSmart: Implementation of a national injury prevention program. *Women in Sport and Physical Activity Journal*, 32, 1-9. <https://doi.org/10.1123/wspaj.2024-0008>
- Belcher, S., Larmer, P., Christopherson, R., & Kovanur Sampath, K. (2024). Physiotherapy students' perspectives of a blended learning approach through the COVID-19 pandemic years. *The New Zealand Journal of Physiotherapy*, 52(1), 8-16. <https://doi.org/10.15619/nzjp.v52i1.343>
- Belcher, S., Larmer, P., Christopherson, R., & Kovanur Sampath, K. (2024). Physiotherapy students' perspectives of a blended learning approach through the COVID-19 pandemic years. *New Zealand Journal of Physiotherapy*, 51(1), 8-16. <https://doi.org/10.15619/nzjp.v52i1.343>
- Broman, P. (2024). A 'usable past'? Irish affiliation in CANZUS settler states. *Genealogy*, 8(3), 79-93. <https://doi.org/10.3390/genealogy8030079>
- Brownie, S., Broman, P., Comer, L., Cooney, C., & de Wet Fourie, L. (2024). Towards a regionally responsive network: Implementation challenges in New Zealand's reforms to vocational education. *Policy Quarterly*, 20(2), 17-28. <https://doi.org/10.26686/pq.v20i2.9479>
- Brownie, S., Broman, P., Cooney, C., & Comer, L. (2024). Equity of access and participation in tertiary education in Aotearoa New Zealand: The tale of three regions. *Kōtuitui: New Zealand Journal of Social Sciences Online [Online first]*, 1-24. <https://doi.org/10.1080/1177083X.2024.2319118>
- Brownie, S., Yap, J., Blanchard, D., Amankwaa, I., Pearce, A., Kovanur Sampath, K., Yan, A. R., Andersen, P., & Broman, P. (2024). Tools for self-or peer-assessment of interprofessional competencies of healthcare students: a scoping review. *Frontiers Media SA*, 11, 1449715. <https://doi.org/10.3389/fmed.2024.1449715>
- Brownie, S., Yap, J. R., Blanchard, D., Amankwaa, I., Pearce, A., Kovanur Sampath, K., Yap, A.-R., Andersen, P., & Broman, P. (2024). Tools for healthcare student self-assessment and peer-assessment of interprofessional competencies: A scoping review. *Frontiers in Medicine*, 11, 1449715. <https://doi.org/10.3389/fmed.2024.1449715>
- Cleaver, D. (2024). The shared journey of induced lactation: A case study. *New Zealand College of Midwives Journal*, 60, Article 246007. <https://doi.org/10.12784/nzcomjnl.246007>
- Collis, J. M., Barradell, S., Broman, P., & Brownie, S. (2024). University staff insights on interprofessional education and student-led clinic opportunities at an Australian university. *Journal of Multidisciplinary Healthcare*, 2024(17), 305-315. <https://doi.org/10.2147/JMDH.S447690>
- Farrell, G., Chapple, C., Kennedy, E., Reily-Bell, M., Kovanur Sampath, K., Gisselman, A. S., Cook, C., Katare, R., & Tumilty, S. (2024). Autonomic nervous system and endocrine system response to upper or lower cervical spine mobilization in males with persistent post-concussion symptoms: A proof-of-concept trial. *Journal of Manual & Manipulative Therapy*, 32(6). <https://doi.org/10.1080/10669817.2024.2363018>
- Fyers, K. (2024). Entanglements, shadows, and dissonance: Formations of socio-political knowing in nursing. A critical inquiry [Doctoral thesis]. Te Herenga Waka-Victoria University of Wellington.
- Gilbertson, S., & McClunie-Trust, P. (2024). In adults living with epilepsy, does behaviour therapy improve well-being? An integrative review. *Kaitiaki Nursing Research*, 15, 19-43.
- Jones, V., McClunie-Trust, P., MacDiarmid, R., Turner, R., Shannon, K., Winnington, R., Brown, A., Dewar, J., & Jarden, R. (2024). Education pathways for graduate entry registered nurses to transition to advanced practice roles: A realist review. *Nurse Education Today*, 133, 106032. <https://doi.org/10.1016/j.nedt.2023.106032>
- Kovanur Sampath, K., Darlow, B., Tumilty, S., Shillito, W., Fairs, E., Devan, H., & Thomson, O. (2024). "Disproportionate Olympic Rings" – The usage of a biopsychosocial (BPS) framework of care when managing people with musculoskeletal pain by osteopaths in Aotearoa/New Zealand – A qualitative study. *International Journal of Osteopathic Medicine*, 54, 1-12. <https://doi.org/10.1016/j.ijosm.2024.100728>
- Kovanur Sampath, K., Treffel, L., Thomson, O., Draper-Rodi, J., Fleischmann, M., & Tumilty, S. (2024). Changes in biochemical markers following a spinal manipulation—a systematic review update. *Journal of Manual & Manipulative Therapy*, 32(1), 28-50. <https://doi.org/10.1080/10669817.2023.2252187>

- Kovanur Sampath, K., Tumilty, S., Wooten, L., Belcher, S., Farrell, G., & Gisselman, A. S. (2024). Effectiveness of spinal manipulation in influencing the autonomic nervous system – A systematic review and meta-analysis. *Journal of Manual & Manipulative Therapy*, 32(1), 10-27. <https://doi.org/10.1080/10669817.2023.2285196>
- Kovanur Sampath, K., Smith, T., Belcher, S., Farrell, G., Fryer, G., Vaughan, B., & Moran, R. (2024). Diagnosing and treating upper back pain: Insights from New Zealand's manipulative physiotherapists and osteopaths. *Journal of Manual & Manipulative Therapy* [Online first], 1-9. <https://doi.org/10.1080/10669817.2024.2438196>
- McClunie-Trust, P. (2024). Editorial: Ensuring our nursing research sees the light of day. *Kaitiaki Nursing Research*, 15, 3-4.
- McClunie-Trust, P., Jarden, R., Marriott, P., Winnington, R., Dewar, J., Shannon, K., Jones, V., Jones, S., Turner, R., Cochrane, L., & MacDiarmid, R. (2024). Graduate entry nursing students' development of professional nursing self: A scoping review. *International Journal of Nursing Studies*, 151, 104670. <https://doi.org/10.1016/j.ijnurstu.2023.104670>
- McChesney, R., & McClunie-Trust, P. (2024). Anticipatory prescribing. *NZ Doctor*, 31-36.
- McIntyre, C., Draper-Rodi, J., Ferreira, A., Muddle, L., McLeod, G., Kovanur Sampath, K., Sposato, N., & Vaughan, B. (2024). Characteristics of the practice of New Zealand osteopaths who manage patients with chronic pain. *Pain management*, 14(12), 625-632. <https://doi.org/10.1080/17581869.2024.2436836>
- McLachlan, A., Kingi, T., Waitoki, W., Wirihana, R., Hoeta, A., Kinred, S., Pehi, P., Harris, P., & Jones, H. (2024). The TOHU Framework: Sensing and interpreting toho to heal from trauma. *Explore*, 1, 22-56. <https://doi.org/10.1016/j.explore.2024.103017>
- McLachlan, A., Smith, C., & Sampson, J. (2024). Nature-wellbeing connection: A literature review of measurements of connection to nature within Indigenous wellbeing. Part 1. *Journal of Indigenous Wellbeing*, 7(1), 54-67.
- McLachlan, A., & Waitoki, W. (2024). Tawhiti: An indigenous trauma-informed harm reduction approach to alcohol and other drug use. *Journal of Indigenous Wellbeing*, 7(1), 21-36.
- Monk, N. J., Cunningham, R., Stanley, J., Fitzjohn, J., Kerdelmelidis, M., Lockett, H., McLachlan, A. D., Porter, R., Waitoki, W., & Lacey, C. (2024). Inequity in cardiometabolic hospital admissions and blood screening in New Zealand indigenous Māori with psychosis. *BJPsych Open*, 10, e159, 1-9. <https://doi.org/10.1192/bjo.2024.759>
- Monk, N. J., Cunningham, R., Stanley, J., Crengle, S., Fitzjohn, J., Kerdelmelidis, M., Lockett, H., McLachlan, A. D., Waitoki, W., & Lacey, C. (2024). The physical health and premature mortality of Indigenous Māori following first episode psychosis diagnosis: A 15-year follow-up study. *Australian & New Zealand Journal of Psychiatry*, 7(1), 54-67. <https://doi.org/10.1177/00048674241270981>
- Rainey, A. J., Collins, M. C., van der Merwe, F. H., Kovanur Sampath, K., & Belcher, S. (2024). Youth field hockey players' perceptions and utilisation of sports recovery strategies. *Journal of Australian Strength & Conditioning*, 32(4), 1-9.
- Shannon, K., McClunie-Trust, P., Macdiarmid, R., Jarden, R., Dewar, J., Turner, R., Winnington, R., Mowatt, R., & Jones, V. (2024). Graduate entry nursing students' wellbeing and transformation in becoming RNs: A longitudinal case study. *Collegian*, 31, 74-83. <https://doi.org/10.1016/j.colegn.2023.12.001>
- Smith, C., McLachlan, A., & Sampson, J. (2024). Connectedness to nature deeply impacts our wellbeing: Kōrero and themes from iwi taiao knowledge holders - Part 2. *Journal of Indigenous Wellbeing*, 7(1), 68-77.
- Yap, J-R., Broman, P., Longhurst, G., & Brownie, S. (2024). Student-run falls prevention programmes for older adult community members: A pilot study. *Journal of Primary Health Care* [Online first], 1-5. <https://doi.org/10.1071/HC24057>
- Vaughan, B., Fleischmann, M., Cerritelli, F., Draper-Rodi, J., Feehan, J., Ferreira, A., McLeod, G., Morin, C., Muddle, L., Kovanur Sampath, K., Thomson, O., Tripodi, N., Steel, A., & Adams, J. (2024). Systematic reviews of osteopathic care: Protocol for an umbrella review. *Physical Therapy Reviews*, 29(1-3), 1-4. <https://doi.org/10.1080/10833196.2024.2321558>
- Walker, A. J. M., & Schott, G. (2024). Western expansionism via subject-dispersing technologies: Impacts for indigenous personhood and the digital afterlife in postcolonial Aotearoa New Zealand. *English Language Notes*, 62(2), 36-48. <https://doi.org/10.1215/00138282-11343943>
- Wembri, E., Chin, M., & McClunie-Trust, P. (2024). A report on the impact of immigration detention on the health and wellbeing of refugees and asylum seekers. *Ethnographic Edge*, 7(1), 21-41. <https://doi.org/10.24135/ee.v7i1.267>
- Wesselink, R., McClunie-Trust, P., & Stewart, K. (2024). Transforming learning in nursing bioscience through blended learning and a flipped classroom approach: a prospective cohort study. *Teaching and Learning in Nursing* [Online first] <https://doi.org/10.1016/j.teln.2024.12.004>

Centre for Information Technology 2023

Adihetti, R., & Jayalal, S. (2023). Sinhala Language Fake News Detection in Social Media using Autoencoder-based Method. *International Research Conference on Smart Computing and Systems Engineering*, 6, (pp. 1-8). <https://doi.org/10.1109/SCSE59836.2023.10215013>

Attygalle, T I., Withanaarachch, A S., & Jayalal, S. (2023). Factors influencing the success of software startups in Sri Lanka: A comparative analysis using SmartPLS & SEMinR. *International Research Conference on Smart Computing and Systems Engineering*, 6, (pp. 1-8). <https://doi.org/10.1109/SCSE59836.2023.10215016>

Bai, Y., Bosu, M., & Abuaiadah, D. (2023). Predicting learning outcomes in an online learning platform. *Conference of Computing and Information Technology Research and Education New Zealand (CITRENZ)* (pp. 1-15).

Deshan, P D R., & Jayalal, S. (2023). Personalized ASD interventions recommendation for Sri Lankan patients. *5th International Conference on Advancements in Computing (ICAC)* (pp. 774-779). <https://doi.org/10.1109/ICAC60630.2023.10417605>

Dissanayake, N. R., Kasthurirathna, D., & Jayalal, S. (2023). Features for a style for push-communication integrated rich web-based applications. *Journal of Web Engineering*, 3, 515-542. <https://doi.org/10.13052/jwe1540-9589.2236>

Hassan, K M I., Jayalal, S., & Withanaarachchi, A. (2023). A study on factors for adopting B2C digital marketplace in the colombo district multi-purpose cooperative societies Sri Lanka. *Proceedings of the Annual Research Conference on Sustaining Excellence through Multi-Disciplinary Research* (pp. 157-165).

Munasinghe, N., Jayalal, S., & Wijayasiriwardhane, T. (2023). Interpretation of Sri Lankan sign language: A wearable sensor-based approach. *2023 International Research Conference on Smart Computing and Systems Engineering (SCSE)* (pp. 1-8). <https://doi.org/10.1109/SCSE59836.2023.10214999>

Munasinghe, N. K., Yapa, Y. K., Jayalal, S., & Wijayasiriwardhane, T. K. (2023). Literature review on sign language translation approaches on Sinhala sign language: A survey. *14th Applied Science, Business & Industrial Research Symposium – 2022 (ASBIRES – 2022)*, 14 (pp. 66-72).

Rasingolla, R. W. L. M. S. B., & Jayalal, S. (2023). Software development trend prediction: A survey. *14th Applied Science, Business & Industrial Research Symposium – 2022 (ASBIRES – 2022)*, (pp. 91-95).

Samarakoon, J. S. M. A. N., & Jayalal, S. (2023). Sinhala font recognition using transfer learning: Literature review. *14th Applied Science, Business & Industrial Research Symposium – 2022 (ASBIRES – 2022)*, 14, (pp. 85-90).

Te Momo, H. (2023). An investigation of mobile augmented reality: For Waharoa on Te Kōpū Mānia o Kirikiriroa Marae [Master's thesis]. University of Waikato.

2024

Jayasekera, R. M., & Jayalal, S. (2024). Factors influencing the utilization of cloud optimization tools among DevOps engineers: Insights from a software development company in Sri Lanka. *Vallis Aurea: Journal of Sustainable Development and Innovation*, 10, 39-56. <https://doi.org/10.62598/JVA.10.1.4.4>.

Kumesh, T., Jayalal, S., & Wijayasiriwardhane, T. K. (2024). Transforming software size estimation with prompt engineering: A ChatGPT-based framework for component-based systems. *24th International Conference on Advances in ICT for Emerging Regions (ICTer 2024)* (pp. 1-10).

Sarathchandra, K., & Jayalal, S. (2024). An aspect based sentiment analysis model applicable for a domain with a small labeled data set. *2024 Moratuwa Engineering Research Conference (MERCon)* (pp. 718-723). <https://doi.org/10.1109/MERCon63886.2024.10689168>

Samarakoon, P., Asanka, D., Jayalal, S., & Jayalath, N. (2024). Analyzing the learning effectiveness of generative ai for software development for undergraduates in Sri Lanka. *2024 International Research Conference on Smart Computing and Systems Engineering (SCSE), Colombo, Sri Lanka* (pp. 1-7). <https://doi.org/10.1109/SCSE61872.2024.10550837>

Centre for Languages 2023

Deane, L., Kearney, C., & Roodt, J. H. (2023). Exploring the complex issues of nutrient pollution in the dairy farm context: A transdisciplinary journey. *Scope: Work-Based Learning*, 5, 69-80. <https://doi.org/10.34074/scop.6005009>

Gedera, D. S. P., & Fester, A. M. (2023). Integrating ePortfolios to facilitate collaborative learning and reflection in an EAP context. *Teaching English with Technology*, 23(1), 108-122. <https://doi.org/10.56297/BKAM1691/VZBA3686>

Kearney, C. (2023). *Southern Celts: Stories from people of Irish and Scottish descent in Aotearoa*. Mary Egan Publishing.

Ryan, J., Foster, P., Fester, A., Wang, Y., Field, J., Kearney, C., & Yap, J. R. (2023). L1 literacy and L2 oracy: A partial replication of Foster & Skehan (1996). *Language Learning*, 73(4), 1345-1368. <https://doi.org/10.1111/lang.12557>

Wang, Y., & Ryan, J. (2023). The complexity of control shift for learner autonomy: A mixed-method case study of Chinese EFL teachers' practice and cognition. *Language Teaching Research*, 27(3), 518-543. <https://doi.org/10.1177/136216882095792>

2024

Fester, A. (2024). First thoughts: Diversity, equity and inclusion. *Modern English Teacher*, 33(4), 5-6.

Fester, A., & Thrikawala, S. (2024). Challenges facing women who are small business owners and have English as an additional language in the Waikato region, New Zealand: An explorative inquiry. *Scope: Work-Based Learning*, 6, 51-61.

Ryan, J., Foster, P., Wang, Y., Fester, A., & Rap, J. R. (2024). Task design, L1 literacy and second language oracy: A close replication of Tavakoli and Foster (2008). *Studies in Second Language Acquisition*, 46(5), 1475-1492. <https://doi.org/10.1017/S0272263124000445>

Centre for Sport Science and Human Performance 2023

Al-Rawi, M., Zheng, L., & Best, R. (2023). Explicit and computational fluid dynamics analysis of a novel polo helmet design: A parametric study. *ASME Journal of Engineering and Science in Medical Diagnostics and Therapy* [Online first], 1-38. <https://doi.org/10.1115/1.4063650>

Best, R. (2023). A review of the digestive, respiratory and nociceptive benefits, associated performance outcomes and clinical considerations following mint and menthol application. *Medical Research Archives*, 11(1), 3321. <https://doi.org/10.18103/mra.v11i1.3321>

Best, R., Williams, J. M., & Pearce, J. (2023). The physiological requirements of and nutritional recommendations for equestrian riders. *Nutrients*, 15(23), 4977. <https://doi.org/10.3390/nu15234977>

Brownie, S., Blanchard, D., Amankwaa, I., Broman, P., Haggie, M., Logan, C., Pearce, A., Sampath, A., Yan, A., & Andersen, P. (2023). Tools for faculty assessment of interdisciplinary competencies of healthcare students: An integrative review. *Frontiers in Medicine*, 10, 1-19. <https://doi.org/10.3389/fmed.2023.1124264>

Collins, C. M., van der Merwe, F. H., Rainey, A. J., Kovanur Sampath, K., & Belcher, S. C. (2023). Youth field hockey coaches' perspectives and use of sports recovery strategies. *The Journal of Sport and Exercise Science*, 7(3), 37-44. <https://doi.org/10.36905/jses.2023.03.05>

Kovanur Sampath, K., Ann-Rong, Y., Haggie, M., Tapara, T., & Brownie, S. (2023). Exploring the option of student-run free health clinics to support people living with type 2 diabetes mellitus: A scoping review. *Frontiers in Public Health*, 11, 1-9. <https://doi.org/10.3389/fpubh.2023.1128617>

Maggie, M. B. P., Saga, N., & van der Merwe, F. H. (2023). Quantifying and comparing the physical characteristics of sub-elite level university age rugby players from New Zealand and Japan. *Journal of Australian Strength and Conditioning*, 31(7), 7-16.

2024

Berger, N. J. A., Best, R., Best, A. W., Lane, A. M., Millet, G. Y., Barwood, M., Marcora, S., Wilson, P., & Bearden, S. (2024). Limits of ultra: Towards and interdisciplinary understanding of ultra-endurance running performance. *Sports Medicine*, 54, 73-93. <https://doi.org/10.1007/s40279-023-01936-8>

Brownie, S., Yap, J. R., Blanchard, D., Amankwaa, I., Pearce, A. E., Kovanur Sampath, K., Yan, A., Andersen, P., & Broman, P. (2024). Tools for healthcare student self-assessment and peer-assessment of interprofessional competencies: A scoping review. *Frontiers in Medicine Healthcare Professions Education*, 11. <https://doi.org/10.3389/fmed.2023.1124264>

Forbes, S., Best, R., & Dominguez, R. (2024). Dietary supplements and ergogenic aids in relation to health and performance. *Frontiers in Sports and Active Living*, 6, <https://doi.org/10.3389/fspor.2024.1450604>

Rainey, A. J., Collins, C. M., van der Merwe, F. H., Kovanur Sampath, K., & Belcher, S. (2024). Youth field hockey players' perceptions and utilisation of sports recovery strategies. *Journal of Australian Strength and Conditioning*, 32(4), 16-24.

School of Media Arts 2023

Bannister, M. (2023). *The Front Lawn's Songs from the Front Lawn*. (1st ed.). Bloomsbury Academic.

Bannister, M. (2023). *The Changing Same Go to the Movies* [Album]. Powertool Records.

Bannister, M. (2023). "Both sides now": Folk-rock authorship, interpretation, and the cover version. *Popular Music & Society*, 46(4), 1-21. <https://doi.org/10.1080/03007766.2023.2252267>

Bannister, M. (2023). Joker to the thief: Trickster guitarists in 1970s stadium rock. *Metal Music Studies*, 9(2), 151-169. https://doi.org/10.1386/mms_00103_1

Booth, J. (Performer), Mayall, J. (Performer), Macpherson, K. (Performer), Levy, Y. (Performer), & Bradley, P. (Artist). (2023). *Dr Mesmers private army and lower bar collective*. [Performance]. Meteor, Hamilton, New Zealand, October 27.

Braae, N. (2023). Pop-rock authenticity, intertextuality, and humour in the films of Adam McKay and Will Ferrell. In Audissino, E. & Wennekes, E. (Eds.), *The Palgrave handbook of film music and comedy* (pp. 139-153). New York.

Braae, N., Mayall, J., Sidwell, D., & Chuen, K. (2023). Scoring loss in a contemporary New Zealand musical. *IASPM Journal*, 13(1), 1-17. [https://doi.org/10.5429/2079-3871\(2023\)v13i1.11en](https://doi.org/10.5429/2079-3871(2023)v13i1.11en)

- Citizen, J. (2023).** Aligning the vibrations: Resounding matters. *Junctures: The Journal for Thematic Dialogue*, 23, 9-21. <https://doi.org/10.34074/junc.23002>
- Foster, J. (2023).** Kikini o te rehutai. [Design Output]. Tauranga City Council: New Zealand.
- Foster, J. (Curator), & McConnell, L. O. (Curator). (2023).** Hear us out 2023 - Toi Ohomai. [Curatorial Exercise]. Creative Hub, Toi Ohomai Windermere Campus: Tauranga, New Zealand, 23 February - 28 March.
- Foster, J. & McConnell, L. O. (2023).** Hear us out: The elders edition. [Curatorial Exercise]. RAMP Gallery: Hamilton, New Zealand, 25 Oct - 1 Nov. <https://rampgallery.co.nz/exhibitions/heres-us-out/>.
- Green, T. (2023).** Doubt (again) ArtSpace at Realm. 20 November 2023 - 28 January 2024 ArtSpace Curator: Gareth Syvret Essay: Tamsin Green Design: Mary Callahan ISBN: 978-0-6456169-1-0. Melbourne, Australia.
- Harman, R. M. (Work exhibited). (2023).** CTANZ 21. [Colouration practices, 6 works (hand dyed, stitched textiles)]. Group exhibition. Curated by I. Stockwell, Waitaki Museum & Archive, 15 April 2023 to 28 May 2023.
- Harman, R., Salmanzadeh, M., Sandoval, N., & Rathinaraj, P. (2023).** Nonylphenols found in a wastewater of activewear garments, after laundering in Aotearoa New Zealand. *International Journal of Clothing Science and Technology*, 35(5), 766-778. <https://doi.org/10.1108/IJCST-11-2022-0157>
- Herangi, T. (Exhibiting Artist). (2023).** Waitangi, why tangi, why we tangi. Earth fired uku mango whai (detail). Group exhibition. Curated by J. R. Collins, Ramp Gallery.
- Herangi, T., Holloway, M., & Citizen, J. (2023).** New shoots from old roots: Te pou ahurei as a learning framework. *Scope: Contemporary Research Topics (Learning and Teaching)*, 12, 9-16. <https://doi.org/10.34074/scop.4012010>
- Kerr, V., & Bannister, M. (2023).** Performing nature unnaturally. [Artefact/Object/Craftwork]. New Zealand: Ramp Gallery, Hamilton.
- Long, J. H. (Sound Design). (2023).** Socrates vs the YouTuber [Film/Video]. New Zealand: Nathan Higgins. <https://www.youtube.com/watch?v=nWcehUy4xYg>.
- Long, J. H. (Sound Designer). (2023).** Surgical precision. [Film/Video]. New Zealand: Zarquons Fish, Flash As Productions.
- Macpherson, P. K. W. (Artist), Lead. (2023).** Cartographic sound map - soundscape ecology project. [Curatorial Exercise]. Ramp Gallery: Hamilton, New Zealand, Nov 29 - 30 Opening Celebration 29 November 2023. <https://thingstodo.events/events/cartographic-sound-map-soundscape-ecology-project>.
- Mayall, J. M. (2023).** Experiential [Composition]. Mayall Creative Ltd.
- Mayall, J. M., & Horo, H. (2023).** Tiaho Pō. Royal NZ Ballet.
- Mayall, J. M. (Performer), & Horo, H. (Performer). (2023).** Chamber music NZ series - AWE. [Performance]. Q Theatre, Auckland, New Zealand, Chamber Music NZ.
- Mayall, J. M. (Composer/Conductor), & Horo, H. (Taonga puoro). (2023).** He Aho Roreka. [Performance]. Putaruru Plaza, New Zealand, Orchestras Central.
- McConnell, L. O., Nicholls, S., & Long, J. (2023).** Socially distant [Interactive light sculpture]. Hamilton, New Zealand: 2023 Kirikiriroa Festival of Weird.
- McConnell, L. O. (2023).** Upon returning [Design Output]. RAMP Press: Hamilton, New Zealand.
- Purdom, M. (2023).** The performing photobook [SLT photobook and 1 minute video "Wheel spin"]. Group exhibition. Curated by Francesca Seravalle, FORMAT International Photography Festival, Derby, UK. 17-19 March 2023.
- Williams, G. C. A. (2023).** "Carbon Work". Prototype sculpture for commission that comprises three limestone parts. [Artefact/Object/Craftwork]. New Zealand: Paeroa, New Zealand.
- Williams, G. C. A. (2023).** 'Nontoxic'. Sculpture. Wood, brass. [Artefact/Object/Craftwork]. New Zealand: Wintec Staff Studios.
- ## 2024
- Bannister, M. (2024).** Folkie Madonnas and founding fathers: Women and authenticity in 1960s-1970s folk rock. *Women and Music: A Journal of Gender and Culture*, 28, 100-120. <https://doi.org/10.1353/wam.2024.a939589>
- Bannister, M. (2024).** Putting the Mockers on: The Rutles, The Beatles, rock biopics and parody. *Panoptikum*, 31, 11-31. <https://doi.org/10.26881/pan.2024.31.01>
- Böhler, K. K., Braae, N., Gamble, S., Sora, A., & Ververka, T. (2024).** Partying and protesting with tUnE-yArDs' "Water fountain". *Samples*, 22, 1-20. <https://gfpm-samples.de/index.php/samples/article/view/330>
- Braae, N., & Brook, L. (2024).** Creating and evaluating impact: A resource for creative arts researchers. Te Pūkenga.
- Braae, N. (2024).** Sweet charity and the musical cosmopolitanism of New York City. In Mittermeier, S., Keller, V. & Smółka, M. (Eds.), *From Broadway to The Bronx: New York City's history through song* (pp. 29-38). Intellect Ltd.
- Braae, N. (2024).** Middlebrow compositional aesthetics in 1970s pop-rock. In Guthrie, K. & Chowrimootoo, C. (Eds.), *The Oxford handbook to music and the middlebrow* (pp. 576-598). Oxford University Press.

Braae, N. (2024). 'Life is Real': The Beatles' Influence on Queen. In Rigg, T. & Mazierska, E. (Eds.), *The Artistry and Legacy of Queen* (pp. 27-39). Bloomsbury.

Braae, N. (2024). The bells are ringing out: The impact(s) of Queen. In Rigg, T. & Mazierska, E. (Eds.), *The artistry and legacy of Queen* (pp. 147-159). Bloomsbury.

Braae, N. (2024). Catch the references if you can: Marc Shaiman and stylistic pastiche. *Studies in Musical Theatre*, 18(2), 139–154. https://doi.org/10.1386/smt_00158_1

Braae, N. (2024). Musical humour and caricatures in *The Book of Mormon*. *Popular Music*, 42(4), 353-374. <https://doi.org/10.1017/S0261143024000059>

Croucher, T. M. (Artist), & Croucher, T. L. (co-Artist). (2024). *The Garden Suites*. [Arcade, oil on canvas, 600mm x 600mm. Cocktail, oil on canvas, 600mm x 600mm. Lost rostrum, oil on canvas, 600mm x 600mm. The Clearing, oil on canvas, 600mm x 600mm. Turret, oil on canvas, 600mm x 600mm. White Fringe, oil on canvas, 600mm x 600mm.]. Group exhibition. Curated by David James, Atelier Gallery, Nelson, New Zealand.

Foster, J. (2024). Te awa koiora. [Design Output]. Te Rautini: New Zealand.

Green, T. (2024). 100 years. [Curatorial Exercise]. Ramp Gallery: Hamilton, New Zealand, 15 February - 31 March.

Green, T. (Curator). (2024). Home: Wintec post grad group exhibition [Curatorial exercise]. Morrinsville Gallery: New Zealand. <https://www.morrinsvillegallery.org.nz/exhibitions/>.

Green, T., Pahoki, S., Chantel, M., & Jezdic, D. (2024). It's better that Aries and Virgo talk to a wall than talk to each other - A Collaboration [Curatorial exercise]. Ramp Gallery: Hamilton, New Zealand, 15 February—31 March.

Holloway, M. (2024). Design won't save the world (essay). Hamilton, New Zealand.

Long, J. H. (Sound Design). (2024). *The tavern* [Feature Film]. Matt Hicks Media.

Mayall, J. M. (2024). *Emerging futures* [Composition]. Mayall Creative Ltd.

Mayall, J. M. (2024). *Kingdom of night* [Soundtrack]. The Meteor.

Mayall, J. M. (2024). *Our own little mess* [Soundtrack]. A Slightly Isolated Dog.

Mayall, J. M. (2024). *Rock bottom* [Soundtrack]. Black Sheep Circus.

Mayall, J. M. (Conductor). (2024). *Ō Tātou wāhi mana; ā tātou korero* [Performance]. Turangawaewae, Ngaruawahia, Orchestras Central.

Mayall, J. M. (performer). (2024). *Where our shadows meet* (Soundtrack) [Performance]. Isaac Theatre Royal, Christchurch, New Zealand, Equal Voices Arts.

McConnell, L. O., & Macpherson, K. (2024). *Aotearoa NZ sound map* (interactive website & branding) [Design Output]. Wintec: New Zealand.

McConnell, L. O., & Foster, J. (2024). *Hear us out* (public poster exhibition) [Design Output]. Phantom Billstickers: Hamilton, New Zealand.

Russell, E. (2024). *Worn well logo specification guidelines*. [Design Output]. Emily Russell: New Zealand.

Tawhiao, H., Citizen, J., & Herangi, T. (2024). Weaving potentialities and AI: Patterns are not inscriptions. *Junctures: The Journal For Thematic Dialog*, 24, 80-94.

Research Office 2023

Ryan, J., Foster, P., Fester, A., Wang, Y., Field, J., Kearney, C., & Yap, J. R. (2023). L1 literacy and L2 oracy: A partial replication of Foster & Skehan (1996). *Language Learning*, 73(4), 1345-1368. <https://doi.org/10.1111/lang.12557>

Ryan, J. (2023). Miscommunicated referent tracking in L2 English: A case-by-case analysis. *IRAL - International Review of Applied Linguistics*, 61(4), 1543-1575. <https://doi.org/10.1515/iral-2021-0185>

Wang, Y., & Ryan, J. (2023). The complexity of control shift for learner autonomy: A mixed-method case study of Chinese EFL teachers' practice and cognition. *Language Teaching Research*, 27(3), 518-543. <https://doi.org/10.1177/1362168820957922>

2024

Ryan, J., Foster, P., Wang, Y., Fester, A., & Yap, J. R. (2024). Task design, L1 literacy and second language oracy: A close replication of Tavakoli and Foster (2008). *Studies in Second Language Acquisition*, 46(3), 1475-1492. <https://doi.org/10.1017/S0272263124000445>

