

Te Whatu Ora  
Waitematā  
University of  
Auckland  
AUT

Collaborative  
Research  
Symposium  
2023



Sponsors:



Te Whatu Ora  
Health New Zealand  
Waitematā



MEDICAL AND  
HEALTH SCIENCES  
SCHOOL OF MEDICINE

***Awards & Networking Event***

***Programme***

***24<sup>th</sup> July 2023***

**Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research  
Symposium 2023**

**Awards & Networking Event Programme**

**24th July 2023**

**Programme**

Event information 2:00-5:35pm.....	3
Opening.....	3
2:00pm    Welcome.....	3
2:25pm    Guest Speaker .....	3
Oral Presentations and Awards.....	4
2:35pm    University of Auckland Best Māori Researcher.....	4
2:55pm    University of Auckland Best Pacific Researcher .....	4
3:15pm    AUT Most Impactful Nursing or Midwifery research .....	4
Poster Awards.....	4
3:35pm    WellFoundation - Best Poster .....	4
3:40pm    Waitematā People and Communications – People’s choice Poster, joint winners .....	4
Break.....	5
Oral Presentations and Awards continued.....	5
4:30pm    AUT Most Impactful Allied Health Research.....	5
4:50pm    AMRF Best Senior Researcher.....	5
5:10pm    AMRF Best Emerging Researcher.....	5
Closing.....	5
List of Highly recommended submissions (no award).....	6
Highly recommended oral presentations .....	6
Highly recommended posters.....	6
Awardee Abstracts.....	7
Oral Abstracts.....	7
Poster Abstracts .....	14
Symposium Acknowledgements.....	17

## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023

Event information 2:00-5:35pm

The 2023 Te Whatu Ora Waitematā, University of Auckland and AUT Collaborative Research Symposium was held as an online forum on 22<sup>nd</sup> May 2023. Judging of the accepted posters and 10 min oral presentations occurred after this.

Entry criteria: The research must be connected to the Waitematā District community through population, location, or contributors. Weighting will be given to projects which have a strong connection to the Waitematā District, and which align with the national research strategy.

<https://www.health.govt.nz/publication/new-zealand-health-research-strategy-2017-2027>

Today's award and networking event at Whenua Pupuke, North Shore Hospital, is the accumulation of these events. The accepted submissions may be viewed on the following link.

<https://www.waitematadhb.govt.nz/about-us/research-learning/symposium/>

### Opening

**2:00pm**      **Welcome**

**Master of Ceremonies**      Te Aniwa Tutara

**Mihi Whakatau**      Kaumatua Fraser Toi

**Organisational Mihi**      Dr Jonathan Christiansen  
Chief Medical Officer, Te Whatu Ora Health New Zealand – Waitematā

Professor John Fraser  
Dean, Faculty of Medical and Health Sciences, Waipapa Taumata Rau/University of Auckland

Professor Nicola Kayes  
Associate Dean of Research, Faculty of Health and Environmental Sciences, AUT

**2:25pm**      **Guest Speaker**

Dr Robyn Whittaker  
Te Whatu Ora National Director of Evidence, Research and Clinical Trials  
*The national direction of research support services in Te Whatu Ora*

## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023

### Oral Presentations and Awards

#### **2:35pm University of Auckland Best Māori Researcher**

Presented by Professor John Fraser, Dean, Faculty of Medical and Health Sciences, Waipapa Taumata Rau/University of Auckland

*Kaumātua Insights into Indigenous Māori Approaches to Pain Management: A Qualitative Study*

Presenters: Dr Debbie Bean & Ms Eva Morunga

#### **2:55pm University of Auckland Best Pacific Researcher**

Presented by Professor John Fraser, Dean, Faculty of Medical and Health Sciences, Waipapa Taumata Rau/University of Auckland

*New Zealand Pacific Parents' Perspectives on Skin to Skin with their Preterm Infants on a Neonatal Unit*

Presenter: Cheree Taylor

#### **3:15pm AUT Most Impactful Nursing or Midwifery research**

Presented by Professor Nicola Kayes, Associate Dean of Research, Faculty of Health and Environmental Sciences, AUT

*What is the experience of nurses undertaking research activity whilst in paid employment within a Te Whatu Ora district?*

Presenter: Kathryn Tennant

### Poster Awards

#### **3:35pm WellFoundation - Best Poster**

Presented by Tim Edmonds, CEO, WellFoundation

*Kaumātua have the ability, desire and right to control their medicines journey*

Authors: Joanna Hikaka, Rhys Jones, Carmel Hughes, Nataly Martini

#### **3:40pm Waitematā People and Communications – People's choice Poster, joint winners**

Presented by Stephen Davies, Acting Director People and Communications, Te Whatu Ora – Waitemata

Joint winners:

## **Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023**

*What key clinical, psychological and neurophysiological factors predict the magnitude of exercise induced hypoalgesia (EIH) in individuals with knee osteoarthritis (OA)?*

Authors: David Toomey, Associate Professor Gwyn Lewis, Dr Natalie Tuck, Dr Usman Rashid, Professor Jo Nijs, Associate Professor David Rice

*Systemic Lupus Erythematosus (SLE) Te Whatu Ora Waitemata patients in Auckland: Epidemiology and Attainment of Lupus Low Disease Activity State (LLDAS)*

Authors: Nisha Prashar, Sue Austin, Kristine (Pek Ling) Ng

### **Break**

Please join us for a light refreshment in the atrium.

### **Oral Presentations and Awards continued**

#### **4:30pm      AUT Most Impactful Allied Health Research**

Presented by Professor Nicola Kayes, Associate Dean of Research, Faculty of Health and Environmental Sciences, AUT

*Aphasia in Aotearoa: A codesigned project to update aphasia therapy in Aotearoa New Zealand.*

Presenter: Robyn Gibson

#### **4:50pm      AMRF Best Senior Researcher**

Presented by Sue Brewster, Executive Director, & Hannah Gibbons, Research Programme Manager, Auckland Medical Research Foundation

*Changes in hospital admission for stroke: Findings from the ARCOS studies (1981-2022)*

Presenter: Rita Krishnamurthi

#### **5:10pm      AMRF Best Emerging Researcher**

Presented by Sue Brewster, Executive Director, & Hannah Gibbons, Research Programme Manager, Auckland Medical Research Foundation

*A Decision Support System at Adult ED Triage for predicting health outcomes*

Presenter: Zhenqiang Wu

### **Closing**

**5:30      Karakia**                      Te Aniwa Tutara

## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023

### List of Highly recommended submissions (no award)

#### Highly recommended oral presentations

- Co-Teaching: Reviewing the delivery of co-taught prescribing workshops  
Avril Lee & Dr Tony Zhang
- Changing the script: medicine optimisation recommendations made during proactive multidisciplinary meetings with older adults  
Dr Katherine Bloomfield
- Frailty, quality of life and resilience in a cohort of retirement village residents  
Dr Katherine Bloomfield
- “I don’t want to be here... let’s get out of here, let’s get moving”: older adults’ perspectives on successful rehabilitation  
Oliver Frear
- Two Weeks of Low Molecular Weight Heparin for Isolated Symptomatic Distal Vein Thrombosis (TWISTER study)  
Dr Eileen Merriman
- Can virtual humans deliver mindfulness to reduce stress?  
Mariam Karhiy
- A Clinicians’ and Patients’ Survey to Examine PreventS-MD Software Usability for Primary Stroke Prevention (PRIME)  
Anjali Bhatia, Jesse Dyer
- The DIAMOND trial – Different Approaches to MOderate & late preterm Nutrition: Determinants of feed tolerance, body composition and development  
Dr Tanith Alexander
- Anxiety, pain, and disability predict outcomes of Complex Regional Pain Syndrome: An 8-year follow-up of a prospective cohort  
Shari Cave
- The chronic pain of chronic pancreatitis; support for a transdiagnostic approach.  
Ruth Newcombe
- Can virtual humans deliver mindfulness to reduce stress?  
Dr Natalie Tuck

#### Highly recommended posters

- Cancer Screening Services: What do Indigenous Communities Want? A Systematic Review.  
Dr Eunjong (Franklin) Han, Mr Sanket Srinivasa PhD, Assoc. Prof. Jason Gurney,  
Prof. Jonathan Koea
- Can a Targeted Pre-Exercise Education Intervention Enhance the Exercise Induced Hypoalgesia (EIH) Response in Individuals With Knee Osteoarthritis (OA)?



## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023

David Toomey, Associate Professor Gwyn Lewis, Dr Natalie Tuck, Associate Professor Ben Darlow,  
Dr. Usman Rashid, Associate Professor David Rice

- Inter- and intra-rater reliability for assessment of swallowing using a hand-held portable ultrasound device.  
R. Hammond, A. Dimmock, K. Winiker, M.L. Huckabee
- Feasibility and acceptability of telehealth and contactless delivery of human papillomavirus (HPV) self-testing for cervical screening with Māori and Pacific women in a COVID-19 outbreak in Aotearoa New Zealand  
Dr Karen Bartholomew, Jane Grant, Anna Maxwell, Dr Collette Bromhead, Fiona Gillett, Dr Rajneeta Saraf, Kate Moodabe, Dr Susan M Sherman, Dr Georgina McPherson, Dr Deralie Flower, Dr Jyoti Kathuria, Professor Sue Crengle, Dr Richard Massey, Dr Nina Scott, Pania Coote

### Awardee Abstracts

#### Oral Abstracts

##### 1. Kaumātua Insights into Indigenous Māori Approaches to Pain Management: A Qualitative Study

**Authors:** Dr Debbie Bean<sup>1,2</sup>, Ms Eva Morunga<sup>3,4</sup>, Ms Korina Tuahine<sup>2</sup>, Ms Karlee Hohepa<sup>5</sup>, A/Prof Gwyn Lewis<sup>2</sup>, Mr Donald Ripia<sup>2</sup>, Dr Gareth Terry<sup>2</sup>

<sup>1</sup>Chronic Pain Service, Te Whatu Ora – Waitematā; <sup>2</sup>Health & Rehabilitation Research Institute, Auckland University of Technology, Auckland; <sup>3</sup>Department of Psychological Medicine, University of Auckland, Auckland; <sup>4</sup>Cancer Support Service, Te Toka Tumai, Auckland; <sup>5</sup>Department of Psychology, Massey University, Auckland; <sup>6</sup>Student Learning Centre, Auckland University of Technology, Auckland; <sup>7</sup>Centre for Person Centred Research, Auckland University of Technology

#### **Abstract:**

**Background:** Chronic pain is the leading cause of disability in Aotearoa New Zealand and is more prevalent and disabling in Māori than non-Māori. Little is published about Māori views of, or approaches to, managing chronic pain/mamae. This mātauranga could be used to develop treatment approaches.

**Aim:** To understand kaumātua views on the effects of pain, traditional pain management practices, and mātauranga Māori relating to managing pain.

**Method:** 14 kaumātua participated in interviews or a focus group/hui. Interviews and the hui were transcribed, and reflexive thematic analysis was used to develop themes in the data. Findings were discussed and refined in collaboration with participants.

## **Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023**

Results: Analysis wove the kōrero of the kaumātua into three themes: 1. The Multidimensional Aspects of Pain: Pain stretched beyond the physical and encompassed emotional trauma, wairua pain, grief and hurt resulting from the loss of loved ones, contamination of the environment or breaches of tikanga. Some mamae was described as everlasting, passing between people or generations. 2. Hōhonutanga: Healing through Connection. Healing of pain was seen to occur through strengthening connections with people, the spiritual realm, the natural world, and with papakāinga, connection to place. 3. Kia Maia Kia Kaha, Being Strong in the Face of Pain. Self-reliance to manage pain and self-determination to make health decisions were viewed as critical. A stoical approach to pain was described, in part because complaining was seen as futile, unnecessary or weak, but also because of a desire not to burden whānau.

Conclusions: Mātauranga Māori emphasises that pain and its healing should be considered multidimensional phenomena incorporating physical, mental, and relational components as well as existing in the spiritual realm and incorporating links between people, places, the past and future. Resilience and toughness in the face of such pain mean that pain can be managed by individuals with stoicism.

Acknowledgements: New Zealand Pain Society research grant; AUT internal funding

### **2. New Zealand Pacific Parents' Perspectives on Skin to Skin with their Preterm Infants on a Neonatal Unit**

**Authors:** Cheree Taylor

Te Whatu Ora - Waitematā, Community Child Health, Rehabilitation Teaching & Research Unit, Department of Medicine, University of Otago

**Abstract:**

Background: Prematurity is the leading cause of death in children under 5 years of age worldwide. Infants who survive this period have greater risk of neurodevelopmental impairments than their full-term peers. Skin to skin is an intervention during the neonatal period that improves physiological stability, decreases infant mortality, morbidity and improves neurobehavioral and psychosocial outcomes. Within New Zealand, the infant death rate is highest among Pacific infants born less than 28 weeks gestation, warranting further investigation into all aspects of care for this population.

Aims: The purpose of this study was to explore Pacific parents' lived experiences of skin to skin with their preterm infants while on NZ based neonatal units to inform culturally responsive care and service delivery.

Methods: Interpretive Phenomenological analysis informed by Talanoa research methodology was used to guide this qualitative study. Recruitment and data collection took place between November 2020 and July 2021 on the



## **Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023**

neonatal units across Auckland. Interviews took place with Pacific parents of preterm infants born less than 33 weeks.

Results: Data analysis identified five superordinate themes and 13 subordinate themes. This included “overcoming fear and anxiety”, “connection”, “words matter”, “actively managing racial bias” and “spirituality and religious beliefs facilitates resilience”. Skin-to-skin promoted connection and strengthened all four pou of the Fonofale model. Communication styles of individual nurses greatly influenced the Vā (relational space) experienced by families, which subsequently affected their experience of skin-to-skin.

Conclusion: Findings indicate the need for Pacific cultural competence training in order to provide culturally safe care when supporting an intervention like skin-to-skin. Intentionally encouraging and facilitating Pacific parents’ spirituality within the NICU is another key strategy to optimise skin-to-skin. Within the stressful NICU environment supporting nurses in their communication and actions when facilitating skin to skin, has the potential to affect the initiation, uptake, and experience of skin-to-skin.

Acknowledgments: Te Whatu Ora Waitematā – PDF funding Otago University supervisors Dr Fiona Graham and Doctor Dawn Elder Cultural supervisor Anveli Brown Purcell

### **3. What is the experience of nurses undertaking research activity whilst in paid employment within a Te Whatu Ora district?**

**Authors:** Kathryn Tennant

Te Whatu Ora – Waitematā, Research & Knowledge Centre

#### **Abstract:**

Background: Research and evidence-based practice is essential for the delivery of high quality patient care and, as highlighted in the Waitemata DHB (WDHB) Research Strategy (2021), research is fundamental to improving the health of the community. As part of building capability and capacity of nursing research within Te Whatu Ora-Waitematā it is vital to understand how best to support nurses undertaking such research activity.

Aims: The NZ Health Research Strategy (2017) highlighted that support and research education are vital to create a vibrant research environment. Therefore, the aim of this study was to explore the experiences of nurses undertaking research activity whilst employed in order to build research capacity and capability of nurses through making recommendations for the development of support systems.

Methods: This was an interpretive descriptive study. Six semi-structured interviews were undertaken with nurses who had completed research activity within the previous five years.

## **Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023**

**Results:** A number of themes were developed that help understand the experience: adult learning theory vs. lack of methodological support; time management and role conflict – worker vs researcher; ‘little pockets of research’ – isolation and a lack of academic awareness within the workplace; ‘it just sits on a shelf getting dusty’ – need to close the loop through application and recommendations for practice; ‘the process grows you’ – enhanced role and self.

**Discussion:** Whilst it is evident that nurses undertake meaningful research, there are a number of challenges that they face during the process. Nurses need to feel value in the research they do, in that it can make a difference to patient care or outcomes, and to feel valued themselves for their role as a nurse researcher.

**Conclusion:** This study will aid the development of research support and inform the broader research culture within Te Whatu Ora- Waitematā

### **4. Aphasia in Aotearoa: A codesigned project to update aphasia therapy in Aotearoa New Zealand.**

**Authors:** Mrs Robyn Gibson<sup>1</sup>, Dr Clare McCann<sup>2</sup>, Prof. Alan Barber<sup>3</sup>

<sup>1</sup>Te Whatu Ora Waitematā - Speech Language, <sup>2</sup>Speech Science, the University of Auckland, <sup>3</sup>Centre for Brain Research, FMHS, the University of Auckland

#### **Abstract:**

**Background:** The significant gap between aphasia research and clinical implementation, and the impact of that on people with aphasia, is now well established. However, no research has previously investigated this area in Aotearoa New Zealand.

**Aims:** To explore the experiences of speech-language therapists (SLTs) and people with aphasia in Aotearoa New Zealand, and to improve the provision of aphasia therapy through a codesigned intervention.

**Methods:** This doctoral research was divided into three separate studies: A questionnaire distributed to SLTs, semi structured interviews with 16 people with aphasia, and a co-designed workshop for SLTs.

**Results:** In study one, SLTs described highlights of aphasia rehabilitation, including breakthrough moments and positive outcomes, and some of the barriers they experienced to providing aphasia therapy, including workplace limitations and access to resources and research. In study two, themes generated from interviewing people with aphasia included the importance of the therapeutic relationship, the relevance of the therapy, the availability of SLT services and access to those services. In study three, the co-designed workshop was effective in improving the SLTs’ self-rated provision of aphasia therapy, with statistically significant improvement in their ability to tailor

## **Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023**

their interventions for people with aphasia, and their confidence in working with people with aphasia, in particular for Māori with aphasia.

**Discussion:** The evidence-practice gap in aphasia appears to be greater in Aotearoa New Zealand than in other countries. This research provides key information about the impact of the evidence-practice gap on SLTs and on people with aphasia and their whānau. The resultant workshop was designed to meet the needs of SLTs and has begun to address the challenges and service gaps identified in studies one and two.

**Conclusion:** This research is an important step on the journey to ensure that all those with aphasia in Aotearoa New Zealand receive best practice aphasia therapy.

**Acknowledgements:** The doctoral research was funded through the New Zealand Lotteries Health Research Doctoral Scholarship.

### **5. Changes in hospital admission for stroke: Findings from the ARCOS studies (1981-2022)**

**Authors:** Professor Rita Krishnamurthi, Mr Balakrishna Nair, Ms Jesse Dyer, Mr Anupam Verma, Ms Anjali Bhatia, Dr Ekta Singh Dahiya, Ms Varsha Parag, Dr Yogini Rathnasabapathy, Dr Daniel Exeter, Professor Anna Ranta, Professor Suzanne Barker-Collo, Professor Valery  
Te Whatu Ora - Waitematā Stroke

#### **Abstract:**

**Background:** The Auckland Regional Community Stroke Studies (ARCOS) are population-based studies conducted in Auckland, New Zealand, every decade since 1981. The primary source of notification has been Te Whatu Ora, including Waitematā.

**Aims:** We aim to evaluate the changes in hospitalisation for stroke, case-fatality and mortality by the former District Health Board regions, overall and by demographic groups over the past five decades.

**Methods:** Five ARCOS studies have been conducted (ARCOS I- 1981, ARCOS II- 1991, ARCOS II-I 2002, ARCOS IV- 2011, ARCOS V- 2021). Stroke cases were identified through multiple case ascertainment methods, including public hospitals and emergency departments. ARCOS II did not identify hospital admission details; hence this data is omitted from analysis. Deaths (28-day case fatality) were captured for all incident cases. ARCOS V data is preliminary.

**Results:** There were 994, 1642, 2038 and 2556 admissions for stroke, accounting for 73%, 85%, 97% and 96% of total strokes in ARCOS I, III, IV and V, respectively. Over this time, Te Whatu Ora Waitematā admitted 6%, 32%, 35% and 33% of stroke cases respectively. In ARCOS V, 7%, 15%, 4% and 6% of patients admitted to Auckland,

## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023

Middlemore, North Shore and Waitakere hospitals respectively are Māori. In 1981, no Māori or Pacific patients were admitted to North Shore or Waitakere hospitals. North Shore had the greatest proportion (59%) of people aged 75 years or older. 28-day case fatality reduced significantly across all hospitals in the last five decades, (e.g. from 43% at the North Shore Hospital in 1981 to 10.2% in 2021).

Discussion: The pattern of hospitalisation for stroke has shifted dramatically over the past five decades, as has the demographic make of stroke patients, with a greater proportion of Māori, Pacific and Asian patients admitted with stroke.

Conclusion: Greater hospitalisation and higher absolute numbers of strokes suggest an ongoing and increasing demand for stroke services. Case fatality may have improved over the past five decades, due to specialised medical care services and treatment options.

Acknowledgements: The ARCOS studies were funded by the Health Research Council of NZ. We acknowledge the ARCOS V Steering Committee members, Professors Craig Anderson (PI ARCOS III), and Ruth Bonita (PI ARCOS I-II), the research assistants and Te Whatu Ora nurses and physiotherapists, and all the ARCOS patients and families.

### 6. A Decision Support System at Adult ED Triage for predicting health outcomes

**Authors:** Dr Zhenqiang Wu<sup>1</sup>, Dr Kate Allan<sup>2</sup>, Dr Natalie Anderson<sup>3</sup>, Ms Sue Lamb<sup>2</sup>, Ms Annie Park<sup>4</sup>, Prof Robert Scragg<sup>4</sup>, Prof Martin Connolly<sup>1,2</sup>, Dr Joanna Broad<sup>1</sup>, Dr Laura Chapman<sup>2</sup>

<sup>1</sup>Department of Geriatric Medicine, Waitematā Clinical Campus, University of Auckland; <sup>2</sup>Te Whatu Ora – Waitematā; <sup>3</sup> School of Nursing, University of Auckland<sup>4</sup>; School of Population Health, University of Auckland

#### **Abstract:**

Background: Emergency department (ED) overcrowding is a major global healthcare issue, making it crucial to improve

the problem through innovative research. Triage is the first point of contact between patients and ED, thus improving

the accuracy of triage may optimise resource allocation and use with better patient outcomes.

Aims: To develop a decision support system (clinical prediction models) at ED triage time to predict healthcare outcomes. It is not to replace triage assessors but to provide relevant knowledge and timely support for their decision-making.

## **Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023**

**Methods:** This was a retrospective cohort study including five years (2016-2021) of ED presentation data from two Waitematā hospitals. All adults with an ATS triage code were eligible for the study. The routinely collected data before and at triage were used to develop and validate prediction models for predicting hospital admission, mortality and other healthcare outcomes. The data were divided into training (60%), validation (30%) and test (10%) datasets. Both traditional regression and progressive modelling approaches were utilised.

**Results:** Analysis and model development included 530,165 presentations from 197,942 adults, with a mean (SD) age of 53 (22) years. Of these presentations, 65% were European, 12% Māori and 9% Pacific. All models for hospitalisation prediction had significantly higher discrimination and calibration ability than the reference model (triage code only); in validation, neural network, and logistic regression models exhibited the strongest ability to discriminate with c-statistics of 0.86 and 0.85, respectively. The highest discrimination ability was 0.94 for mortality in hospital, 0.91 for ICU admission, and 0.68 for ED representation in 7-day.

**Discussion & Conclusion:** As a proof of concept, prediction models utilising routinely collected hospital data for patient care have an excellent ability to predict hospital admission, mortality, and ICU admission. These models show potential for decision-support for triaging practice, for prioritising patients and for resource allocation.

**Acknowledgements:** This study was funded by the Precision Driven Health (PDH)-Health Research Council of New Zealand (HRC) Postdoctoral Fellowships grant (22/862). We would like to express our gratitude to the staff at the Research & Knowledge Centre, i3 (Institute for Innovation + Improvement), and Health Information Group of Te Whatu Ora - Waitematā for their assistance in the locality application and accessing the data. We also thank the data scientist team of PDH and the research support team from the University of Auckland for their invaluable support.

## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023

### Poster Abstracts



#### 1. Kaumātua have the ability, desire and right to control their medicines journey.

**Authors:** Joanna Hikaka<sup>1,2</sup>, Rhys Jones<sup>1</sup>, Carmel Hughes<sup>3</sup>, Nataly Martini<sup>1</sup>

<sup>1</sup>The University of Auckland; <sup>2</sup>Te Whatu Ora Health New Zealand – Waitematā; <sup>3</sup>Queen's University, Belfast, Northern Ireland

#### **Abstract:**

**Background:** Understanding patient experience is a vital component of health service development. Pharmacist-led medicines review services can improve the quality use of medicines. These services, developed internationally, are underutilised in Aotearoa and may currently increase health disparities. Utilising kaumātua knowledge to develop medicines review services may support the achievement of Māori health equity.

**Aims:** Explore kaumātua (Māori older adults) experiences of medicines and medicines-related services in Aotearoa.

**Methods:** Semi-structured interviews were conducted with 10 kaumātua. Reflexive thematic analysis was used to generate themes using a kaupapa Māori theoretical framework. Themes were presented to participants and kaumātua groups. Themes were then developed into key messages for lay audiences. Key messages were visualised through working with a Māori artist. Eligibility criteria: Māori, 55 years or older 5+ medicines Community dwelling in Waitematā DHB.

**Results:** Four themes were identified: Medicines have positive and negative impacts on mind, body and social connections. Medicines supply appears to be a business transaction rather than an act of care. Kaumātua have the ability, desire and right to make their own medicine decisions. Caring, authentic health partnerships to support medicines decisions are valued.

**Discussion:** This research has been used, in part, to develop a medicines review intervention for kaumātua was tested in a feasibility study. An important aspect of this research was developing information to feedback to Māori communities and practicing pharmacists, to better inform everyday practice and support to the achievement of Māori health equity.



## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023



### 2. What key clinical, psychological and neurophysiological factors predict the magnitude of exercise induced hypoalgesia (EIH) in individuals with knee osteoarthritis (OA)?

**Authors:** David Toomey<sup>1</sup>, Associate Professor Gwyn Lewis<sup>1</sup>, Dr. Natalie Tuck<sup>1</sup>, Dr. Usman Rashid<sup>1</sup>, Professor Jo Nijs<sup>2</sup>, Associate Professor David Rice<sup>1,3</sup>

<sup>1</sup>Health and Rehabilitation Research Institute, Auckland University of Technology; <sup>2</sup>Pain in Motion International Research Group, Department of Physiotherapy, Human Physiology and Anatomy, Faculty of Physical Education and Physiotherapy, Vrije Universiteit Brussel, Ixelles, Belgium; <sup>3</sup>Te Whatu Ora Health New Zealand – Waitematā, Pain Services, Department of Anaesthesiology and Perioperative Medicine.

#### **Abstract:**

**Background:** Prior research indicates that individuals with knee osteoarthritis (OA) exhibit more variable exercise induced hypoalgesia (EIH) that can lead to flares in pain, adversely affect exercise adherence and limit exercise related pain relief.

**Aims:** This cross-sectional study explored potential clinical, psychological and neurophysiological predictors of the magnitude of EIH in individuals with knee OA.

**Methods:** 119 men and women (mean age 68 [±] 10) with knee OA completed baseline clinical tests, psychological questionnaires (e.g anxiety, depression, catastrophising, kinesiophobia, expectations) as well as measures of pain sensitisation using standardised quantitative sensory testing. Before and immediately after a bout of isometric resistance exercise, pressure pain thresholds (PPT) were completed at the knee (local EIH) and the contralateral forearm (remote EIH). Linear regression analysis was utilised to explore which variables predicted the magnitude of EIH (change in PPT), while linear mixed regression was used to determine what portion of the variance in EIH was explained by the observed variables.

**Results:** The magnitude of EIH was larger at the knee than the arm ( $p < 0.001$ ). Of the observed variables, only age, anxiety and expected change in pain were associated with the magnitude of EIH (all  $p < 0.05$ ). However, together these variables accounted for <10% of the total variance in EIH. A large amount of the remaining variance was due to individual and test site (knee, forearm) related differences.

**Conclusions:** Age, anxiety and expected change in pain were associated with the magnitude of EIH in people with knee OA. Large between participant and between-location variance suggests that there is still a significant space for exploration of additional clinical variables which may eventually explain differences in the EIH response. This may be important in order to design more effective exercise-based interventions for people with knee OA.

**Acknowledgements:** Funding – Health Research Council and Auckland University of Technology.

## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023



### 3. Systemic Lupus Erythematosus (SLE) Te Whatu Ora Waitemata patients in Auckland: Epidemiology and Attainment of Lupus Low Disease Activity State (LLDAS)

**Authors:** Nisha Prashar<sup>1</sup>, Sue Austin<sup>2</sup>, Kristine (Pek Ling) Ng<sup>2</sup>

<sup>1</sup>Te Whatu Ora Health New Zealand – Counties Manukau, Rheumatology Department; <sup>2</sup>Te Whatu Ora Health New Zealand – Auckland, Rheumatology Department.

#### **Abstract:**

**Background:** There is significant lack of lupus research in New Zealand (NZ). The Asia Pacific Lupus Collaboration (APLC) is an international collaboration of lupus experts. NZ became a member of the APLC in 2018. TWOW is the lead site for the APLC treat-to-target (T2T) Lupus Low Disease Activity State (LLDAS) prospective study.

**Aims:** To assess epidemiology, LLDAS attainment, lupus damage index and clinical characteristics in lupus patients from the TWOW APLC Auckland cohort.

**Methods:** All patients who fulfilled either the American College of Rheumatology (ACR) or Systemic Lupus International Collaborating Clinics (SLICC) criteria were invited to participate in the study. At each study visit (3 to 6 monthly), patients are assessed for flares using SLEDAI-2K. Information on clinical manifestations, medication use, and laboratory data are collected.

**Results:** Sixty two patients were recruited during 2018-2020. The incidence of SLE in TWOW is 5.72 per 100,000. The ethnic breakdown was Asian (n=27, 44%), European (n=25, 40%), Pacific Island (PI) (n=5, 8%) and Māori (n=3, 5%). Arthritis was the most common clinical feature (n=51, 82%), followed by photosensitivity (n=31, 50%). Fourteen patients (23%) had renal disease. In terms of medications used, 35 patients (56%) had used prednisone at some point with the majority of patients (n= 52, 84%) on hydroxychloroquine. LLDAS attainment at any time point was achieved in 56 patients (90%). About 1/3 of patients flared at least once during study (n=24, 39%). Six patients (9.6%) had a severe lupus flare. The average SLICC-ACR Damage Index was 0.22 (range 0 - 47).

**Conclusion:** This is the first NZ prospective study on TWOW lupus patients. The majority of patients were able to achieve LLDAS, a clinical state associated with better outcomes. Corticosteroid use occurred in more than half of the cohort indicating the lack of effective lupus therapeutics.

## Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research Symposium 2023

### Symposium Acknowledgements

The Collaborative Research Symposium Committee would like to thank:

- The judges and acknowledge the time they spent carrying out the adjudication.
- Our sponsors: Te Whatu Ora Waitematā – People and Culture; Faculty of Medical and Health Sciences, Waipapa Taumata Rau/University of Auckland; Faculty of Health and Environmental Sciences, AUT; WellFoundation and Auckland Medical Research Foundation, for their continued support to the Collaborative Research Symposium.



**Te Whatu Ora - Waitematā, University of Auckland and AUT Collaborative Research  
Symposium 2023**



**Te Whatu Ora**  
Health New Zealand  
Waitematā

**UNIVERSITY OF  
AUCKLAND**  
Waipapa Taumata Rau  
NEW ZEALAND

**MEDICAL AND  
HEALTH SCIENCES**  
SCHOOL OF MEDICINE

**AUT**  
TE WĀNANGA ARONUI  
O TĀMĀKI MAKĀU RAU

# Collaborative Research Symposium 2023

## Networking Awards Event

**Come join us to showcase research  
in the Waitematā District**

**Monday 24 July 2023**  
**1400 - 1745**

Whenua Pupuke, North Shore Hospital

Live presentations from the award nominees.  
Award presentations for orals and posters.

**AWARDS:**

- AMRF Best senior presentation
- AMRF Best Emerging researcher
- AUT Most Impactful Allied Health Research
- AUT Most Impactful Nursing or Midwifery research
- UoA Best Māori Researcher
- UoA Best Pacific Researcher

**POSTER AWARDS:**

- WellFoundation - Best Poster
- Waitematā People and Communications - People's choice

RSVP for catering purposes to  
[research@waitematadhb.govt.nz](mailto:research@waitematadhb.govt.nz) by 10th July 2023

Recorded presentations, posters & abstracts available online from 22.05.23  
[www.waitematadhb.govt.nz/about-us/research-learning/symposium](http://www.waitematadhb.govt.nz/about-us/research-learning/symposium)

**WELL  
FOUNDATION.**

Auckland Medical  
Research Foundation  
1987