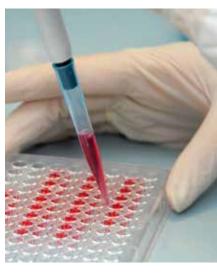
WAIKATO DISTRICT HEALTH BOARD

RESEARCH ANNUAL REPORT

2018-2019









for high need populations

Oranga



Safe, quality health services for all *Haumaru*



People centred services *Manaaki*



Effective and efficient care and services

Ratonga a iwi



A centre of excellence in learning, training, research, and innovation

Pae taumata



Productive partnerships **Whanaketanga**



Foreword

Nau mai, haere mai

Welcome to the second Waikato District Health Board (DHB) Research Annual Report. Waikato DHB continues to support research within the organisation, and is delighted to be able to report on the research undertaken at Waikato DHB in the latest financial year.

One of the key priorities in Waikato DHB's Strategic Framework is – A centre of excellence in learning, training, research and innovation, and we continue to work towards that. Waikato DHB is aiming to cement its position as a centre of clinical excellence, a teaching hospital, with links to University of Auckland and University of Waikato. Key stakeholders also include Wintec and primary health organisations. We are fortunate to have such a diverse and rich research portfolio here at Waikato which is reflected in the number of approved research projects and publications. The aim for coming years is to continue to promote and celebrate research, encourage committed staff to reduce inequity and to improve the health and wellbeing of all our patients/population.

We are looking to grow research, while remaining safe and effective.

The wish-list for future years includes the ability to assist researchers in writing grant submissions, access to biostatistical support, improving the transparency and visibility of research within the DHB and the much anticipated development of a research hub. We would like to thank Ross Lawrenson who chairs our Research Advisory Group for ensuring that research remains a key priority for the organisation.



Mo Neville
Director
Quality and Patient Safety



Neville Hablous Acting Chief Executive



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Ross Lawrenson Chair Research Advisory Group

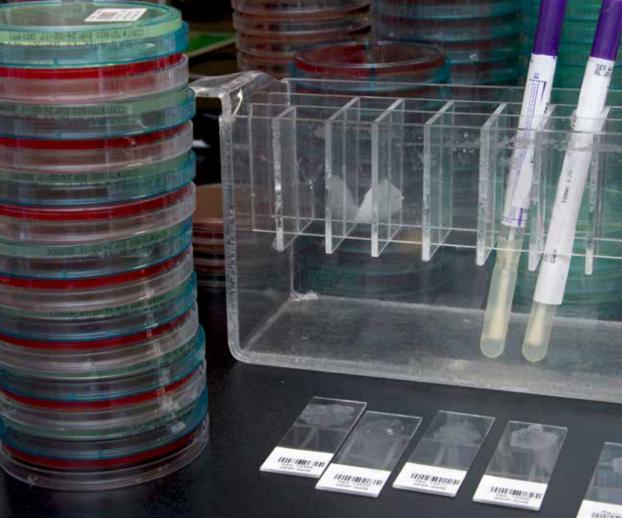
Introduction

It is a great pleasure to be able to offer this 2018-2019 Waikato DHB Research Annual Report. Waikato is a tertiary centre and it is important for us to be at the forefront of innovation and research. We are always striving for the best outcomes for patients through high quality research. At the same time it is important to have a wider view of the role of research in helping us understand the health needs of the people we serve, the factors that help improve health and importantly reducing inequities. This report highlights the excellent research and innovation that is going on within the Waikato DHB. Some of this has been carried out in conjunction with academic research partners, other research has been as part of a clinical network and a considerable amount has been generated by interested clinicians exploring health outcomes in our local settings.

The Research Advisory Group aims to help support an active research environment. I have to thank Mo Neville, Sarah Brodnax and the team in Quality and Patient Safety for providing a fantastic research friendly governance environment. Thanks to our fantastic librarians who provide such great support and service to our researchers. I also want to acknowledge the role of the Waikato Medical Research Foundation for their invaluable financial support and to Associate Professor JV Conaglen whose Biannual Research seminars have for more than 20 years encouraged research which is highlighted each year in the NZ Medical Journal.

2018-2019 was a highly successful year and I look forward to an even better outcome in 2019-2020.





Highlights

A number of exciting and innovative research projects are underway at the Waikato DHB, some of which are mentioned later in this report. These projects include collaborative studies involving key stakeholders from other institutions such as the universities.

The establishment of the Research Advisory Group and the New Zealand Health Research Strategy document highlight the importance of health research both within Waikato DHB and nationally.

The Waikato DHB Strategy published in July 2016 increases our emphasis on health equity for high need populations.

The Māori Research Review Committee continues to review research submissions with a focus on equity of access, timeliness and quality of care; and encourages researchers to collect ethnicity correctly, to report findings respectfully and increase Māori participation in research studies.

In the 2018-2019 financial year

- registered at Waikato DHB.
 These projects encompassed clinical drug trials, investigator led research and research for attainment of a qualification
- 171 clinical trials were underway during the year including 3276 participants of whom 550 identify as Māori.
- Over 180 peer reviewed publications were published.
- Ten summer studentship projects were completed.

New Zealand Health Research Strategy

The Ministry of Health and Ministry of Business Innovation and Employment produced a New Zealand Health Research Strategy 2017-2027 document in June 2017. Public consultation focused on the best process for setting these priorities has been completed, and the next stage is likely to be an opportunity to provide input on the priorities themselves.

The consultation was a joint initiative between the Ministry of Health, Ministry of Business, Innovation and Employment, and the Health Research Council (HRC). The three agencies have been working with an independent Development Group to establish health research investment priorities that will create enduring change for the life of the New Zealand Health Research Strategy (2017-2027) and beyond.

The Development Group has deliberated extensively on feedback received to inform a revised version of the prioritisation model, which is now progressing through the final stages of development.

The timeframe for publication has been delayed from earlier indications of June 2019. This is to ensure that feedback from the New Zealand Health Research Strategy Steering Group is thoroughly considered and addressed to support implementation. As a next step, the HRC will be presenting the revised version to the Steering Group for indicative approval, before proceeding for approval by the Minister of Health and the Minister of Research, Science and Innovation.

This will conclude the development work for Action One (see next page) of the New Zealand Health Research Strategy, and the focus will then move to ongoing implementation and coordination.

The Minister of Health has acknowledged that research, evidence and innovation is critical to addressing inequities and in continuously improving the quality and outcomes of services provided. He has encouraged DHBs to continue to work closely with the Ministry to progress the work programme to implement the Health Research Strategy.

What does it mean for Waikato region?

The vision is: By 2027 New Zealand will have a world-leading health research and innovation system that, through excellent research, improves the health and wellbeing of all New Zealanders.

The four principles which will guide the priorities are:

- Research excellence
- Transparency
- Partnership with Māori
- Collaboration for impact.

The document outlines how the Ministry of Health, HRC and Ministry of Business Innovation and Employment will work together to achieve these goals at the high level.

The supporting actions speaks to the organisation's goals – research that advances the priorities of NZ Health Strategy; improves outcomes and addresses the burden of disease, improves the understanding of the various determinants of health, contributes to health equity.

These strategic priorities and the vision link closely with the priorities and vision that Waikato DHB Research Advisory Group has outlined. The table below summarises the Government actions outlined in the Strategy and lists actions that Waikato DHB can take to align with the strategy.

| | Action to be taken by Government | Action to be taken by Waikato DHB | | |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Strategic Priority 1 | Invest in excellent health research that address | ses the health needs of all New Zealanders. | | |
| Action 1 | Prioritise investments through an inclusive prior | rity-setting process | | |
| | The HRC will develop a priority setting process to advise the Minister of Health and the Minister of Science and Innovation on health research priorities in NZ. This will involve wide consultation (consumers, researchers, health sector agencies, health practitioners, iwi, Pacific peoples, community organisations, disabled people and government agencies. The priorities identified will form the basis of the HRC's three-yearly investment plan and will guide other areas of government funded research. | Waikato DHB will develop priorities for research from Annual Plan, Māori Health Plan and input from Primary Health Organisations (PHOs) and Māori stakeholders. (Research Advisory Group). These will be communicated to researchers. | | |
| Action 2 | Invest in research for healthy futures for Māori | | | |
| | The Government and Māori will work in partnership to improve Māori health outcomes through investments in research. | Waikato DHB will continue to strengthen its research connections with Te Puna Oranga and external Māori stakeholders and researchers. | | |
| | | The new Consumer Council will also assist in strengthening connections. | | |
| Action 3 | Invest in research that results in equitable outclead independent lives | omes for Pacific peoples and helps them to | | |
| | The Government and Pacific peoples will collaborate to improve health of Pacific peoples through investments in research. | Waikato DHB will strengthen connections with the Consumer Council to link with local Pacific peoples. | | |
| Action 4 | Develop and sustain a strong health research v | workforce | | |
| | The Government will put appropriate mechanisms in place to support, attract and retain the health research workforce (HRC will take the lead). | Waikato DHB will develop ideas on what would assist the region to attract and retain this workforce (Research Advisory Group). | | |
| Strategic Priority 2 | Create a vibrant research environment in the he | ealth sector | | |
| Action 5 | Strengthen health sector participation in resear | rch and innovation | | |
| | Ministry of Health will consider funding models and infrastructure requirements – investment in infrastructure and effective governance of research is needed. | Waikato DHB can prepare information to contribute this process. | | |
| Action 6 | Strengthen the clinical research environment a | nd health services research | | |
| | Ministry of Health will work with DHBs and others to strengthen the clinical research environment and health services research. | Waikato DHB can prepare information to contribute to this process (Research Advisory Group). | | |

| | Action to be taken by Government Action to be taken by Waikato D | | | | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Strategic Priority 3 | Build and strengthen pathways for translating research findings into policy and practice | | | | |
| Action 7 | Enable and embed translation across the healt | h sector | | | |
| | Government will ensure work is well-coordinated across relevant institutions; mechanisms for translating knowledge from offshore work well, data assets are linked, accessible and well governed, investment plans for funding agencies reflect the importance of translation. | Waikato DHB research office can focus on following up on research completed, share results of the research projects, and encourage services to determine whether outcomes from research can/should be translated. | | | |
| Strategic Priority 4 | Advance innovative ideas and commercial opp | portunities | | | |
| Action 8 | Support transformative and innovative ideas | | | | |
| | The Government will increase the share of funding for supporting transformative and innovative ideas across the research spectrum; and will ensure appropriate support and effective governance for big data and genomics. | Waikato DHB will investigate funding for adoption and sustaining of innovative ideas / research findings. | | | |
| Action 9 | Create more industry partnerships | | | | |
| | The Government will seek to increase the number of partnerships between industry, research institutes and health sector agencies. They will also seek to form partnerships with iwi, hapu and communities and others to address Māori health needs | Waikato DHB has commenced work in this area with the creation of the Research Advisory Group. | | | |
| Action 10 | Strengthen platforms for commercialising innov | vations | | | |
| | The Government will strengthen platforms for commercialising new innovations and strengthen connections internally to tap into capital and specialist expertise. | Waikato DHB will ensure our rights as a provider are upheld in the process of intellectual property and commercialisation. | | | |

Research at Waikato DHB

Research governance

Most research at Waikato is driven from the clinical services and by the clinicians. There are some very research active departments and teams covering a wide spread of topics. The director for Quality and Patient Safety has the executive oversight for the research portfolio in the DHB.

Research encompasses a wide variety of studies – including clinical drug trials sponsored by pharmaceutical companies, investigator led studies, studies reviewing clinical records and data retrospectively, research for attainment of qualification, and studies that include interviewing staff and/or patients.

The number of participants on most clinical trials is less than 100, with larger numbers often involved in retrospective reviews. Clinical drug trials typically involve two to four patients at Waikato DHB, as they are usually world-wide studies.

Ethnicity of participants is collected for all clinical trials and for most other research studies. The Māori Research Review Committee has a focus on improving our ethnicity data collection within the organisation, on eliminating inequity in healthcare, ensuring report findings are respectful, and on increasing Māori participation in research.

Most disciplines and services within Waikato DHB undertake research. A summary of the various research units is included below.

Research Advisory Group

In 2017 Waikato District Health Board established the Research Advisory Group, its purpose being to:

- provide high level leadership, governance, strategic direction and oversight of research activity at Waikato DHB
- promote and develop Waikato DHB's research culture by ensuring a transparent, supportive and appropriate research environment and infrastructure; and by nurturing and enhancing research capability, capacity and performance
- promote and develop a centre of excellence for Māori Health and health equity research and innovation
 which will build close and enduring relationships with Māori health researchers and Māori organisations and
 community in the Waikato
- ensure research undertaken within Waikato DHB is scientifically valid, is carried out in a co-ordinated manner, follows policy and has the potential to improve service delivery, personal health outcomes or population health
- ensure results of research undertaken is disseminated appropriately
- increase the focus on translational research (research into practice) and service delivery research.

Membership includes executive staff from Waikato DHB plus representatives from key stakeholders: University of Waikato, University of Auckland, Wintec and PHOs.

Current year

A number of exciting and innovative research projects are underway at the Waikato DHB, some of which are mentioned later in this report. These projects include collaborative studies involving key stakeholders from other institutions such as the Universities.

The 2018-2019 financial year saw 139 studies registered at Waikato DHB and 127 studies completing the approval process at Waikato DHB.

We have sought IT support for improved collation and reporting of research.

The future

Priority areas for the coming year include:

- Developing a strategy for eliminating health inequity through research
- Forging better relationships with Māori in the research arena
- Continuing to develop the research office functions
- Supporting the development of a research, improvement and innovation hub
- Developing a set of Key Performance Indicators and a dashboard for research activity.

Research processes at Waikato DHB

All research undertaken at Waikato DHB is registered with the Research Office. This can be done on the Waikato DHB internet site, allowing for studies to be registered by non-DHB staff.

The Research Office reviews the information provided, gives guidance on applying for national ethics approval, and ensures that researchers apply for Māori consultation. Approval from the relevant services and departments is then sought. Legal agreements are reviewed by legal services. To complete the locality approval process, once all these things are in place, the study and the legal agreements are approved by the director Quality and Patient Safety on behalf of the Waikato DHB.

The role of the Research Office

The Research Office currently provides a limited service, which includes registration of research projects, advice on whether studies require ethical approval, coordination of the Māori Research Review Committee process, collection of data on studies registered at Waikato DHB and production of a DHB research annual report. In time we would anticipate the role to expand, and to be able to offer assistance to researchers with grant applications, HDEC applications and access to biostatistical support, for example.

Māori consultation at Waikato DHB

Te Puna Oranga (Māori Health service) leads the Māori Research Review Committee, which is responsible for providing Māori consultation for researchers. In alignment with the Waikato DHB Strategy, which has an increased emphasis on health equity for high need populations, the Māori Research Review Committee encourages researchers to consider how they can maximise the potential for Māori health gain from their research. This may include oversampling of Māori participants if possible to get equal numbers or adequate explanatory power¹. The Māori Research Review Committee seeks to ensure that ethnicity is collected and recorded appropriately for all clinical trials and stipulates that the census ethnicity question is used correctly. Guidance on research questions and analyses is provided on an as-required basis.

The Waikato DHB Strategy published in July 2016 increases the emphasis on health equity for high need populations. The Māori Research Review Committee will continue to review research submissions with a focus on equity of access, timeliness and quality of care; and will encourage researchers to collect ethnicity and encourage Māori participation in research studies.

Waikato DHB has endorsed the Te Mana Raraunga², Māori Data Sovereignty Charter, and has a focus on data governance and sovereignty, particularly where data looks to compare Māori with non-Māori, to ensure we meet our obligations. In particular

Manaakitanga: Reciprocity

The collection, use and interpretation of data shall uphold the dignity of Māori communities, groups and individuals. Data analysis that stigmatises or blames Māori can result in collective and individual harm and should be actively avoided.

Researchers are encouraged to seek advice from the Māori Research Review Committee when framing their discussion in relation to Māori health findings and conclusions.

Robson B. Mana Whakamārama - Equal Explanatory Power: Māori and non-Māori sample size in national health surveys. Wellington (NZ): Te Rōpū Rangahau Hauora a Eru Pōmare, Wellington School of Medicine and Health Sciences, University of Otago for Public Health Intelligence, Ministry of Health, New Zealand; 2002 November.

November.
 Te Mana Raraunga: Principles of M\u00e4ori Data Sovereignty. Brief #1 | October 2018. https://static1.squarespace.com/static/58e9b10f9de4bb8d1fb5ebbc/t/5bda2 08b4ae237cd89ee16e9/1541021836126/TMR+Ma%CC%84ori+Data+Sovereignty+Principles+Oct+2018.pdf (Accessed August 2019).

Research statistics

Research at Waikato DHB encompasses clinical drug trials, investigator led research and research for attainment of a qualification.

Research evaluates practice or compares alternative practices, with the purpose of contributing to a body of knowledge by asking what we should be doing.

Research proposals are classified into one of four categories:

| Audit or evaluation | Audit or related activity refers to studies to improve delivery of the health service. Audits involve the systematic evaluation of aspects of health service delivery by considering measurable indicators of performance and/or quality. Evaluation studies aim to determine the relevance, effectiveness and impact of activities in light of their objectives. At this DHB, most clinical audits will be done through the Clinical Audit Support unit, part of the clinical effectiveness team; however occasionally they are registered under research, where clinical service led audits involve more than one DHB or involve sharing identifiable data. |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clinical/Interventional (drug/device) | In an intervention study, the investigator studies the effects of the intervention often comparing an interventional group with a control group. This is usually done before a new intervention is approved for clinical use. A clinical trial of a new blood pressure medicine is an example of an intervention study. Through intervention studies, investigators can exercise the sort of critical thinking, innovation and evidence-based development of practice that improves patient care. High-quality intervention studies are a good way to establish evidence. Studies such as an exercise programme will also be classed as an interventional study. |
| Observational: qualitative/ epidemiological | Observational studies give us vital evidence about our health and how best to protect and improve it. In these studies, the investigators observe and analyse data about health or disability but do not alter the care or services that people receive. They may also seek understanding of patient experiences using qualitative methods. |
| Other | Increasingly we are emphasising co-design programmes, often adopting a kaupapa Māori approach to ensure the needs of Māori are properly acknowledged and addressed. |
| | This category also includes those studies which involve interviewing or surveying staff members for their view on a particular topic. |

Results for 2018-2019

There were 139 studies registered in the 2018-2019 financial year.

| | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 |
|----------------------------------------|-----------|-----------|-----------|-----------|
| Number of research projects registered | 141 | 169 | 169 | 139 |

| Research type | Number |
|-----------------------------------------|--------|
| Investigator led | 76 |
| Pharmaceutical sponsored clinical trial | 32 |
| For qualification | 21 |
| Other | 10 |
| Total | 139 |

The table below shows the studies registered between 1 July 2018 and 30 June 2019 divided into the above categories, by service:

| Studies registered 01/07/18-30/06/19 | Audit or evaluation | Clinical/ interventional: drug/device | Observational: qualitative/ epidemiological | Other | Total |
|--------------------------------------|---------------------|---------------------------------------------|---------------------------------------------------|-------|-------|
| Allied Health | 3 | 2 | 3 | 1 | 9 |
| Child Health | 1 | 2 | 4 | | 7 |
| Community and Clinical Support | | | 3 | | 3 |
| Corporate | 2 | | 2 | | 4 |
| Emergency Department | | 1 | | 1 | 2 |
| Medicine | 5 | 19 | 9 | 3 | 36 |
| Mental Health and Addictions | 2 | | 2 | 1 | 5 |
| Nursing and Midwifery | 1 | | 1 | 4 | 6 |
| Older Persons and Rehabilitation | 1 | | 2 | 1 | 4 |
| Oncology | 1 | 11 | 1 | | 13 |
| Surgical and Critical Care | 7 | 18 | 19 | 4 | 48 |
| Waikato Clinical Campus | | 1 | | | 1 |
| Women's and Child Health | | | 1 | | 1 |
| Grand total | 23 | 54 | 47 | 15 | 139 |

Research participants

The majority of studies registered in 2018/19 sought to recruit less than 100 participants. 34 of the 139 studies had less than 10 participants. The median number of participants across all studies was 20; the median for pharmaceutical sponsored clinical trials was 5.

Clinical support (Pharmacy, Laboratory, Radiology)

The process of registering research includes requiring approval from various clinical support services, to ensure they are aware of the commitments of research projects. Improved methods of capturing this information mean we are moving to be able to report on the number of studies using these clinical support services. Generally the clinical support services will be required for Clinical/Intervention trials.

For a number of the clinical trials sponsored by pharmaceutical companies, the laboratory and radiology tests are performed by external agencies, in some cases, overseas.

| Pharmacy | Number of participants per trial | | | trial |
|--------------------------------|----------------------------------|-------|--------|-------|
| | 1-9 | 10-50 | 50-100 | Total |
| Community and Clinical Support | | | 2 | 2 |
| Medicine | 7 | | | 7 |
| Oncology | 4 | | | 4 |
| Surgical and Critical Care | | 1 | | 1 |
| Grand total | 11 | 1 | 2 | 14 |

| Laboratory | Number of participants per trial | | | trial |
|--------------------------------|----------------------------------|-------|--------|-------|
| | 1-9 | 10-50 | 50-100 | Total |
| Community and Clinical Support | | 1 | | 1 |
| Medicine | | | 1 | 1 |
| Oncology | 4 | 2 | | 6 |
| Surgical and Critical Care | | 1 | | 1 |
| Grand total | 4 | 4 | 1 | 9 |

Radiology

None of the research projects registered this year required additional input from the Waikato DHB radiology service.

Māori Research Review Committee

An important aspect of research in the Waikato is ensuring that the research focuses on equity of outcomes for Māori and ensuring participation and partnership with Māori.

A total of 97 studies (of the 139 registered) were reviewed by the Māori Research Review Committee. Studies not reviewed (22) include those involving staff members only; evaluating products, or extension studies. The remaining 20 studies are either yet to be reviewed (17) or did not proceed (3).

Clinical trials

Pharmaceutical company sponsored clinical trials account for approximately one third of research registered each year. Waikato DHB has 10 clinical trials units, which employ clinical trial nurses/coordinators. In addition, an agreement is in place with Clinical Trials NZ to undertake trials at Waikato DHB in cases where the principal investigator is employed by Waikato DHB.

The 10 clinical trials units are:

- Anaesthesia
- Critical Care/ICU
- Respiratory and Gastroenterology
- Cardiology
- Neurology
- Rheumatology
- Cancer and Blood
- Breast Cancer
- Diabetes
- Renal

In the ten clinical trials units at Waikato DHB there are 40 FTE involved in the smooth running of clinical trials. The clinical trials revenue covers the cost of the salaries of most of these staff.

Clinical trials units report that there were 171 clinical drug trials active during the 2018-2019 financial year. As at 30 June 2019 78 clinical drug trials were open; 37 studies closed to recruitment, but had patients on active treatment (or rolled over to an extension study) and 23 studies were in follow up with patients off active treatment. Two studies were in start-up phase, but not recruiting yet. There was also one study which was closed to recruitment, but patients remain on compassionate supply. Thirty trials were closed off during this financial period.

Recruitment to clinical trials

| Year | Number of clinical trials | Number | Number of | Number | Number | Screening |
|--------------|---------------------------|-----------|-----------------|-----------|----------|-----------|
| | active during the year | recruited | Māori recruited | withdrawn | declined | failure |
| 2016-2017* | 166 | 3419 | 181 | 50 | 140 | 363 |
| 2017-2018 ** | 168 | 4091 | 690 | 12 | 422 | 466 |
| 2018-2019 | 171 | 3276 | 550 | 45 | 509 | 649 |

Note: * Figures for 2016-2017 do not include Anaesthesia.

^{**} Figures for 2017-2018 do not include Renal Service. Also four large registry studies (involving 15466 patients) have been excluded from the table above.

Profiles of researchers and research units

Research at Waikato DHB covers a range of activities from post-graduate descriptive studies to large clinical trials funded by international pharmaceutical companies. They involve a variety of staff from across many departments.

As evidenced in the list of research at the end of this report, there are a number of researchers within the Waikato DHB. Many of these researchers are experienced, well-known researchers in their field, and there are a number of emerging researchers. A number of Waikato DHB staff also hold employed or honorary academic positions within tertiary institutions, such as University of Auckland, University of Otago and University of Waikato. For the purposes of this report, researchers are referred to by their title at Waikato DHB.

There are 10 dedicated clinical trial research units within Waikato DHB (see page 13). In addition to those units, research is undertaken across the breadth of the services at Waikato DHB.

Profiles of researchers

Below are profiles of a few of our staff who have undertaken research in the last year.

Graham Mellsop

Professor Graham Mellsop
has been a fantastic
contributor to academic
research in the field
of mental health for
many years and has
led research innovation
in Waikato since his
appointment in 2004. Graham
specialised in psychiatry in the

early '70s and his research has led to advances in many areas of mental health, including public policy, service quality improvement and areas of diagnosis and classification of mental illness. Graham also provided mentorship and support for emerging researchers including PhD students over the years. He is much valued on the international stage and has been involved with the Ministry of Health and the World Health Organisation in international classification, and diagnostic systems as well as being highly sought after as an expert witness on a number of high profile cases.



Graham has sat on numerous boards, tribunals and committees and is a distinguished fellow of the Pacific Rim College of Psychiatrists, a Fellow of the Royal Australian and New Zealand College of Psychiatrists and has a college citation for exceptional services to psychiatry, locally, nationally and internationally

His supportive leadership within the Waikato DHB is going to be much missed and we wish him very well in his retirement.

Lindah Chikazhe

Lindah Chikazhe is a fulltime clinical trial nurse
coordinator in the Cancer
and Blood Research
Trials unit at Waikato
DHB. The unit specialises
in haematology, medical
oncology and radiation
oncology clinical trials.

She worked at United Bulawayo Hospital in Zimbabwe, specialising in orthopaedics before immigrating to New Zealand in 2006. Linda worked in Dargaville and at Whangarei Base Hospital before moving to the Waikato. After deciding to learn more and expand her

scope of nursing she applied for a job with the unit as a research nurse and within a year took up a position as a trial coordinator. This is a role that provides a variety of learning opportunities whilst taking part in international research in cancer care. Lindah finds the role very challenging and exciting.

She completed a master's degree in Nursing with Massey University in 2016. She has an interest in health literacy and as part of her master's project she started work developing patient resources about clinical trials to make it easier for patients and family to gain a better understanding of what this involves. She is excited that her abstract about the project has been accepted for a poster presentation at the Australasian Gastro-Intestinal Trials Group conference in Adelaide.

Jenni Scarlet

Jenni Scarlet is a research nurse specialising in breast cancer clinical trials and research.

Working alongside breast surgeons and oncologists; Jenni has coordinated clinical trials for the prevention of breast cancer,

and treatment of ductal carcinoma insitu, early and metastatic breast cancer. She has coordinated trials introducing sentinel node biopsy to different types of breast cancer, introducing new drug treatments (e.g. the aromatase inhibitors and other targeted drugs) and "fine- tuning" of radiotherapy (e.g. use of a genomic assay to select women with low risk breast cancers who we may safely omit radiotherapy). Jenni has coordinated research for the improvement of quality of life, and communication (e.g. the use of decision aids) and reducing side effects. With more understanding of different types of breast cancer, current treatments become more tailored and individualised.

Our Waikato breast cancer research team participates in local research, and collaborates in multiple international clinical trials through an Australia and New Zealand investigator led group called Breast Cancer Trials. Via this group Waikato researchers collaborate with other major breast cancer research groups around the world.

In 2000, Jenni worked alongside colleague doctors and nurses with a special interest in breast cancer to establish the Waikato Breast Cancer Research Trust. This charitable trust enables breast cancer clinical trials, observational research and the Waikato Breast Cancer Register. This Register (now part of a national breast cancer register) enables an extensive audit of breast care and treatment, and can inform us of many aspects of breast cancer in our region.

There are many benefits for departments associated with participating in clinical trials/research; including; support of evidence based practice/medicine and keeping staff up to date with the latest developments in treatments. A culture of enquiry through research raises the standing of the Breast Care Centre and of Waikato Hospital nationally and internationally and helps attract staff to a progressive unit and hospital. There are many advantages to our patients, including, access to the best medical or surgical treatments. Participants who take part in clinical trials are also known to have better outcomes, even when receiving a standard treatment.

Thanks to good quality research, we have come a long way since the era of the radical mastectomy. More and more women today are surviving a diagnosis of breast cancer due to early detection (the breast screening programme is based on clinical trials research) and more effective, safe and tailored treatments.

Vanessa Vanderwolf

Vanessa's Master's of
Nursing research explored
the extremely obese/
bariatric needs inpatient
population.

Her research established that this population have unique needs that are associated with prolonged length

of stay. These include failure to early mobilisation, lack of suitable equipment, medical complexity and an increased incidence of developing skin injuries during the hospital experience.

Titled "Does one size fit all?", the evidence generated by the study highlights a need for benchmarking of care standards, new systems and processes which encourage pre-emptive care as opposed to a reactive approach for people with extreme obesity/ bariatric needs. Vanessa became interested in the bariatric subpopulation as a result of her passion for understanding the 'complex patient'. There are many complex or vulnerable patient subpopulations in a hospital, yet very little research has been conducted in NZ on larger sized patients as a unique subgroup. This seemed uncanny, in that obesity is now the number one global 'epidemic', whereby we are seeing more and more obesity in the healthcare setting.

Currently Vanessa works as a registered nurse on a busy surgical ward at Waikato Hospital. Whilst research in nursing is not everyone's cup of tea, having come out the other end of the Master's journey she now views research as a way that patient outcomes can be improved. Whether this leads to a better understanding of patient complexity, or the knowledge needed to improve care, systems and processes, the ultimate goal is to reduce the disparities that exist in healthcare among vulnerable groups. If these disparities can be reduced by nursing excellence, Vanessa would wholeheartedly encourage all nurses into exploring the world of research.



physiotherapist in New Zealand for nine years and the UK for six years Laura made the move to an Allied Health research position in 2017. With a strong clinical background in rehabilitation, Laura has also held management and leadership positions in Waikato and the Midlands Region. Working alongside John Parsons in the role of Bupa Fellow in Allied Health Research, Laura actively supports and drives Allied Health research within the DHB.

She has recently completed her Master's in Health Sciences researching the DHB physiotherapy provision for stroke patients in the first six months following stroke. She is also supporting a number of clinical staff complete research including' physiotherapy led pessary clinic' and the 'efficacy of community dietetics in the older population' She currently awaiting publication of articles including 'clinician knowledge of driving restrictions post stroke' and the article associated with her master's thesis.

Siân Beattie

Siân Beattie is a senior clinical physiotherapist at Waikato Hospital. She has over 20 years of physiotherapy experience and her area of interest is on women's and pelvic health physiotherapy. This includes working with patients referred with bladder or bowel dysfunction, pelvic organ prolapse and pelvic pain including pain with

intercourse.

Siân has recently completed a master's in Professional Practice with Wintec, Hamilton. The focus of her research was to explore the current practice experiences of health care practitioners in regard to conversations about pelvic floor problems with their patients. The research identified that undergraduate and work-based learning enabled practitioners to feel confident in their abilities to engage in conversations about pelvic floor problems as well as providing awareness in limitations and abilities to partake in these conversations. Providing a safe, confidential space to allow patients to engage in conversations about pelvic floor problems with their patients was invaluable. The importance of engaging in discussions provided positive patient experiences which encourages further integration into practice.

Siân and her colleague, Ashleigh Wood, have also instigated a physiotherapy-led initiative, with the support of uro-gynae, to address the use, selection and fitting of support pessaries in the management of women with pelvic organ prolapse and urinary incontinence. The aim of this initiative is to provide timely patient intervention for the provision of vaginal support pessaries, as well as freeing up vital gynae appointments for them to see more specialised and complex patients. This is an ongoing pilot that will be regularly reviewed and outcomes measured by both physiotherapy and gynaecology.

Midland Trauma Research Centre

The Midland Trauma Research Centre is part of the Midland Trauma System and was established to translate data into knowledge. The focus is on identifying and monitoring trauma issues which can then be addressed by appropriate people in the wider team – depending on whether the issues are clinical, system, infrastructure or injury awareness or prevention in nature. The Centre has a 2019-2022 strategic plan with four research themes; (1) Delivering high quality clinical care to all regional trauma patients, (2) Developing the regional trauma system with targeted process and infrastructure improvements, (3) Improving injury awareness and prevention and (4) Improving outcomes for patients following traumatic injury. The plan aligns with Ministry of Health strategic priorities, Midland Regional Service Plans, and MTS objectives.

Midland Trauma Research Centre actively support staff and students who want to undertake research or audit focused projects and are currently concentrating on developing links with external organisations to maximise the value gained from our trauma registry data. Current research collaborations include NZ Transport Agency (linking trauma and Police crash data), St John (evaluating our pre-hospital destination guidelines), WINTEC and the University of Auckland (patient experiences following trauma). The Centre's ability to undertake research relies on the commitment of the clinical staff across the Midland Trauma System to collecting the base trauma data, and the hub staff for data entry and quality checks on the trauma registry.

Joe Baker is
a consultant
orthopaedic
surgeon
with an
interest
in spine
surgery
at Waikato
Hospital and

Joe Baker

an associate professor in surgery at the University of Auckland. He has a background in academia developed throughout training in Ireland that complements in clinical practice. He spent a year in the laboratory setting prior to embarking on specialist training and being mentored by professor Kevin Mulhall, an academic orthopaedic surgeon.

Within the Waikato Hospital set-up Joe wants to foster academic work among trainees in Orthopaedic Surgery and aspiring surgeons who often have academic requirements placed upon them. There is such a breadth and volume of pathology within the Waikato region that opportunities for academic work within the field of orthopaedic and spinal surgery are plentiful. Understanding what we do, and what the results are, is hugely important simply applying evidence from overseas experiences is not always appropriate for a geographically isolated region with unique social and cultural demographics. Enhancing ties between Waikato Hospital and other institutions in the region, such as the University of Waikato, will be key to maximising our academic potential. Joe has a great group of colleagues from different surgical specialties and non-surgical specialties, equally driven to advance academic achievement at Waikato. Developing these links between specialties is very exciting.

On a personal level, Joe has a particular interest in spinopelvic alignment and is currently working with the Auckland Bioengineering Institute on a shape analysis project that will hopefully answer some basic science questions as well as providing some key information that is applicable to surgical planning.

Andrew Wood

Andy is an Ear Nose and Throat surgeon and a Senior Lecturer at The University of Auckland. He completed his medical degree at The University of Oxford in 2003, was awarded his PhD at the University of Auckland in 2013 and completed his ENT training in New Zealand in 2014. He has a strong research and clinical focus on Rhinology

(sinus, nasal and anterior skull base surgery) and has published extensively on the microbiology of chronic rhinosinusitis.

Andy's recent research topics have included post-operative care following sinus surgery, equity of access to ENT care and surgical simulation in undergraduate teaching. He is currently principal investigator in a multi-national device trial for sinusitis treatment as well as a randomised trial of antibiotics following sinus surgery in collaboration with Dr. Charles Lee at the University of Waikato. When at Medical School he was the founding member of the Hugh Cairns Surgical Careers Society, is a member of the New Zealand Training, Education and Assessment Committee for ENT Surgery and is proud to be a founding member of the Waikato Institute of Surgical Education and Research along with other Waikato-based collaborators.

Jade Tamatea

(Ngāti Maniapoto and Ngāti
Kahungunu). Jade grew up in the
Waikato before studying medicine at
The University of Auckland. Having
returned to the Waikato, Jade now
has a Fellowship with the Royal
Australasian College of Physicians,
specialising in endocrinology and
diabetes. Jade's passion is Māori
health and she sees review and critique of

the health system's processes as important. She has developed her skills as a researcher, with a PhD through The University of Auckland looking at the impact of thyrotoxicosis on Māori.

Her dual appointment as a Senior Lecturer with Te Kupenga Hauora Māori and the Department of Medicine, University of Auckland, gives her an avenue to continue her research in this area, while also helping to support the next generation of Māori clinicians. She balances this with her love of clinical care with a post as an endocrinologist at the Waikato DHB. She thrives and remains grounded with the support of her wider whānau, her supportive husband who is also a clinician at the DHB and their two tamariki ataahua.

Jade is a past winner of the Waikato Kudos Medical Science Award (2017) and has published a number of papers on endocrinology and health equity this year.

Profiles of research units

Mental Health and Addictions

The Mental Health and Addictions service has an extensive research track record of research and has published 15 peer review papers in 2018. Graham Mellsop has been the leading researcher in Psychiatry for many years and contributed internationally to the discipline including being an advisor to the World Health Organization. Associate professor David Menkes has a particular interest in psychopharmacology and has published widely on the side effects of many psychotherapeutic agents. He also has an interest in medical ethics and the role the pharmaceutical industry plays in health care.

Surgical and Cardiovascular

As a tertiary centre our surgical services are at the forefront in delivering high quality care to patients with complex conditions. As a leading cancer care centre we are particularly active in cancer surgery including in breast, lung, bowel and urology. In addition our cardiothoracic unit is rapidly becoming recognised as one of the busiest and most innovative in Australasia. Our vascular unit is also recognised for its excellent work and is one of only three teaching centres in Australasia that provides specialist vascular training to registrars.

Vascular Department

Mr Thodur Vasudevan and Mr Aasim Khan continue publishing important papers. Nathaniel Chiang, a former researcher at Waikato DHB, was awarded his PhD on wound healing in vascular patients in 2018. Mr Vasudevan is also taking part in several pharmaceutical company sponsored clinical trials.

Cardiothoracic Department

The Waikato Cardiothoracic Surgical Department is continuing to publish reputable papers. This is an active research team including professor Adam El Gamel, David McCormack, Paul Conaglen, Nand Kejriwal, Nick Odom, Damian Gimpel, Felicity Meikle, Zaw Lin and Grant Parkinson.

Breast Surgery

The Waikato Breast Care unit is one of the leading research groups in New Zealand led by Associate Professor Ian Campbell. The unit has been successful in attracting significant research funds and has an impressive research publication list. Mr Campbell also has had a track record of supporting surgical research fellows including a Commonwealth Scholar from Sri Lanka, Mr Sanjeewa Seneviratne and currently Ms Melissa Edwards who is undertaking a PhD on "The effects of comorbidity on early breast cancer treatment and outcomes in New Zealand."

Together with professors Ross Lawrenson (University of Waikato) and Mark Elwood (University of Auckland) and Dr Nina Scott, understanding inequities for Māori women with breast cancer has been a major focus of the unit's research.

The Waikato Breast Cancer Register has also been utilised together with the Auckland and Canterbury registers in studies examining local recurrence after

breast conserving surgery and radiotherapy, supported by an HRC grant. The unit's other major focus is involvement in a number of clinical trials.

Trauma

The Midland Trauma Research Centre group, Mr Grant Christey, Mrs Alaina Campbell, Mr Alistair Smith, have published important papers on cycling injuries, equity and ethnicity; farming related injuries (e.g. quad bikes, livestock, etc.), trauma in the elderly; the epidemiology of workplace injuries; the experiences of and longer term effects of trauma on patients and their whānau/family.

The research team have collaborated with the Bionic study, an important New Zealand study on the epidemiology of head injuries.

They are also currently involved in collaborative research with the New Zealand Transport Agency to identify the nature and causes of on-road motorcycle trauma.

This collaborative work has the potential to improve the evidence based on which policy and funding decisions are made in both road safety and injury prevention.

While meeting current research needs the team have an eye on the future, identifying opportunities to work smarter and more effectively by growing research partnerships through targeted collaboration with safety partners and agencies; and by delivering evidence based research in more user friendly formats to a variety of policy and funding decision makers.

The Midland Trauma Research Centre's ultimate goal remains injury prevention and reducing the burden of trauma on Midland region communities.





Ophthalmology

The Waikato Hospital Eye department has a wellestablished clinical research ethic with several members of the consultant staff publishing regularly.

Mr Ben Hoy, Mr Stephen Ng, Mr John Dickson, Mr Michael Merriman and Mr James McKelvie bring a strong academic focus to the department.

Orthopaedics

The Orthopaedic department has had another busy year and has progressed a number of research activities. Mr Joe Baker, Mr Thin Hong, Mr Carl Jones, Mrs May Mak have published papers in peer-reviewed journals. Mr Sandeep Patel has been supporting research fellow David Lees in his research.

The department is slowly establishing a formal research program and looks forward to making the department a place where clinical and academic endeavours can thrive.

Plastic / Oral and Maxillofacial surgery

The service has several research projects underway, including a project with University of Otago looking at bonding universal dental adhesive resin to developmentally hypomineralised enamel.

One of the registrars is investigating a simple method to colour balance digital photographs for remote assessment of burns depth. Articles have been published by Drs Singh, Maarschalk, Goad, Taib and Adams.

Anaesthetics

The department of Anaesthesia and Pain Medicine fosters a strong research culture led by professor Jamie Sleigh supported by clinicians, scientists, and research nurses. In particular: Drs Logan Voss, Kelly Bryne, Amy Gaskell, Christopher Jephcott, Scott Robinson, Rebecca Pullon; and Jonathan Termaat, Gay Mans and Glenda Mouton.

Research continues steadily, funded by various multicentre trials, a renewal of the JSMF grant, and the Shrimpton fund.

A number of presentations have been made at national and international conferences.



Rebecca Pullon, Amy Gaskell, and Logan Voss.

Intensive Care research

The Intensive Care Unit (ICU) at Waikato Hospital is active in a number of studies endorsed by the ANZICS-Clinical Trials Group, despite the hotly debated and widely discussed issue of consent in the Intensive Care environment. The team is led by Dr Robert Martynoga, ICU and Anaesthesia consultant, who manages the Research Portfolio and is Chair of the Critical Care Research Group. With Dr Annette Forrest departing, Dr Renesh Nair has enthusiastically commenced as Principal Investigator in a few studies, with the team supported by Dr Hamish Lala and Dr Ben Murrin.

Most of the team's work involves large scale multicentre trials looking to improve outcomes for patients receiving Intensive Care treatment. These include treatments for patients with severe community acquired pneumonia, duration of antibiotic therapy in patients with bacteraemia, and treatments for invasively ventilated adults with early activity and mobilisation. Other studies in conjunction with MRINZ and The George Institute for Global Health include comparing Beta-Lactam delivery and a trial to determine whether fluid resuscitation and therapy with Plasma-Lyte compared to 0.9% sodium chloride reduces 90 day mortality. Critical Care has a strong working relationship with Fisher & Paykel Healthcare Limited, collaborating to trial a new therapeutic respiratory support device.

Medical

As a tertiary referral centre, Waikato Hospital provides a comprehensive range of medical subspecialties. Staff are recognised for their expertise in their field and a number of the units are involved in research. The division of medicine is very active in undertaking clinical trials and always has a number of trials underway.

Cardiology

Waikato Hospital has been a leading centre for cardiology research led by associate professor Gerry Devlin who has recently moved to Tairāwhiti DHB. Associate professor Martin Stiles has taken over this role. Other members of the department are - Sanjeevan Pasupati, Rajesh Nair and Janice Swampillai. The Cardiology Clinical Trials team consists of four full time and four part time registered nurses, plus administration assistance, and is involved in a number of clinical trials. Martin continues in his role as chair of the International Scientific Document Writing Subcommittee of the Asia Pacific Heart Rhythm Society and the only non-North American member of the Scientific and Clinical Documents Committee of the Heart Rhythm Society. He is also co-supervisor for three PhD candidates at two universities: K Khokhar, University of Adelaide: K Jamart, University of Auckland; S Agrawal, University of Auckland.

The service is currently working on four projects which involve funding:

- National Health and Medical Research Council, Australia 2015. PI: Sanders. AUD3. 15 million for Cardiac Resynchronisation Therapy and AV Node Ablation for Atrial Fibrillation in Heart Failure (APP1080920). Chief investigator. Five year project
- NZ HRC, 2016. PI: Zhao. \$1.17 million for Atrial microstructure: The key to resolving atrial fibrillation. Investigator. Five year project
- National Heart Foundation of NZ, 2017. PI: Zhao. \$15,000 for research project grant investigator. Two year project

 Faculty research development funding (FRDF), University of Auckland 2017. PI: Zhao \$50,000 approx. for the development of a robust diabetes mellitus model.

Endocrinology and Diabetes

The endocrinology research team at Waikato Hospital are led by associate professor John V Conaglen supported by Dr Marianne Elston, Dr Jade Tamatea and endocrine surgeon Mr Wynne Meyer Rochow. The team have published widely, particularly on thyroid and adrenal disease.

The Waikato Regional Diabetes team led by Dr Justina Wu, who has carried on the research agenda for the service, with Drs Jade Tamatea, Louise Wolmarans and Ryan Paul; and Dr Lynne Chepulis (University of Waikato).

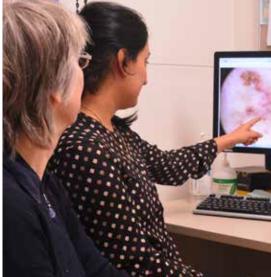
Their interests include research into the changes in the gut microbiome and barriers to screening in gestational diabetes, and management of diabetes in youth and young adults.

Rheumatology

During 2018, work has continued on the unit's research themes of rheumatoid arthritis, gout, spondyloarthritis, vasculitis and systemic sclerosis, led by Dr Doug White (University of Auckland). The unit has contributed to development of preliminary remission criteria for use in gout clinical trials and to a national audit of benzbromarone use as well as data on the impact of smoking on gout treatment.







Dr Doug White was an invited speaker to several conferences

- Paediatric Rheumatology, Sports Medicine New Zealand Waikato Branch, 2019
- Local Signs of Systemic Disease, Sports Medicine New Zealand Waikato Branch, 2018
- Spondyloarthritis at the Australasian Association of Musculoskeletal Medicine Annual Scientific Meeting in 2018

The Spondyloarthritis, Genetics and the Environment Study (SAGE) has continued to prove a valuable collaborative research effort with analysis of novel genetic markers. Work is underway on a Health Economic analysis of spondyloarthritis in New Zealand. Rheumatology have had two summer studentships, one from Arthritis NZ and the other form the University of Auckland.

Respiratory

2018 has been a busy year for respiratory research with local investigator driven, national and international collaborative trials. The respiratory research unit is led by Dr Cat Chang and Professor Bob Hancox (University of Otago) and employs three full time research nurses Christine Tuffery, Sandra Hopping and Siobhan Uruamo. The studies are supported by clinical staff including Dr Janice Wong, Dr Rain Shafuddin, Dr Noel Karalus, Karen Middleton (lung cancer CNS), Glenda Sullivan (COPD CNS) and Sue Jones (Asthma CNS). There are ongoing projects in the fields of COPD, bronchiectasis, lung cancer, interstitial lung disease, tuberculosis and asthma.

The department has been successful in grant applications and is the lead site for New Zealand in the investigator driven, multi-centre, trans-Tasman study looking at beta-blockers in COPD funded jointly by the NHMRC and the HRC. Respiratory research is also collaborating with animal behaviour scientists and scent chemists at Waikato University looking at the feasibility lung cancer screening through scent detection. The department maintains the regional lung cancer register and this has led to the intervention of a

larger regional study of barriers to diagnosis for Māori at risk of lung cancer. Siobhan Uruamo also came on board as part of an HRC funded study to look at the rates of latent TB in Māori.

Gastroenterology

Research in the Gastroenterology unit is driven by Dr Frank Weilert and Dr James Brooker, and includes Dr Graeme Dickson, Dr Dara De Las Heras, Dr Elizabeth Phillips, Dr Wayne Bai (research fellow). There are two research nurse coordinators in the clinical trials team. At year end there were 10 clinical trials (plus four long term extension trials) currently running in the gastroenterology clinical trials unit. One of the key achievements recently has been the fact that treatments are now available for hepatitis C with a 98 percent cure rate, following 15 years of involvement in hepatitis C trials and improving hepatitis C treatment and outcomes.

Achievements in the past year include employment of a research fellow, post-graduate study for a study coordinator, commencement of liver fibro-scanning and hepatitis C work in the community, and receiving an award recognising enrolment and investigator and site staff.

Infectious Diseases

Paul Huggan has encouraged research into Infectious diseases in Waikato Hospital and has published in international journals on the topic.

Dermatology

The Waikato Dermatology department is one of the most research-active in Australasia. Associate Professor Amanda Oakley and Marius Rademaker pioneered our tele-dermatology service which has meant that GPs can access a dermatology opinion through digital images. The department has also actively encouraged the junior staff into research. Amanda Oakley is also involved in the DermNet NZ website which is internationally recognised and was acknowledged by the United States Dermatology Services with an award.





Neurology

The Neurology department published highly reputable papers on the therapeutic potential of dietary strategies, such as ketogenic diets, in people with Parkinson's disease and drug-resistant epilepsy. Members of the team have presented at national and international conferences on Parkinson's and Alzheimer's and made a number of written, video and radio media releases

Dr Phillips, along with his co-investigators based in the Neurology department, continues to research the potential for dietary treatments in neurological disorders after receiving a successful WMRF of \$25,000 for the Alzheimer's Dietary Study. This study has allocated patients with Alzheimer's disease, plus a study partner, for 12 weeks to either a low-carbohydrate "ketogenic" diet high in healthy fats, or their usual diet supplemented with healthy adult eating guidelines and recipes. They will then assess and compare the effects of the diets have on (1) cognition, (2) function, and (3) quality of life. Participants are still being accepted currently; the study website is located at www.nutritioninalzheimers.com to find out more.

Ongoing research from staff (including both nurses and medical students) continues to work toward large collaborative projects involving other New Zealand hospitals. The general aim of these studies is to assess the nation-wide impact of stroke and multiple sclerosis. The service is also taking part in a number of pharmaceutical company sponsored clinical trials for conditions such as epilepsy and multiple sclerosis.

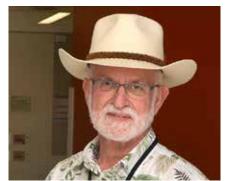
Renal

The renal department is actively taking part in several intervention trials – some funded by the industry and some by Australasian Kidney Trials Network (AKTN) (non-profit). The funding from the industry sponsored trials are used to subsidise AKTN trials which look at clinically important issues for patients that have sound pathophysiological basis. Our advanced trainees also undertake audit and research projects as part of their training requirements. Dr Rabi and other SMOs are also actively involved in individual physician led research projects using data from within the unit and also from wider dialysis registries (ANZDATA and NZ PD registry). Our next big project will be looking at all the kidney biopsy data from our unit and correlating the pathological findings with long-term patient outcomes.

Older Persons and Rehabilitation

Waikato DHB have identified research into ageing as an important point of the strategy of improving services for older persons. The unit has internationally recognised researcher professor Matthew Parsons as its lead, and recently employed Dr John Parsons as BUPA fellow in rehabilitation.

The Institute of Healthy Ageing is a collaborative venture between Waikato DHB, the University of Auckland and the University of Waikato, and was launched in 2013. Its purpose is to facilitate the sharing of research and clinical expertise, and the development of research initiatives in the field of ageing, older people's health and rehabilitation.



Dr Michael Kaplan.

The governance group of the institute includes representatives from Waikato DHB, University of Auckland, Bupa NZ, Wintec and the community. Part of the Institute's focus is translational and applied research. The Institute has a clear research strategy developing expertise in rehabilitation (Dr Michael Kaplan) health services recognition and in dementia care (led by Dr Colin Patrick and Dr Etu Mau), and is well placed to help Older Persons and Rehabilitation become one of the leading centres for education/training and research in the country. Dr Kaplan was awarded the Kudos Medical Award in 2018 for his research.





Oncology

As a regional cancer centre the cancer services have been very active in research. It has an active clinical trials unit and is currently managing a number of important clinical trials as well as some funded by the HRC.

There are currently four HRC cancer studies been run from the Waikato Hospital including one from Associate Professor Michael Jameson on "More gain, less pain from chemo radiation for rectal cancer by adding simvastatin" and another on "Metastatic breast cancer" been managed by Dr Chunhuan Lao and Dr Marion Kuper. Professor Lawrenson (University of Waikato, Medical Research Centre team) is principal investigator on two HRC studies "Improving early access to lung cancer diagnosis for Māori and rural communities" and "Reducing delay and increasing access to early diagnosis for colorectal cancer".

Women and Children

Obstetrics and Gynaecology

The Women's Health team is involved in a number of clinical trials and evaluation studies.

Dr Narena Dudley is involved in clinical trials looking at high grade cervical anomalies and the management of CIN3; Drs Joy Marriott, Isabel Camano, Nerida Titchiner, and research midwife Jessica Jordan, are involved in a study looking at induction of labour (OBLIGE). There are also a number of nursing/ midwifery led studies being undertaken in the service, and the service is contributing to the Cleft Lip and Palate Risk Factors Study.

The OBLIGE (Outpatient Balloon vs Inpatient Gel) study is a New-Zealand wide multi-centre trial comparing two methods of preparing the cervix for labour, outpatient balloon catheter versus current inpatient prostaglandin practice. The trial is being facilitated by the Liggins Institute at The University of Auckland. Waikato is one of 11 participating sites. This will be the first large study in New Zealand that examines women going home with a balloon catheter as part of their induction - over 1500 women will take part in OBLIGE. The study has recruited over 500 women to date (68 of these from Waikato). This study has the potential for making significant changes to the delivery of maternity care for the future. If the OBLIGE study confirms safety, effectiveness and acceptability of the balloon method, women will be able to be at home with their family/ whānau for part of their induction of labour.

Paediatrics

Research activity in Paediatric Medicine has increased significantly with involvement in the PARIS II trial, a multicentre RCT comparing nasal high flow therapy to conventional low flow oxygen for children with hypoxaemic respiratory failure. Participation in PARIS II has allowed appointment of Kirsty Greaves to the role of part time research nurse coordinator for Paediatrics.

We are also working towards commencing recruitment for a further multicentre RCT, the BIPED Study, investigating the synergistic efficacy of oral dexamethasone and nebulised adrenaline for the management of bronchiolitis. We were once again well represented at the Paediatric Society of New Zealand annual conference, with presentations by four groups of medical students, as well as two registrars, and at which Dr Aaron Ooi was awarded the Royal Australasian College of Physicians 2018 Trainee Research Award of Excellence for his research on the implementation of a simulation programme for medical students in Paediatrics, undertaken with Dr Alex Wallace.

Dr Deborah Harris has taken up a new role working as a Lecturer, Nurse Practitioner in the department of Graduate School of Nursing, Midwifery and Health, Victoria University, Wellington. We wish Deborah all the best. In 2018 Dr Harris received the University of Auckland Research Excellence Medal (Team Award) for her work on the Sugar Babies and CHYLD studies.







Paediatric surgery

Dr Kanaan Aumua together with Mrs Udaya Samarakkody and Dr Danny De Lore (Rotorua) presented at Canadian Pediatric Surgeons scientific meeting followed by publishing "Racial disparity in outreach pediatric surgical service" in the prestigious Journal of Pediatric Surgery highlighting the delayed elective surgery in Māori ethnicity due to innate systemic causes not detected by standard models of health.

Shani Fernando (Medical student) supervised by Dr Noel Karalus and Mrs Udaya Samarakkody presented at the Canadian meeting a 20 year follow up of "Nontuberculous mycobacterial (NTM) lymphadenitis in children – A subtropical disease with diagnostic challenge".

Dr Sashikumar Sankaran and Mr Askar Kukkady were co-authors for a multi-centre national publication on "Ethnic variations in the childhood prevalence of Hirschsprungs disease in New Zealand". ANZ J Surg. 2018.

Dr Marilyn Wong, surgical trainee presented her research on "Validity of focussed assessment with sonography in trauma (FAST) in the paediatric population" at the annual scientific conference of Royal Australasian College of Surgeons in Bangkok, Thailand (supervisor – Mr Stephen Adams).

Māori health

Nina Scott (Ngāpuhi, Ngāti Whātua and Waikato) is a public health physician and is clinical director of Māori Public Health at Waikato DHB. Nina works on a range of fronts to advance Māori health. This includes chairing Hei Āhuru Mōwai, the national Māori cancer leadership group that works closely with researchers, politicians and the health ministry to improve Māori cancer control. Nina is also lead for the He Pikinga Waiora (HPW) research team who work with Māori communities to co-design approaches to chronic disease prevention and treatment using the use the HPW Indigenous Implementation Science Framework (www.hpwcommunity.com).

In the past Nina has worked in breast and prostate cancer research teams as a Māori investigator. She is currently conducting Harti Hauora Tamariki, a large HRC funded and HPW based hospital randomised trial which involves (1), making service improvements based on feedback from Māori staff, and patient's families plus (2), Māori navigators linking patients and families with resources and community services. Co-principal investigators on the Harti study are Dr Bridgette Masters Awatere and Associate Professor Polly Atatoa-Carr. Nina takes an active role in supporting researchers to develop Māori research expertise and expanding the Māori health research workforce.

Dr Rawiri Keenan has been awarded a Foxley Fellowship – "Cultural Competence and Equity focussed activities in Primary Care" by the HRC.

Associate professor Jacquie Kidd, AUT Taupua Waiora Centre has been the Māori academic advisor on two HRC cancer projects and is locally working with The Rauawaawa Kaumātua Charitable Trust on a study on prostate cancer support services for Māori men.





Nursing

Nursing research platform has a methodological underpinning that of a qualitative kaupapa māori co-design, although a more general qualitative expertise to projects is available when requested.

There are currently a number of research projects underway, led by Nursing and Midwifery staff with some of these being undertaken for attainment of a qualification (master's, PhD). The studies cover a wide variety of services/disciplines across the health sector. The majority of this research is aligned to priorities as identified via the DHB Strategic Imperatives and Nursing at Waikato DHB 2017-2021.

Allied Health

Since late 2016 the Bupa research fellow (Allied Health) John Parsons and the Bupa (Allied Health) research associate Laura Stratton have been actively engaged in fostering a research culture within allied health through

- Facilitating and conducting research projects within Allied Health
- Promoting research amongst Allied Health clinicians and the broader Waikato DHB community
- Providing research education opportunities to allied health clinicians and advising and supporting Allied Health clinicians interested in undertaking higher education in research
- Encouraging and supporting Allied Health Clinicians to disseminate results of research activities through conference presentations and publications.

Primary Care, Rural Health, and Telehealth

While much of the DHB research has been conducted in conjunction with Waikato Hospital we need to remember that most health care interactions occur in primary care. The interface between primary and hospital services have been a central component in ensuring excellent care and excellent outcomes for our patients. The Waikato Medical Research Centre has concentrated its research on this interface and has studies in cancer, diabetes, and rural health.

Collaborations

Some of the research undertaken at Waikato DHB is done in collaboration with other organisations, key examples being:

- University of Waikato
- University of Auckland
- University of Otago
- Auckland University of Technology
- Institute of Healthy Ageing
- Wintec
- BUPA

- Oxford University
- Columbia University
- University of Wisconsin, Madison
- Bern University
- University of Melbourne
- Monash University, Melbourne

As we set the strategic direction for research going forward, we will grow our collaboration space.

Honours, awards and grants

Summer studentships

Each year Waikato DHB funds summer studentship scholarships through the Waikato Clinical School to support hypothesis-driven research projects that can be undertaken in a 10 week period over the student's summer break are encouraged.

An important part of the project is to encourage the student to develop an interest in research. The supervisor must be available over the time-frame of the studentship to ensure direct regular supervision. Students will work under the supervision of a project supervisor who will take responsibility not only for the project's completion but also for completing the appropriate approval processes. The applicant/supervisor must obtain ethical approval through the Health and Disability Ethics Committee where required and have Waikato DHB authorisation.

Waikato Clinical School summer studentships 2018-2019

| Supervisor/s | Project title | Student Name | Student Source | Source of Funding |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------|-------------------|
| Dr Joe Baker | Evolution of assessment and treatment of the posterior malleolus in a Level 1 Trauma Centre. | Juvelyn Raynel | University of Auckland | Waikato DHB |
| Dr Cat Chang, Dr Harry Gallagher | Observational study reviewing the impact of the first dedicated Interstitial Lung Disease Multi Disciplinary Meeting in New Zealand after the first 2 years. | Sarah Fairweather | University of Otago | Waikato DHB |
| Prof Ross Lawrenson, Dr Tania Blackmore, Vanessa Burrett, Jenny McCleery, Leonie Brown, Karen Middleton, Dr Janice Wong, Dr Chunhuan Lao, A/Prof Ian Campbell | Investigating the psychological support needs of patients with newly diagnosed breast cancer. | Elaine del Mundo- Ramos | University of Auckland | Waikato DHB |
| Dr Douglas White | Isolated Antibodies Against Ro52 and their Significance in the Waikato Hospital Systemic Sclerosis Cohort. | Phoebe Bardoul | University of Otago | Waikato DHB |

| Dr Jade Tamatea, Associate Professor John V Conaglen, Dr Marianne Elston, Professor Papaarangi Reid | Accuracy of ethnicity records at primary and secondary healthcare services in Waikato region, Aotearoa/New Zealand. | Brooke Blackmore | University of Otago | Waikato DHB |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------|----------------------------------|
| Dr Nina Scott | The Harti Inhalator study (HIS): The effects of provision of NRT inhalators on smoking cessation for intervention participants compared to usual care participants of the Harti Hauora Tamariki randomised control trial. | Maia Silviera | University of Waikato | Waikato DHB |
| Rebecca Pullon | EEG patterns during anaesthesia | Louisa Howse | University of Auckland | Waikato DHB |
| Rebecca Pullon | Causal relationships in the brain and regain of consciousness | Lucy Yan | University of Auckland | Anaesthetic Research Trust |
| Dr Douglas White | Increased Malignancies in our Waikato cohort of patients with Systemic sclerosis | | | Arthritis NZ |
| Dr Ryan Paul, Dr Lynne Chepulis, Dr Jade Tamatea, Dr Louise Wolmarans | The Impact of New Zealand Guidelines on Maternal and Neonatal outcomes in Gestational Diabetes Mellitus. | Kirshni Bhula | University of Otago | Waikato DHB |
| Dr Gregory Jacobson, Dr Steve Bird, Mr Adam El Gamel, Dr Gerry Devlin | Do patterns in the gut and oral microbiomes associate with coronary artery disease and acute coronary syndromes? | Liam Stayte | University of Auckland | Heart Foundation |
| Dr Michael Jameson | What do colorectal cancer survivors die from? | Rachel Nunn | University of Otago | Waikato DHB |

Kudos Awards

Dr Michael Kaplan was winner of the Waikato DHB Medical Science Award in 2018. His trailblazing research in the 1970s challenged prevailing belief by suggesting that adults can grow new nerve cells. His theory took time to gain acceptance but is now one of the fundamental principles underlying rehabilitation programmes for those who have experienced a stroke or similar neurological trauma.

Following his years as a researcher, Dr Kaplan left the research world to practice medicine. This led to a distinguished career as a teacher, academic and clinician in the physical medicine and rehabilitation fields. In the Waikato, he championed the establishment of the collaborative Institute of Healthy Ageing venture and he is a passionate innovator in the area of stroke rehabilitation. Contemporary published research is applied to Waikato stroke victims; optimizing our patients to be among the best outcomes in both Australia and New Zealand.

Dr Kaplan's incorporation of the principles of neuroplasticity and collaborative research with the Institute of Healthy Ageing are creating patient dramatic recoveries using innovative therapy protocols with up-to-date pharmacological insights. Our patient journey incorporates the best research taken from the laboratory bench to the bedside. Dr Kaplan has been invited this September as a key note speaker at the Australasian Winter Conference on Brain Research for his accomplishments. Dr Kaplan has applied his Kudos award toward creating an education YouTube channel; Kaplan Brain Health.

The other finalists in 2018 were Dr Tim Edwards and Dr Jonni Koia, both from University of Waikato.

Waikato DHB Master's Scholarship: Healthy people. Excellent care

Funded by Waikato DHB, the purpose of this scholarship is to provide support for Master's students at University of Waikato conducting research with links to one or both of the Waikato DHB's strategic imperatives: (i) Health equity for high needs populations; or (ii) Effective and efficient care and services.

Kiri Diamond was the inaugural winner of this scholarship. Kiri is a descendant of Ngati Tūwharetoa and Ngāpuhi who was born and bred in Tauranga Moana and after leaving Tauranga straight out of college returned to raise her son and ran her own Wellness clinic that provided a mix of rongoā māori and contemporary service. It was after learning about some of the blocks for Māori in accessing their own cultural practices she got her Degree in Social Sciences and is currently finishing off her thesis in Masters in Applied Psychology (Community). Kiri's research is a project that has been requested through a hapū whānau ora hui in 2016 when the whānau wanted to improve their own wellbeing due to the removal of the visiting doctor service. The whānau ahi kā of Ngatī te Maunga are located on the western access of Lake Taupo, that has a difficult road to access and medical emergencies require the Westpac Helicopter Service to get injured people to the hospital. The whānau wanted to learn how to use rongoā from their lands to keep themselves well.

The thesis research focuses on the issues, challenges and learnings from implementing a marae-based rongoā programme in a semi-rural location. The thesis uses a participatory action research methodology which required the ahi kā whānau to develop, access and decide on each stage of the wananga, also including how a facebook group page would be used. The Tomokanga engagement framework has been used to evaluate the decisions made throughout the implementations of the rongoā programme. The learnings from the research are intending to be used to implement a second phase of the programme and whānau would like to use their learning to help other hapū who are looking at implementing a similar programme.

Health Research Council grants

No new HRC grants were gained in the 2018/2019 year.

Work continues on the projects for which HRC grants were received in the 2017/18 year:

- Does a Whānau Ora approach improve outcomes for hospitalised tamariki? (Dr Nina Scott)
- Improving early access to lung cancer diagnosis for Māori and rural communities, (Professor Ross Lawrenson)
- Reducing delay and increasing access to early diagnosis for colorectal cancer, (Professor Ross Lawrenson)

Heart Foundation

In July 2018 the Heart Foundation made grants towards two studies at Waikato DHB:

- Associate Professor Gerard Devlin
 Department of Cardiology at Waikato District Health Board
 Ffr-gUidance for compLete non-cuLprit REVASCularization a registry-based randomized clinical trial.
- Dr David McCormack
 Department of Cardiothoracic Surgery at Waikato Hospital
 New Zealand National Aortic Awareness Day Event

Cancer Research Trust NZ (previously Genesis Oncology Trust)

No grants were received from Cancer Research Trust this year.

In 2017 a Research Project Grant was awarded to Dr Navin Wewala, Oncology Department, Waikato Hospital, Hamilton for his project "Phase Ib randomised, placebo-controlled, double-blinded trial of cimetidine to prevent the nephro-, neuro- and oto-toxicity of cisplatin in patients undergoing chemo-radiotherapy for head and neck cancer." This project is in the registration and sign-off process at Waikato DHB, and is expected to get underway mid-2019.

Waikato Medical Research Foundation

The following grants were made by the Waikato Medical Research Foundation to researchers in the Waikato region during 2018. A total of \$110,252 (with amounts varying from \$1640 to \$29,740) was granted to recipients at Waikato Hospital during this period.

Studies registered at Waikato DHB:

| Award | Recipient | Organisation | Project |
|-------|-----------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 294 | Dr Kelly Byrne Consultant Anaesthetist | Waikato Hospital | Efficacy of continuous erector spinae block for post-operative analgesia: a triple masked placebo controlled feasibility study |
| 296 | Dr Marianne Elston Consultant Endocrinologist | Waikato Hospital | Investigation of weight gain and appetite following treatment for thyrotoxicosis – a pilot study |
| 297 | Dr Odette Hart Vascular Registrar | Waikato Hospital | Determination of ongoing physiology abnormality in chronic venous disease post intervention |
| 300 | Dr Matthew Phillips Consultant Neurologist | Waikato Hospital | Low-fat versus ketogenic diet in Alzheimer's disease : a pilot randomized controlled trial |
| 304 | Amy Jones Te Puna Oranga | Waikato Hospital | The Harti Inhalator Study |
| 305 | Dr Miriam Bennett Respiratory | Waikato Hospital | Do Cardiac Selective Beta-Blockers Affect The Use Of Beta-Agonist Inhalers Following Bronchoconstriction In Asthma? |
| 306 | Dr Frank Lin Department Of Oncology | Waikato Hospital | Comprehensive Analysis Of Prognostic Factors In Advanced Cancers By Mining Of The Electronic Medical Record |
| 307 | Dr Andrew Wood Academic Surgery | Waikato Clinical Campus University of Auckland | A Pilot Study Of Post-Operative Antibiotics In Endoscopic Sinus Surgery |

Other studies in Waikato region:

| Award | Recipient | Organisation | Project |
|-------|----------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 292 | Dr Carolyn Aird Research Fellow | Waikato Clinical Campus University of Auckland | Assessing the value of teaching medical students emotional intelligence skills to promote deeper and more meaningful personal reflection: a pilot study |
| 301 | Dr Jaimie Veale School of Psychology | University of Waikato | By and for, not on and to: an analysis of transgender health research needs |
| 303 | Dr Joanna Hicks Proteins And Microbes Lab, Faculty Of Science And Engineering | University of Waikato | Cysteine Biosynthesis And Infection, Gonorrhoea's Weak Link? |

Research projects approved

A list of research projects approved at the Waikato DHB Research Office between 1 July 2018 and 30 June 2019 is included as Appendix A.

List of publications

A list of publications follows as Appendix B. Please note that this list may not be complete.

Appendix A – Studies

Studies approved 1 July 2018 to 30 June 2019

The table below shows the titles of research that was approved in the period 1 July 2018 to 30 June 2019, by department, service and the principal investigator at Waikato DHB. Some of these projects were registered in prior years (the registration process can be protracted for a number of reasons). A number of these principal investigators may also be working on other research/trials that commenced before 1 July 2018 and are still underway.

Where the research is being done by a principal investigator outside of Waikato DHB, and there is no Waikato DHB investigator, these are noted as "External PI".

Note: Some research undertaken by nursing staff is listed in the service in which the research was done, rather than under the heading 'Nursing and Midwifery'.

Allied Health

Physiotherapy

Laura Stratton

The use of pessaries as a treatment adjunct by Physiotherapists

Linda Barlow

The Role of the Physiotherapist in the Acute Medical Setting

Speech Language Therapy

Gwen Kerrison

Impact on clinical decisions with the introduction of objective measures in VFSS

Kate McGaw

Patients' and family's experiences of aphasia following a brain tumour.

(External PI)

The impact of telehealth videoconferencing services (THVCS) on work systems for key stakeholders in NZ: a sociotechnical approach

Child Health

Child Development Centre

Dr Kate Wallace

Experiences of Transition to Adult Health Care from Young Adults with Cystic Fibrosis

NICU

Dr Deborah Harris

Glucose in Well Babies and their later Neurodevelopment (GLOWiNg)

Paediatric Medicine

Dr Hamish McCay

Nasal High Flow Therapy for CHildren with Acute Hypoxemic Respiratory Failure - a Randomised Controlled Trial - PARIS II Trial

Dr Te Aro Moxon

What's in a name?

Paediatric Surgery

Marilyn Wong

Management and Outcomes of Congenital Anomalies in Low-, Middle- and High-Income Countries: A Multicentre, International, Prospective Cohort Study

Community and Clinical Support

Pharmacy

Rajan Ragupathy

Addiction by opioid prescription- how good is our opioid prescribing post discharge?

Antimicrobial use in Māori vs Non-Māori respiratory patients after discharge from a tertiary level hospital

Corporate

Strategy and Funding

(External PI)

Evaluating Models of Pharmacist Integration into General Practice in New Zealand

Dr Richard Wall

Emerging Sources and Pathways for Leptospirosis - a paradigm shift

Te Puna Oranga

(External PI)

Māori co-designed intervention to refocus New Zealand health service delivery for improved engagement and responsiveness with Māori māmā hapū and pēpi: Investigate the development, use and impact of the Harti Hauora Māmā Hapū (HHMH) holistic assessment tool within a Kaupapa Māori antenatal programme context.

Medicine

Diabetes

Dr Ryan Paul

New Zealand Youth and Young Adults Diabetes Workforce Survey

Screening Rates for Diabetes in Pregnancy in the Waikato Region

Type 2 diabetes medication: Which One is RighT Here (WORTH) study

Emergency Department

Dr Christine Brabyn

Australasian Resuscitation in Sepsis Evaluation: fluid or Vasopressors in emergency Department Sepsis (ARISE FLUIDS) trial

Fever Phobia

(External PI)

Information Provision for Mild Traumatic Brain Injury

The role of Forensic Nurses in Emergency Departments in New Zealand DHBs

Victoria Shaw

Exploring Emergency Department Visits: A study examining presentations to Waikato Hospital's Emergency Department and lessons learned through simulation of this environment

Endocrinology

Dr Jade Tamatea

Accuracy of ethnicity records at primary and secondary healthcare services in the Waikato region, Aotearoa/ New Zealand

Gastroenterology

Dr Frank Weilert

A 52-week, placebo-controlled, randomized, Phase 3 study to evaluate the safety and efficacy of seladelpar in subjects with primary biliary cholangitis (PBC) and an inadequate response to or an intolerance to ursodeoxycholic acid (UDCA)

A Multi-center, Open-label, Long-term Extension Study of ABI H0731 + Nucleos(t)ide as Finite Treatment for Chronic Hepatitis B Patients

A Phase 2a, Multicenter, Double blind, Placebo controlled Study evaluating ABI-H0731 as adjunctive therapy in virally suspressed HBeAG-positive patients with Chronic Hep B ABI-H0731-201

ABI-H0731-202: A Phase 2A, Multi- Centre, Double-Blind, Placebo-Controlled Study to Evaluate ABI-H0731 + Entecavir versus Entecavir Alone for the treatment of Viremic, HBeAg Positive Patients with chronic Hep B Real World Efficacy of Antiviral Therapy in Chronic Hepatitis C in New Zealand (REACH-C)

Infectious Diseases

Dr Graham Mills

The RiCoDIFy study: A Phase 3, randomized, doubleblind, active controlled study to compare the efficacy and safety of ridinilazole (200 mg, bid) for 10 days with vancomycin (125 mg, qid) for 10 days in the treatment of Clostridium difficile infection (CDI)

Medical Training

Dr Paul Huggan

Development of teaching, mentoring and supervision skills for junior medical registrars

Neurology

Dr Christopher Lynch

Reducing fatigue after stroke: A randomised controlled trial. Fatigue After STroke Educational Recovery (FASTER)

Dr Matthew CL Phillips

Low-Fat Versus Ketogenic Diet In Alzheimer's Disease: A Pilot Randomized Controlled Trial

Dr Daniel Oh

The New Zealand National Stroke Registry

Renal

Dr Kannaiyan Rabindranath

A multicenter, double blind, randomized, placebo-controlled study to evaluate the safety and efficacy of intravenous CR845 in Hemodialysis patients with moderate to severe Pruritus, with a 52 week open-label extension.

A Phase 3b, Randomised, Double Blind, Placebo-controlled Study to Evaluate the Efficacy and Safety of TRC101 in Delaying Chronic Kidney Disease Progression in Subjects with Metabolic Acidosis

A randomized, multicenter, double-blind, parallel-group, active-control study of the efficacy and safety of Sparsentan, for the treatment of immunoglobulin a nephropathy (PROTECT IgAN)

REDUcing the burden of dialysis Catheter ComplicaTIOns: a National approach (REDUCCTION)

Dr Peter Sizeland

Incidence and outcomes of renal replacement therapy for people with end-stage kidney disease who are not eligible for health and disability care in New Zealand. Protocol for a retrospective longitudinal study

Dr Ryan Paul

Predicting Nocturnal Hypoglycemia in Patients with Type 1 Diabetes using Flash Continuous Glucose Monitoring Data using Machine Learning: Initial Retrospective Study

(External PI)

Live Donor Renal Transplantation Cross Matches in 2016 in New Zealand and their outcomes to transplantation

Respiratory

Dr Cat Chang

A double-blind, placebo-controlled, multi-centre, clinical trial to investigate the efficacy and safety of 12 months of therapy with inhaled colistimethate sodium in the treatment of subjects with non-cystic fibrosis bronchiectasis chronically infected with Pseudomonas aeruginosa (P. aeruginosa). [Promis 1 – A clinical study of inhaled CMS by i-Neb in patients with NCFB]

A Phase 1b/2a, Double-blind, Placebo-controlled, Dose-escalation Study to evaluate the safety, pharmokinetics, and pharmacodynamics of recombinant human plasma gelsolin (RHU-PGSN) added to standard of care in subjects hospitalised with community - acquired pneumonia (CAP). BTI-201

A Phase 3, randomized, doubleblind, parallel-group, placebo-controlled multicenter study to evaluate the efficacy and safety of two doses of GLPG1690 in addition to local standard of care for minimum 52 weeks in subjects with idiopathic pulmonary fibrosis. Galapagos IPF clinical trial 2019

A Randomized Open-Label, Phase 1b Study of the Safety of Pirfenidone Solution for Inhalation (AP01) in Patients with Idiopathic Pulmonary Fibrosis (ATLAS Study)

Dr Harry Gallagher

ILD Registry Intersticial Lung Disease

Rheumatology

Dr Douglas White

A Phase 3, Randomized, Double-blind, study comparing Risankizumab to Placebo in subjects with active Psoriatic Arthritis (PsA) who have a history of inadequate response to or intolerance to at least one disease modifying anti-rheumatoid drug (DMARD) therapy.

Dr Kamal Solanki

Increased malignancies in our Waikato cohort of patients with Systemic sclerosis

Dr Vicki Quincey

A multicenter, randomised, double-blind, placebo-controlled study to evaluate the safety and efficacy of Upadacitinib in subjects with Giant Cell Arteritis.

Dr Deepika Padala

Health Economics of Systemic Sclerosis the Waikato Hopital cohort, New Zealand

Mental Health and Addictions

Forensic mental health

Sarah Taylor

Level of observations and therapeutic engagement in an adult inpatient mental health service.

Mental Health

Dr Dinesh Nagaraj

Resource utilization review of high-acute psychiatric inpatient wards at Henry Rongamau Bennett Centre

Nursing and Midwifery

Integrated Operations Centre

Dr Nina Scott

The Hospital Transfers Project: Māori whānau Involvement in the Health Care Equation

Nursing

(External PI)

Patterns of socio-political knowing in nursing practice: A qualitative inquiry into registered nurses understanding Psychological Collectivism and Its Effects on Group Member Job Performance and Taking Charge Behaviour The Role of the Enrolled Nurse within the Waikato Region

Prof Development Unit

(External PI)

New Graduate Professional Education: The Impact on Nursing Practice and Patient Care.

Theatre

Lara Smith

The Monitoring of Caesarean-Section Delivered Newborns in the Post-Anaesthetic Care Setting.

Older Persons and Rehabilitation

Older Persons and Rehabilitation

Laura Stratton

Key stakeholder views on the implementation of PREP-2 into Waikato District Health Board

Reach

Prof Matthew Parsons

Social Investment National Evaluation (SINE)

Oncology

Breast Cancer Research

(External PI)

Variations in the management and outcomes of women with metastatic breast cancer

Cancer and Blood Research

Dr Alvin Tan

CX839008: A Randomized, DoubleBlind, PlaceboControlled Phase 2 Study Comparing CB-839 in Combination with Cabozantinib (CBCabo) vs. Placebo with Cabozantinib (PboCabo) in Patients with Advanced or Metastatic Renal Cell Carcinoma (RCC) CANTATA

Dr Marion Kuper

PantoCIN: Pantoprazole as prophylaxis against delayed chemotherapy-induced nausea and vomiting (CINV) in patients receiving adjuvant or neoadjuvant breast cancer chemotherapy

Haematology

Dr Humphrey Pullon

KISS study: Kinase Inhibition with Sprycel Start up Protocol CTNZ201208

Dr Shahid Islam

A Phase 3, Randomized Study of Zanubrutinib (BGB-3111) Compared with Ibrutinib in Patients with Relapsed/Refractory Chronic Lymphocytic Leukemia or Small Lymphocytic Lymphoma BGB-3111-305 (Alpine)

Medical Oncology

A/Prof Michael Jameson

A Phase 3, Open-Label, Multicenter, Randomized Study to Investigate the Efficacy and Safety of BGB-A317 (Anti-PD1 Antibody) Compared with Docetaxel in Patients with Non-Small Cell Lung Cancer Who Have Progressed on a Prior Platinum-Containing Regimen

Phase Ib randomised, placebo controlled, double blinded trial using Cimetidine to prevent the Oto, Nephro and neurotoxicity of Cisplatin by OCT2 inhibition in patients undergoing chemoradiation for head and neck cancer (CONCOCT)

Reducing Oxaliplatin Neurotoxicity: A Phase 1B Randomized, Double-Blind, Placebo- Controlled, Crossover, Dose-Finding and Proof-of-Concept Trial of Cimetidine in Gastrointestinal Cancer Patients (CITRON)

Dr Archana Srivastava

A multicentre, randomised, double-blind, placebo-controlled Phase 3 study in ovarian cancer patients evaluating Rucaparib and Nivolumab as maintenance treatment following response to front-line platinum-based chemotherapy (Athena)

Palliative Care

Dr Rowan Beaumont Bell

What are the perceptions of the barriers to teaching and learning within a hospice environment in New Zealand?

Surgical and Critical Care

Anaesthesia

Dr Rebecca Pullon

The effect of repeated exposure to a binaural beat on brainwave patterns.

Dr Kelly Byrne

A Phase 2b/3 Prospective, Randomized, Double-Blind, Sham-Controlled Trial of VTS-270 (2-hydroxypropyl-β-cyclodextrin) in Subjects with Neurologic Manifestations of Niemann-Pick Type C1 (NPC1) Disease

Perioperative Ischemic Evaluation-3 Trial (POISE-3)

QPI1002 Phase 3 for Prevention of Major Adverse Kidney Events (MAKE) in Subjects at High Risk for AKI Following Cardiac Surgery (QRK309)

The Hospital Operating Theatre-Randomised Oxygen trial. (HOT ROX)

Dr Michael Foss

Reducing opioid harms- opioid prescribing at discharge from general surgery and orthopaedic wards at Waikato hospital

Dr Michelle Gatter

A multi-centre randomized controlled trial of two Interventions to Manage DRY mouth in pre-operative elective surgical patients (IM DRY)

Breast Cancer Research

Ian Campbell

Gaps in the provision of radiotherapy for early breast cancer.

Cardiology

Dr Madhav Menon

DynamX Sirolimus Study

Full Revasc

Dr Raewyn Fisher

A prospective randomized Open, Blinded End-point controlled study evaluating the resoluation and recurrence of left ventricular thrombus with different anti coagulatoin strategies LV Thrombus- RELEVANT Study

A Randomized, Double-Blind, Placebo-Controlled Study to Assess the Effects of Bempedoic Acid (ETC-1002) on the Occurrence of Major Cardiovascular Events in Patients with, or at High Risk For, Cardiovascular Disease Who Are Statin Intolerant (CLEAR Outcomes Study)

Dr Sanjeevan Pasupati

SafePass.2: A prospective, non-randomised, multi-centre, open-label clinical investigation assess the safety and technical performance of the Emboliner embolic protection catheter

Dermatology

Islay Dickie

Dermatomyositis in the Waikato- A Retrospective Review

(External PI)

The epidemiological, clinical, pathological and genetic characteristics of epidermolysis bullosa in New Zealand

ENT

Dr Andrew Wood

A Phase II, Randomized, Blinded, Sham Procedure-Controlled, Parallel-Group Trial to Evaluate the Efficacy, Safety and Tolerability of LYR-210 in Adult Subjects with Chronic Sinusitis

An assessment of the burden of sinonasal disease in the Waikato region

Intensive Care Unit

Dr Robert Martynoga

Bacteremia Antibiotic Length Actually Needed for Clinical: Randomized Controlled Trial (BALANCE RCT)

Maxillofacial & Dental

Michael Brosnan

Bonding universal dental adhesive resin to developmentally hypomineralized enamel

Midland Trauma System

Dr Grant Christey

Establishing and Ranking the Priorities for Research and Quality Improvement Activities for Trauma in Australia and New Zealand

Falls: Injuries requiring hospital admission in the Midland Region, 2012-2018

Motorcycle Crashes: Behavioural elements- Mobile risk analysis tool for motorcycle road crashes

Pedestrians: Injuries requiring hospital admission in the Midland Region, 2012-2018.

Unintentional injury on the farm, 2012-2018.

Ophthalmology

Hamza Ali

To compare the outcome of near vision by doing near activities versus normal activities in amblyopic children.

Orthopaedics

Jason Donovan

Rehabilitation Following Selective Dorsal Rhizotomy (SDR) in New Zealand

Prof Ross Lawrenson

A national review of strong opiate dispensing on discharge after total hip or knee replacement

(External PI)

Long-term outcomes and survival of children following overwhelming sepsis from musculoskeletal infections in the Paediatric Intensive Care Unit

Joseph Baker

Challenge/threat states and surgical recovery

Surgery

Dr Win Meyer-Rochow

Effect of pre-operative Lugol's iodine on thyroid function and thyroid vascularity in patients undergoing thyroidectomy for Graves' disease

Vascular

Mr Thodur Vasudevan

Covered endovascular reconstruction of aortic bifurcation for extensive aortoiliac occlusive disease (CERAB)

Waikato Clinical Campus

Waikato Clinical Campus

A/Prof Michael Jameson

A pilot study evaluating the effects of relaxation music from quartz crystal singing bowls on mood and sleep in teenage males

Women's and Child Health

Child Health

Joanne Clarke

Resolving the research gap - what factors may influence cleft lip and cleft palate? Gene-Environment risk factor study - cleft lip and palate

Studies registered but not approved 1 July 2018 to 30 June 2019

The table below shows the research projects that were registered in the period 1 July 2018 to 30 June 2019, but had not yet been approved as at 30 June 2019, by department, service and the principal investigator at Waikato DHB.

Where the research is being done by a principal investigator outside of Waikato DHB, and there is no Waikato DHB investigator, these are noted as "External PI".

Allied Health

Allied Health

Laura Stratton

Implementing early family meetings during inpatient stroke rehabilitation

Child Development Centre

Karli Joll

Capture: Cerebral Palsy – evaluating current diagnostic practice for translating research on early identification

Tania Johnstone

Early Parenting Acceptance and Commitment Therapy 'Early PACT' for parents of infants with/at high risk of cerebral palsy

Dietetics

Sue Henderson

To investigate the efficacy of community dietetics in the care of the elderly.

Child Health

Paediatric Medicine

Dr Hamish McCay

The impact of a new PHARMAC policy: Is there household transmission of bacterial resistance with prolonged azithromycin use for children with bronchiectasis? (BAZAAR)

Paediatrics

Dr Alexandra Wallace

Bronchiolitis in Infants Placebo versus Epinephrine and Dexamethasone Study (BIPED Study)

Dr Maryam Mussa

The effect of Non - invasive Glucose Monitoring Devices (GMD) on patient satisfaction and improvement in glucose control in children with Type One Diabetes Mellitus

Community and Clinical Support

Laboratory

Julia Howard

Epidemiology of invasive Pasteurella infection in a tertiary hospital in New Zealand May 2014- end April 2019

Corporate

Information Services

Dr Ruth Large

Investigation of the implementation and user experience of Patient Flow Manager

Medicine

Gastroenterology

Dr Frank Weilert

A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study Evaluating the Safety, Tolerability, and Efficacy of GS-9674 in Non-Cirrhotic Subjects with Primary Sclerosing Cholangitis

Neurology

Dr Jan Schepel

A phase 3b Multicenter, randomised, double-blinded, placebo-controlled study to evaluate the efficacy and safety of ocrelizumab in adults with primary progressive multiple sclerosis (WA40404)

Mental Health and Addictions

Community Alcohol and Drug

(External PI)

Substance use, health status and service utilisation of older-aged adults attending an Community Alcohol and Drug Services OST program in Hamilton

(External PI)

Ngā ara tautoko: Service user and their whānau experience of continuity of care for substance use and related problems.

Mental Health and Addictions

Tracy Eccleston

What are the enablers for whānau of mental health service users to access whānau support services

Older Persons and Rehabilitation

Older Persons and Rehabilitation

(External PI)

Tele-Wheelchair and Seating Assessment Stakeholder Consultation: A Mixed Methods Study

The Experiences of Māori with Traumatic Brain Injury in the Waikato with Post-Acute Rehabilitation Services

Oncology

Medical Oncology

A/Prof Michael Jameson

A Phase 3, randomised, blinded, placebo-controlled study of Tislelizumab (BGB-A317) plus chemoradiotherapy followed by Tislelizumab monotherapy in newly diagnosed, stage III subjects with locally advanced, unresectable non-small cell lung cancer

Dr Alvin Tan

A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study of Talazoparib with Enzalutamide in Metastatic Castration-Resistant Prostate Cancer (Talapro-2)

Oncology

Dr Ian Kennedy

Poziotinib for Patient KM dob 01 July 1954

Surgical and Critical Care

Anaesthesia

Dr Kelly Byrne

A multi-centre Retrospective, Comparative, Observational Study in Australia and New Zealand to Evaluate the Safety of repeated administration of PENTHROX® (methoxyflurane) for the treatment of Acute Pain associated with Burns and Wound Care Management

Does erector spinae block (ESB) effect somatosensory evoked potentials (SSEPs)

Cardiothoracic Surgery

Dr Damian Gimpel

Aortic width ratios as a predictor for poor outcomes of aortic pathology

Minesh Prakash

ES-VAC dressing as an adjunct to pain management in rib fractures

Utility of muscle mass area at thoracic level to assess frailty in TAVI patient

Utility of VAC dressing as an adjunct to pain management post thoracotomy

Mr David J McCormack

Identifying a marker on thoracic computed tomography to quantify frailty in TAVI and aortic valve replacement. (CT Muscle mass and TAVI/AVR)

Obesity paradox and TAVI

Theresa Muwanga-Magoye

The use of tracheostomy in post cardiac patients in a tertiary hospital

ENT

Dr Andrew Wood

A pilot study of post-operative antibiotics in Endoscopic Sinus Surgery (Antibiotic prophylaxis in ESS)

General Surgery

Bevan Dawson

Barriers to Bowel Cancer among Māori in the Waikato Region

Midland Trauma System

Dr Grant Christey

Improving patient outcomes following serious injury

Orthopaedics

Jason Donovan

Surgical delay time for NOF fracture patients on dabigatran

Joseph Baker

Unstable Intertrochanteric Neck of Femur Fractures in the Geriatric Population: Short or Long Proximal Femoral Nail (PFN)?

Plastic and reconstruction

Theresa Muwanga-Magoye

Assessment and Management of Hot Springs Burns in New Zealand

Urology

Dr QiHao Ong

Ethnic inequalities in presentation, analgesia use and management of renal colic in Waikato Hospital

Vascular

Mr Thodur Vasudevan

The Randomized And Controlled Noninferiority Trial to Evaluate Safety and Clinical Efficacy of the SurVeil™ Drug-Coated Balloon in the Treatment of Subjects with Stenotic Lesions of the Femoropopliteal Artery Compared to the Medtronic IN.PACT® Admiral® Drug-Coated Balloon (Transcend)

Appendix B – List of publications

List of publications 2018

Mental Health and Addictions

- 1. **Menkes, DB**. Pharmacological interactions: more reason to regard alcohol as a drug. . BMJ. 2018 Nov 28;363:k4952. doi: 10. 1136/bmj. k4952
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