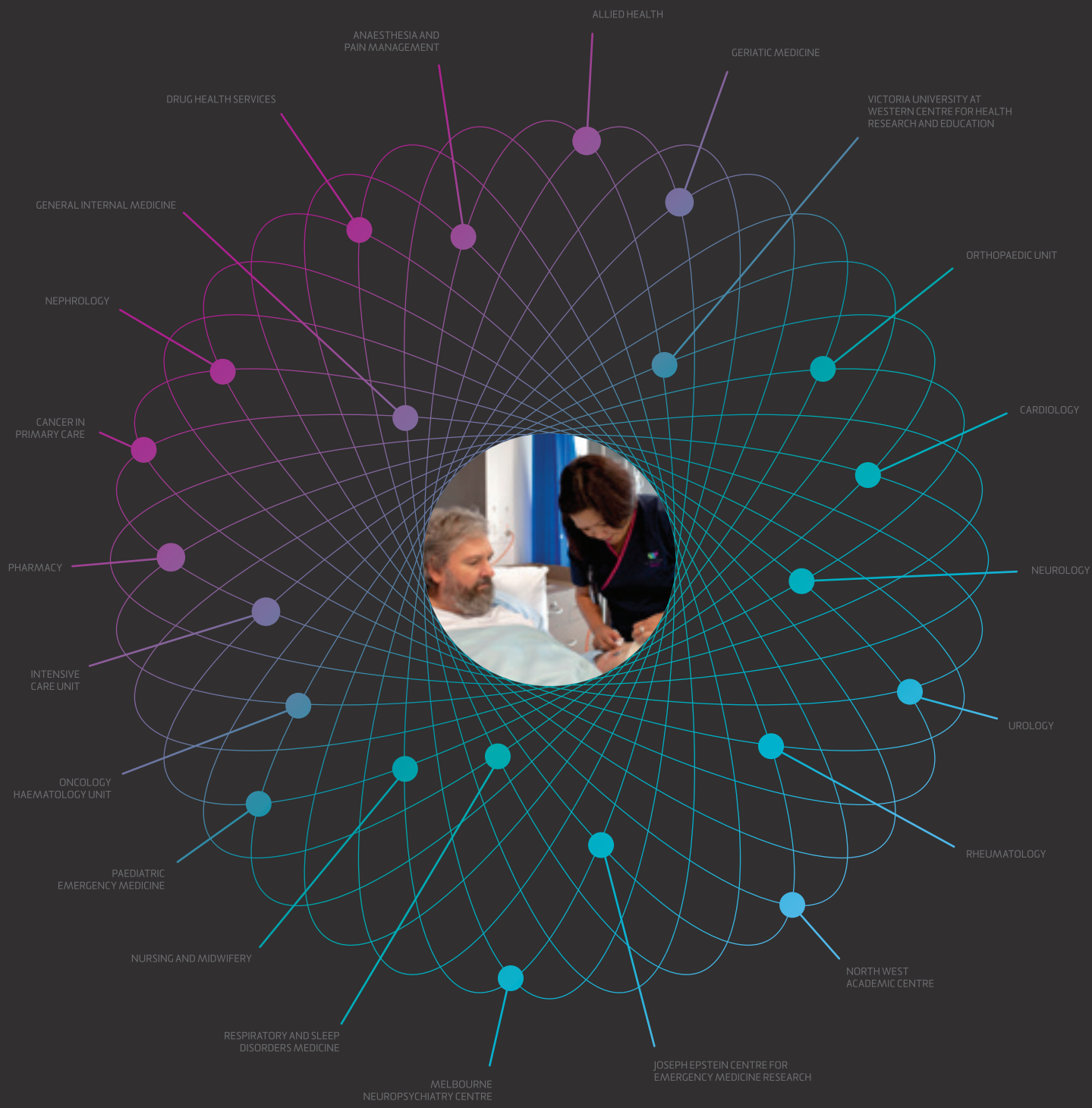


LOCALLY RESPONSIVE.
GLOBALLY CONNECTED.



OUR VISION

Together, caring for the West – our patients, staff, community and environment.

OUR PURPOSE

Working collaboratively to provide quality health and well-being services for the people of the West.

OUR VALUES

Compassion

Consistently acting with empathy and integrity

Accountability

Empowering our staff to serve our community

Respect

For the rights, beliefs and choice of every individual

Excellence

Inspiring and motivating, innovation and achievement

Safety

Working in an open, honest and safe environment

OUR PRIORITIES

Safe and effective patient care

People and culture

Community and partnerships

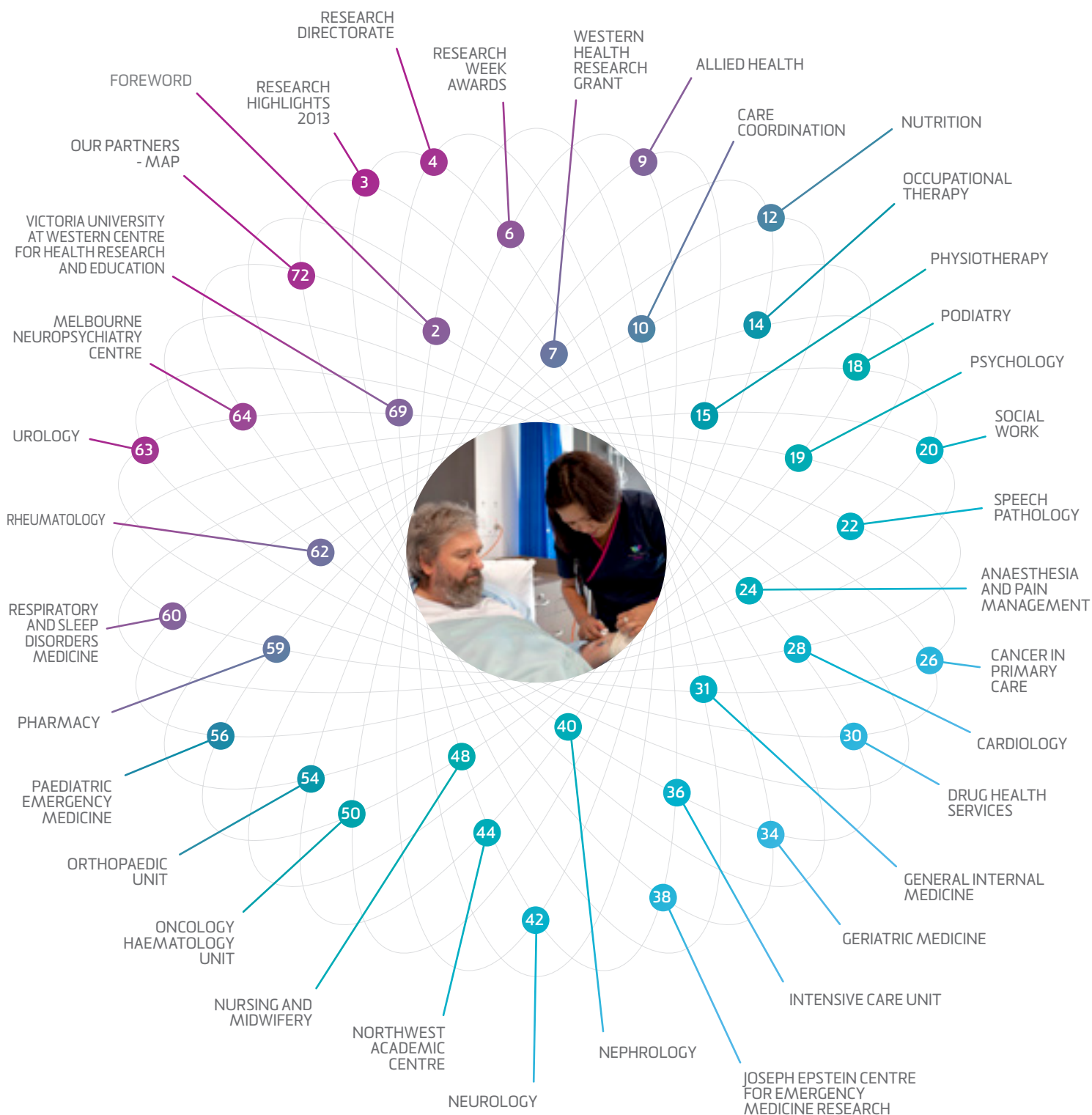
Research and learning

Self-sufficiency and sustainability

Acknowledgement of traditional owners

Western Health respectfully acknowledges the traditional owners of the land on which its sites stand as the Boon Wurrung and the Wurundjeri people of the greater Kulin Nation.

CONTENTS



FOREWORD

WESTERN HEALTH'S APPROACH TO RESEARCH IS ONE WHICH ACKNOWLEDGES THAT THERE ARE A RANGE OF SOCIAL, ECONOMIC, DEMOGRAPHIC AND PSYCHOLOGICAL DIMENSIONS TO RESEARCH, AS WELL AS LABORATORY ELEMENTS.

Our community linkages are strong and these are often reflected in the research studies we generate and support. Western Health's research has a dual focus on being locally responsive to the communities, characteristics and disease patterns within our region, while also being globally connected, as we participate in a wide range of collaborative research with Victorian, national and international partners. We are also strongly committed to building a strong foundation for investigator-led research. This powerful combination is leading to direct benefits for patients as the outcomes of research are translated into treatment options. Improving the future for our patients is at the heart of medical research and this aligns with the new Western Health framework we have established for quality, safety and the patient experience, known as Best Care.

This edition of our annual Research Report highlights the outstanding research efforts of the staff at Western Health during 2013. The major highlights were 357 published journal articles, 207 research projects approved, and over \$29M in research grant funding held with our collaborators. All of these metrics represent an increase on the previous year, reflecting the ongoing growth of Western Health's research activities.

Our financial commitment to research has increased substantially in recent years and is growing exponentially, as we recognise the need to take a lead role in significantly increasing the extent of clinical research in the West. We are a key member of the Melbourne Academic Centre for Health - the University of Melbourne's Academic Health Science Centre - and a formal member of the Victorian Comprehensive Cancer Centre.

The Australian Institute for Musculoskeletal Science (AIMSS) continues to thrive, which is evident in the impact of its impressive research output and the benefits its work is bringing to the population in the Western suburbs of Melbourne, where

conditions such as osteoporosis, arthritis and diabetes remain major challenges.

During 2013, the Western Health Research Grant was established. The Grant was made possible through the contributions of staff specialists at Western Health and other sources and it provides funding for research conducted at Western Health. The grant program aims to promote new areas of multidisciplinary research in chronic disease, generate pilot data contributing to an external research grant application, and promote projects that will improve patient outcomes.

Research Week at Western Health is a major annual event in which we celebrate the achievements of our Western Health research community and it continues to grow each year in terms of content and the number of research prizes. The event had a number of distinguished key note speakers, and we were fortunate to have the Victorian Minister for Health and Ageing, the Hon. David Davis formally open the proceedings. Professor Jim Bishop AO, Executive Director of the Victorian Comprehensive Cancer Centre (one of our research partners) presented a thought-provoking keynote address on the impact of research partnerships in improving the health of people living in Melbourne's West. This year, for the first time Research Week included a dedicated Philanthropy and Research Keynote Address, which was delivered by Simon McKeon AO, along with a number of concurrent sessions including Oncology & Haematology and Obstetrics and Gynaecology. We would like to convey our gratitude to all our prize sponsors and supporters for their ongoing loyalty and support of research at Western Health.

We look forward to the continual growth and expansion of Western Health's research capabilities and output in collaboration with our research and university partners both locally and internationally.



Associate Professor Alex Cockram
Chief Executive



Dr Mark Garwood
Executive Director Medical Services

RESEARCH 2013

3

HIGHLIGHTS

255

Seminar and conference presentations

\$2.05m

Income from commercially sponsored clinical trials

207

Research projects approved

\$29.35m

Awarded or held for research grants during 2013*

* Total awarded for the duration of the grants to our researchers and their collaborators

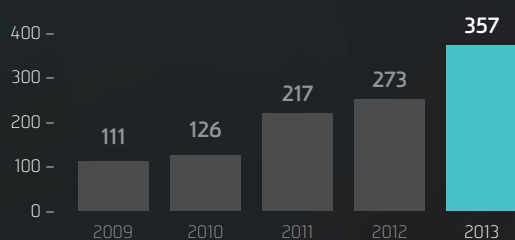
357

Published journal articles

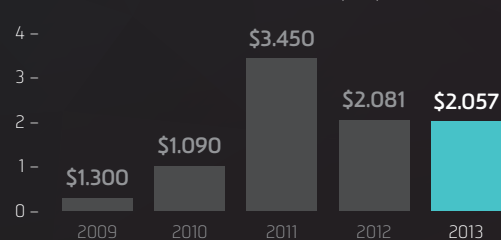
3

Published book chapters

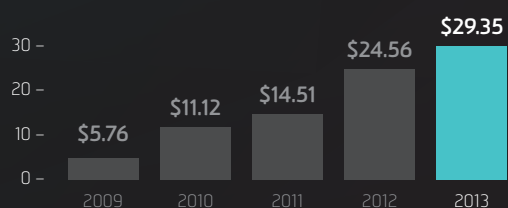
PUBLICATIONS



CLINICAL TRIALS (\$m)



GRANTS (\$m)



RESEARCH DIRECTORATE

WESTERN HEALTH RESEARCH ADVISORY COMMITTEE MEMBERSHIP

Dr Mark Garwood
Executive Director for Medical Services

Dr David Newman
Director, Office for Research (Chair)

Dr Tam Nguyen
Manager, Office for Research (Secretary)

Professor Steven Chan
Professor of Surgery

Professor Peter Ebeling
Professor of Medicine, Chair NorthWest Academic Centre
(University of Melbourne)

Professor Michael Green
Director, Cancer Services

Professor Edward Janus
Director, General Medicine

David Jones
Executive Director, Western Health Foundation

Associate Professor Harin Karunajeewa
Director, Clinical Research, Division of Medicine

Dr Debra Kerr
Senior Lecturer, School of Nursing Victoria University

Associate Professor Ruth McNair
Director, General Practice and Primary Health Care
(University of Melbourne)

Associate Professor Craig Nelson
Director, Department of Nephrology

Associate Professor Denise Patterson
Executive Director, Nursing and Midwifery

Dr John Violet
Director, Sunshine Hospital Radiation Therapy Centre

Dr Arlene Wake
Executive Director, Allied Health, Community Integration
and Partnership

OFFICE FOR RESEARCH STAFF AND VOLUNTEERS

Dr David Newman
Director, Office for Research

Dr Tam Nguyen
Manager, Office for Research

Kerrie Russell
Ethics Administration Assistant

Virginia Ma
Research Governance Officer

Renee Hou
Office for Research Intern (RMIT)

Jenae Ellery
Office for Research Intern (Victoria University)

Christine Mizrahi
Office for Research Volunteer

Lauren Scofield
Office for Research Volunteer

Linda Diep
Office for Research Volunteer

Selin Haslip
Office for Research Volunteer

WESTERN HEALTH LOW RISK ETHICS PANEL MEMBERSHIP

Chairperson

Elizabeth Hessian *MBBS FANZCA* Consultant Anaesthetist

Deputy Chairperson

Debra Kerr *RN MBL PhD* Senior Lecturer, Faculty of Nursing, Victoria University

Lawyer

Paula Shelton *BA LLB* Practice Group Leader-Medical Law Group Slater and Gordon Lawyers

Community Member

Keri Chater *PhD M.Nurs BSocSc RN*

Review Members

Angela Marsiglio *MBBS BMedSci DRANZCOG* Anaesthetic Registrar

Angela Mellerick *RN* Nurse Unit Manager Day Oncology

Anne Marie Southcott *MBBS FRACP* Director, Respiratory and Sleep Disorders Medicine

Elizabeth Skinner *PhD BPhy* Physiotherapist Intensive Care Unit

Emily Incledon *BBSc (Hon) DPsych (Clinical) Assoc MAPS* Clinical Health Psychologist

Harin Karunajeewa *MBBS FRACP PhD* Director, Clinical Research – Division of Medicine

Jenny Schwarz *MBBS FRACP GDipEd GDip Pall Med Clinical* A/Prof in Geriatric Medicine

Julian Choi *MD FRACS* Consultant Surgeon

Lei Ching Yeoh *BPharm* Clinical Trials Manager

Lynette Reid-Price *MClinEpi MAppMgt(Hlth) BBiomedSc* Manager Medical Specialty Diagnostics

Sathyajith Velandy Kootayi *MBBS MD FJFICM* Intensivist

Terence McCann *PhD MA RMN RGN DipNurs (Lon.) RNT, RCNT* Professor of Nursing, Faculty of Nursing (Victoria University)

Tissa Wijeratne *MBBS (Hons) FRACP FAHA* Consultant Neurologist

Manager

Tam Nguyen *PhD GDipSono BSc BE(Biomed) FRSPH* Manager, Office for Research

Honorary Senior Fellow, Faculty of Medicine, Dentistry and Health Sciences (The University of Melbourne)

Secretary

Virginia Ma *BBiomedSc (PharmSc)* Research Governance Officer

WESTERN HEALTH RESEARCH COORDINATORS GROUP

Tam Nguyen
Manager, Office for Research (Chair)

Kerrie Russell
Ethics Administrator, Office for Research (Secretary)

Virginia Ma
Research Governance Officer, Office for Research (Secretary)

Renee Hou
Office for Research Intern

Coordinators

Lizzie Skinner
Allied Health

Ellen Kinkel
Anaesthesia and Pain Management

Vanessa Lee
Cardiology

Sharon Klim
Emergency Medicine

Marian Croft
Gastroenterology

Samantha Bates
Intensive Care

Helen Brasier
Medical Oncology and Haematology

Shannon Uren
Medical Oncology and Haematology

Kleo Hondros
Medicine and Endocrinology

Debra Broomfield
Nephrology

Natalie Teasdale
Neurology

Shelley Westgarth-Nugent
Orthopaedics

Sue Casanelia
Respiratory and Sleep Disorders Medicine

Valarie Yee
Respiratory and Sleep Disorders Medicine

Phuong Tran
Rheumatology

RESEARCH WEEK AWARDS



Pictured: Western Health Chief Executive A/Prof Alex Cockram and Executive Director of the Victorian Comprehensive Cancer Centre Professor Jim Bishop AO

Western Health's annual Research Week, held on 11–15 November 2013, gave an exciting overview of the extent and variety of research undertaken by Western Health researchers with our two main partners, the University of Melbourne and Victoria University.

On Monday 11 November, the Victorian Minister for Health and Ageing, the Hon. David Davis, officially launched Western Health Research Week at the Western Centre for Health Research and Education at Sunshine Hospital. Executive Director of the Victorian Comprehensive Cancer Centre, Professor Jim Bishop AO, presented a thought-provoking opening keynote address on the impact of research partnerships in improving the health of people living in Melbourne's West, highlighting the many significant projects underway.

Research Week featured a number of distinguished keynote addresses as well as presentations from Western Health researchers, which included medical and surgical registrars, allied health and nursing staff, showcasing their research projects. A full program and abstracts book can be downloaded from the Office for Research website.

The Western Health Public Lecture, sponsored by the Western Health Foundation, was presented by Professor Graham Brown AM and focused on global health with local perspectives and issues.

This year, for the first time, Research Week included a dedicated Philanthropy and Research Keynote Address, which was delivered by Simon McKeon AO. This address highlighted the heavy reliance of emerging research centres and researchers on philanthropy as seed funding as they build their skills and move into the realms of National Health and Medical Research Council (NHMRC) and other competitive funding. Philanthropy is becoming increasingly important as the pool of public funds for research contracts.

Mark Burford, Executive Director of the Mitchell Institute, delivered the closing keynote address, which was followed by the 2013 Research Week award presentations. Congratulations to the following prize winners:

- ➔ Neville Yeomans Prize for the Best Medical Research (Registrars and Advanced Trainees) presentation, sponsored by Dorevitch Pathology:
Lauren De Luca: *Maternal smoking, but not inherited thrombophilias is associated with customized SGA below the 5th percentile.*
- ➔ Kendall Francis Prize as the Best Surgical Registrar Research presentation, sponsored by Covidien:
D Currigan, R Hughes, C Wright, F Soeding: *Vasopressor responses in human pulmonary and radial arteries: an in vitro study.*
- ➔ Best Allied Health Research presentation, sponsored by SGE Credit Union:
Ashlea Dickinson and Julia Firth: *The intensity and nature of wound pain associated with diabetes related foot ulcers: a pilot study.*
- ➔ Best Nursing Research presentation, sponsored by First State Super:
Mary Carolan-Olah and Cheryl Steele: *Developing an innovative educational program for high risk women with gestational diabetes mellitus.*
- ➔ Best Research Poster Prize, sponsored by BankVIC:
D Krieser, R May, E Oakely, F Babl: *Computed tomography for head injuries in children: change in usage rates and radiation dose over time.*
- ➔ Best Published Research Paper, sponsored by the Western Health Foundation:
Forbes McGain: *A survey of anesthesiologists' views of operating room recycling.*
- ➔ Inaugural Footscray Rotary Prize for Research in Ageing/ Care for Elderly:
Kathy Kirby and Debra Kerr: *Point prevalence study of incontinence for elderly patients during hospitalisation.*

WESTERN HEALTH RESEARCH GRANT

The newly established Western Health Research Grant, which is funded from contributions from staff specialists at Western Health and other sources, provides funding for research conducted at Western Health. The grant program aims to promote new areas of multidisciplinary research in chronic disease, generate pilot data contributing to an external research grant application, and promote projects that will improve patient outcomes. Twenty outstanding applications from a diverse group of researchers and their external collaborators were received. The following researchers and their colleagues received the inaugural awards:

→ **Nadim Shah (Cardiology)**

awarded \$10,000 for research into the prevalence of asymptomatic coronary heart disease in the siblings of young myocardial infarction patients and the utility of coronary CT angiography as a screening tool (with Chiew Wong, Anne-Maree Kelly, Kean Soon).

→ **Elizabeth Skinner (Physiotherapy)**

awarded the precise sum of \$9,994.50 for research into serum activin, muscle mass and physical function in patients with critical illness - an observational cohort study (with David Scott, AIMSS and Yi Tian Wang, Frankston Hospital).

→ **Marita Walsh (Maternal Fetal Medicine)**

awarded \$10,000 for her research 'Is Placental Growth Factor (PLGF) detected in maternal serum useful as a marker to differentiate between pathologically growth restricted fetuses and constitutionally small fetuses?' (with Jo Said).



RESEARCH WEEK CONTINUES TO GROW, WHICH REINFORCES NOT ONLY THE IMPORTANCE OF RESEARCH BUT ALSO THE STRONG INVOLVEMENT THAT WESTERN HEALTH STAFF HAVE IN CONDUCTING QUALITY RESEARCH ACROSS A RANGE OF DISCIPLINES.

RESEARCH ACTIVITY
IN 2013 FOCUSED ON
UNDERSTANDING CLIENT
EXPERIENCES AND USING
THIS TO INFORM SERVICE
AND WORKFORCE REDESIGN.

ALLIED HEALTH

This section covers the area of Allied Health with the following departments included:

- Care Coordination
- Nutrition
- Occupational Therapy
- Physiotherapy
- Podiatry
- Psychology
- Social Work
- Speech Pathology

HEADS OF DEPARTMENTS

Natasha Toohey
Director, Allied Health

Lebe Malkoun
Director, Community Services

Rebecca Power
Group Manager, Care Coordination

Kathryn Pierce
Manager, Nutrition

Susan Giles
Manager, Occupational Therapy

Timothy Chiu
Manager, Physiotherapy

Ande Szendoe
Manager, Social Work

Meredith Swaby
Manager, Speech Pathology and Audiology

Julia Firth
Manager, Podiatry

Grey Searle
Manager, Psychology

OUR RESEARCH OUTPUT

Publications: 10

Presentations: 77



ALLIED HEALTH (cont.)

CARE COORDINATION

CARE COORDINATION RESEARCH ACTIVITIES REFLECT A COMMITMENT TO IMPROVING EXPERIENCES AND OUTCOMES FOR CLIENTS WITH CHRONIC AND COMPLEX NEEDS.

Research activity in 2013 focused on understanding client experiences and using this to inform service and workforce redesign; building the evidence base for consumer engagement methodologies in care coordination; using routinely collected service data to evaluate the effectiveness of care coordination services; and workforce innovation and reform. Through ongoing involvement in workforce innovation, we have been able to contribute to the national workforce reform evidence base.

Care Coordination received \$600,000 in project funding and delivered three presentations in 2013 including two at the National Allied Health Conference.

OUR RESEARCH

Evaluating the Effectiveness of Experience Based Co-Design in Improving the Client Experience of Mental Health Transition across Health Sector Interfaces

Kate Cranwell, Jo Silva

Collaborators: Terence McCann, Victoria University; Gayelene Boardman, Victoria University; Linda Kensington, South West Melbourne Medicare Local

Fragmentation and slow responsiveness of mental health services is a well-known and documented challenge. Experience based co-design provides an important lens through which to view service integration opportunities. Understanding the impact of duplication and fragmentation of care from the perspective of the consumer provides a common and powerful starting point for conversations about how to develop strategies to promote service integration and responsiveness.

This study aims to improve the consumer's experience of mental health services as they transition through tertiary/subacute programs to primary care and self-management support. It will identify opportunities for service redesign and integration; develop, trial and evaluate service redesign initiatives; and promote greater understanding of services, more integrated care across the system and more effective communication between stakeholders.

This evaluation will contribute to the evidence base on the effectiveness of experience based co-design as a consumer engagement methodology.

Care Coordination Experienced Based Co-Design Project

Kate Cranwell, Jacinta Robertson, Abby Bean, Mark Murray, Rebecca Power, Assunta Morrone, Trish Downes, Helen Gray, Michelle Pitcaithly

Collaborators: Liza Heslop, Victoria University; John Bamburg

There is increasing evidence that consumer and community participation can improve health outcomes, lead to more responsive care, involve people in treatment decisions, and improve quality and safety.

Consumer and community participation can also help reduce political risk, encourage professional, bureaucratic and clinical accountability, identify workforce issues and foster more responsive and equitable services.

This study aims to gather feedback about patients' and carers' experience of Care Coordination services and use the information to improve service delivery and inform and educate staff. Experience based co-design has assisted the Care Coordination service to understand what is working well; identify where patient and carer experience can be improved and where workforce skills need to improve; increase consumer participation in care coordination service review; and change organisational systems to improve patient care and experience.

An Exploratory Study of Care Coordination Work Practice and Activity

Kate Cranwell, Prue Deckert, Abby Bean

Collaborators: Liza Heslop

This study uses an activity log data collection tool to map and analyse care coordination workflow processes and staff functions. It also uses staff focus groups to ascertain views on the care coordination role and opportunities for workforce reform.

This study has had several benefits. It has provided data to inform improvements to the balance of specialist and generalist roles within this workforce; enabled establishment of roles with expanded scope of practice supporting a more efficient 'fit for purpose' workforce; identified gaps and barriers limiting optimal integration of service delivery; and contributed to the development of standards, tools and protocols to support the Care Coordination service.

OUR RESEARCHERS

Kate Cranwell

Workforce Integration and Innovation Project Lead

Rebecca Power

Group Manager

Abby Bean

Health Independence Programs Information Management Lead

Jacinta Robertson

Aged Care Assessment Service: Senior Clinician, Occupational Therapist

Mark Murray

Immediate Response Service Team Leader

Helen Gray

Hospital Admission at Risk Program Operations Coordinator

Prue Deckert

Workforce Integration and Innovation Project Manager

Peter Roe

Health Independence Programs Data Officer

Trish Downes

Hospital Admission at Risk Program Pharmacist

Michelle Pitcaithly

Immediate Response Service Drug and Alcohol Specialist

Anna Peterson

Health Independence Programs Information Management Lead

OUR AWARDS AND GRANTS

Australian Primary Health Care Research Institute

Kate Cranwell

The Relationship between Primary Care and Sub-Acute Care and Primary Health Care: Evaluating the Effectiveness of Experience Based Co-Design in Improving the Client Experience of Mental Health Transition across Health Sector Interfaces. Australian Primary Health Care Research Institute, Australian National University; \$150,000 (2013–2015)

Health Workforce Australia, Aged Care Reform Projects

Rebecca Power

Care Coordination Workforce Australia, Aged Care Reform Projects Workforce Integration and Innovation Project-Building Regional Capacity in the West. \$450,000 (18 months)

ALLIED HEALTH (cont.)

NUTRITION

THE NUTRITION DEPARTMENT HAS FOCUSED ITS RESEARCH ON MALNUTRITION, WHICH LINKS WITH CLINICAL SERVICE PROVISION AND MEETS THE ACCREDITATION REQUIREMENT FOR IMPROVED IDENTIFICATION AND MANAGEMENT OF MALNUTRITION.

During 2013, the Nutrition Department commenced or continued an increased number of studies with a malnutrition focus. One of our lead projects, Investigating Practices Relating to Malnutrition in Victorian Cancer Services Stage II, attracted \$40,000 of funding from the Department of Health. This project will build on the findings from Stage I, which revealed a higher incidence of malnutrition among Western Health cancer patients compared with the overall incidence in Victorian cancer patients.

The International Nutrition Survey was completed in 2013, confirming an increase in adequacy of energy from enteral nutrition in enterally fed Western Health ICU patients. Overall ranking for the Western Health ICU in 2013 for adequacy of energy was 2/36 Australasian sites and ranking for adequacy of protein was 1/36 Australasian sites, where 1 is the best performing site. This was an excellent result.

Another significant study completed in 2013 was Development of a Nutrition Care Pathway for Patients with an Upper Gastrointestinal Malignancy. This project aimed to implement best practice guidelines for nutrition support in patients with an upper gastrointestinal malignancy and bridge identified service gaps. It was awarded one of three major prizes in the Western Health 2013 Allied Health Innovation Awards.

A number of the Nutrition Department's ongoing and future research projects will be conducted in collaboration with Deakin University and the Department of Health. The findings from these projects will inform innovation and improvement in nutrition service provision within Western Health. In 2013, the Nutrition Department delivered seven conference presentations, including five at national conferences.

OUR RESEARCH

International Nutrition Survey

Caroline Calkin

The aim of this survey is to measure improvement in the average adequacy of energy and adequacy of protein from nutrition in ICU patients from 2011 to 2013, following enhancement of nutrition management.

The results showed that the mean adequacy of energy from nutrition had improved from 71% in 2011 to 82% in 2013 and adequacy of protein from nutrition had improved from 65% in 2011 to 75% in 2013. Western Health's overall ranking in 2013 for adequacy of energy was 2/36 Australasian sites and for adequacy of protein was 1/36 Australasian sites, where 1 is

the best performing site. Increased intakes of energy appear to be associated with improved clinical outcomes in critically ill patients, when body mass index is <25 kilograms per metre square (kg/m²) or ≥35 kg/m².

Investigating Practices Relating to Malnutrition in Victorian Cancer Services Stage II

Hollie Bevans, Kathryn Pierce

Collaborators: Lizzie Skinner

Phase I of this study demonstrated a 35% prevalence of malnutrition in cancer patients receiving treatment at Western Health. A large number of cancer patients were receiving treatment for bowel cancer (30%) with 46% being malnourished and only half known to the Nutrition Department.

Phase II will assess whether nutrition intervention during treatment can benefit nutritional status, quality of life and re-admission rates in patients receiving chemotherapy for bowel cancer. A project plan has been developed and an ethics application has been submitted. Usual care (which relies on nursing staff to assess for high-risk malnutrition and make a referral) will be compared with an initial nutrition assessment and education and monthly follow-up for three months.

Currently there is no direct funding for nutrition intervention during chemotherapy at Western Health. If this study finds that nutrition intervention is effective in this patient group, it will assist in developing a model of standard nutrition care for cancer patients.

Development of a Nutrition Care Pathway for Patients with an Upper Gastrointestinal Malignancy

Heather Jordan, Hollie Bevans, Jemima Hill, Vanessa Carter, Kathryn Pierce

Malnutrition is a significant problem for patients with an upper gastrointestinal malignancy. In March 2012, the prevalence of malnutrition was 54% in upper gastrointestinal patients at Western Health; however, only 50% of these patients were known to the Nutrition Department.

The aim of this project was to implement best practice guidelines for nutrition support in patients with an upper gastrointestinal malignancy and bridge identified service gaps. It resulted in improved referral of patients to the Nutrition Department in the pre-operative and Critical Dependence Unit settings. A nutrition service algorithm has been developed to facilitate implementation of this care pathway.

OUR RESEARCHERS

Kathryn Pierce

Manager

Allison Lauder

Grade 4 Dietitian

Vanessa Carter

Grade 4 Dietitian

Aranka Nenov

Senior Dietitian

Alison Qvist

Senior Dietitian

Hollie Bevans

Senior Dietitian

Tamara Sherry

Senior Dietitian

Caroline Calkin

Senior Dietitian

Heather Jordan

Dietitian

Giang Nguyen

Dietitian

Karon Markovski

Dietitian

Aurora Ottaway

Dietitian

Jacqui Young

Dietitian

OUR RESEARCH STUDENTS

Elaine Bo

Masters of Nutrition and Dietetics, Deakin University

Naomi Caulfield

Masters of Nutrition and Dietetics, Deakin University

Melanie Joske

Masters of Nutrition and Dietetics, Deakin University

Karina O'Loughlan

Masters of Nutrition and Dietetics, Deakin University



ALLIED HEALTH (cont.)

OCCUPATIONAL THERAPY

The Occupational Therapy Department is committed to providing an excellent occupation-focused, evidence-based service to clients of Western Health. An active quality committee contributes to this aim, providing leadership and support to staff undertaking quality and research activities.

In 2013, the Occupational Therapy Department commenced many quality and research projects.

To share the knowledge gained through research and practice with the wider profession and to promote the strong quality and research focus of Western Health, the Occupational Therapy Department delivered seven presentations at state and national conferences.

OUR RESEARCH

To Determine the Proportion of Primary-Aged Children Referred to a Learning Difficulties Clinic Who Meet the DSM-IV Criteria for Developmental Coordination Disorder (DCD)

Leanne Chapman, Renee Debrincat

Collaborators: Renee Testa, Clinical Neuropsychologist, Melbourne University

Developmental Coordination Disorder (DCD) is an under-recognised condition in the paediatric population, yet it can have a profound and long-lasting impact on a child's occupational performance and life story.

This research aims to highlight the number of children referred for other learning difficulties who also experience this condition. It will analyse referrals made to the Learning Difficulties Clinic at Children's Allied Health Service, diagnosis and functional performance, to determine what proportion of children referred meet criteria for DCD. It will also explore a profile of assessment and occupational performance for these children.

OUR RESEARCHERS

Susan Giles

Manager

Helen Nelson

Grade 4 Occupational Therapist

Jennifer Wort

Senior Occupational Therapist

Sarah Shipp

Senior Occupational Therapist

Renee Debrincat

Senior Occupational Therapist

Leanne Chapman

Senior Occupational Therapist

Belinda Woods

Senior Occupational Therapist

Sarah Murphy

Grade 2 Occupational Therapist

PHYSIOTHERAPY

The Physiotherapy Department had an outstanding year of research in 2013. Thirty-seven projects were conducted or completed, 33 conference presentations were delivered and 11 grants or awards received for a funding total of more than \$900,000.

Through a focus on dissemination of research findings, staff were successful in having eight peer-reviewed publications. Our research was disseminated in highly ranked forums such as *Journal of Clinical Epidemiology*, *Critical Care*, *Physical Therapy* (the highest ranked physiotherapy journal) and open-access forums such as *BMC Pulmonary Medicine*.

Our collaborative partnerships continued to expand, with primary collaborations with Victoria University and the University of Melbourne through the Australian Institute of Musculoskeletal Science. We also have strong collaborations with Monash University and are developing international collaborations. Our research remains strongly allied with clinical service provision, focusing on musculoskeletal management (in particular primary contact and primary care advanced scope roles), rehabilitation and cardiovascular training (across diverse populations) and non-clinical roles such as education delivery and clinical decision making.

These research highlights were supported by the first NHMRC grant within Allied Health at Western Health and several successful grant applications to evaluate physiotherapy roles within primary care via Medicare Local funding.

THE PHYSIOTHERAPY DEPARTMENT ASPIRES TO BECOME A NATIONAL LEADER IN CLINICAL RESEARCH ALIGNED WITH THE STRATEGIC PRIORITIES FOR WESTERN HEALTH AND OUR BROADER COMMUNITY. SEVERAL PROJECTS THAT COMMENCED IN 2013 FOCUS ON TRANSLATING EVIDENCE INTO CLINICAL PRACTICE.

In 2014, we intend to commence research programs in strategic areas such as the management of chronic disease and the use of new technologies to align with the National Research Priorities.

OUR RESEARCH

Application of a Novel Research Design to Aid Disinvestment from Existing Health Technologies with Uncertain Effectiveness, Cost-Effectiveness and/or Safety

Terry Haines, Lizzie Skinner, Timothy Chiu, Fiona McDermott, Lisa O'Brien, Donna Markham, Deb Mitchell

Collaborators: Monash University, Monash Health, Melbourne Health, Department of Health

There is virtually no data available to guide the provision of weekend allied health services in acute medical and surgical wards and, therefore, service provision varies widely across and within health services. This project will examine the effectiveness, cost-effectiveness and safety of the current model of weekend allied health service delivery on acute medical and surgical units at Western Hospital (Footscray) and a new stakeholder-driven model, compared to having no weekend allied health service on these wards. Ethical approval is currently being sought from Melbourne Health.

This research will inform decisions around the allocation of allied health services on the weekends both nationally and internationally. By participating as a site, Western Health will obtain accurate information that directly informs service provision for our community.

A Randomised Controlled Trial Investigating the Effect of Duration of Immobilisation on Function following Open Reduction and Internal Fixation for Distal Radius Fractures in Adults

Narelle Watson, Jenny Keating, Darren Fraser, Collin McIlveen, Rebecca Pile, Paul Silk, Caitlin Thompson, Louise Taylor, Jackson Boyd

Collaborators: Monash University

Although distal radius fractures commonly occur, factors that affect treatment outcomes have not been well defined. There is a gap in our current knowledge regarding how long a wrist should be immobilised in a cast following surgical repair.

The primary aim of this investigation is to compare the immobilisation periods of one, three and six weeks for acute distal radius fractures following locked volar plate fixation for the outcome measures of function, range of movement, grip strength and pain when measured over a six-month period from the date of surgery.

Information from this investigation will be used to determine whether one immobilisation period is better than another in regards to function and pain. This information will enable us to improve the management of wrist fractures following surgical repair.

ALLIED HEALTH (cont.)

Data collection for this investigation commenced in June 2012 and continued throughout 2013.

The Effect of Moderate-Intensity Cardiovascular Fitness Training Compared to Standard Care in People with a Diagnosis of Stroke: A Pilot Randomised Controlled Trial

Hanna Reynolds, Sarah Kenny, Jane Tillyard, Andy Stewart, Tissa Wijeratne, Erik Hanson, Lizzie Skinner

Collaborators: Victoria University, Australian Institute of Musculoskeletal Science (AIMSS)

The National Stroke Foundation's *Clinical Guidelines for Stroke Management* (2010) state that stroke rehabilitation should include interventions aimed at improving cardiovascular fitness for secondary prevention and to optimise rehabilitation outcomes. Cardiovascular training may have benefits for quality of life and functional performance in patients with stroke.

The aim of this project is to build on former work and conduct a pilot randomised controlled trial of cardiovascular training in this population. Recruitment commenced in mid-2013 and is expected to continue throughout 2014. This pilot work will form the foundation of future project grant applications and is the first example of our collaborative research with AIMSS.

Evaluating the Effectiveness of Experience Based Co-Design in Improving the Client Experience of Mental Health Transition across Health Sector Interfaces

Kate Cranwell, Jo Silva

Collaborators: Terence McCann, Victoria University; Gayelene Boardman, Victoria University; Linda Kensington, South West Melbourne Medicare Local

OUR RESEARCHERS

Timothy Chiu
Manager

Dr Lizzie Skinner
Allied Health Research Lead,
Physiotherapy Research
Coordinator, Senior ICU
Physiotherapist

Narelle Watson
Coordinator Advanced
Practice Allied Health; Senior
Orthopaedic Physiotherapist

Kirsty Barnes
Community-Based
Rehabilitation Team Leader –
Outer Team

Sam Wills
Senior Paediatric
Musculoskeletal Physiotherapist,
Member Research Committee

Collin McIlveen
Senior Musculoskeletal
Physiotherapist

Darren Fraser
Senior Musculoskeletal
Physiotherapist

Rebecca Pile
Senior Musculoskeletal
Physiotherapist

Paul Silk
Senior Musculoskeletal
Physiotherapist, Member
Research Committee

Jan Sutton
Senior Musculoskeletal
Physiotherapist

Kane Rodda
Senior Musculoskeletal
Physiotherapist

Cath Grant
Senior Aged Care, Falls and
Vestibular Physiotherapist

Cathy Davey
Senior GEM/Rehab
Physiotherapist

Hanna Reynolds
Senior Neurological
Physiotherapist

Sarah Kenny
Senior Neurological
Physiotherapist

Jane Tillyard
Senior Neurological
Physiotherapist

Lisa Hoare
Senior Neurological
Physiotherapist

Shae Cooke
Senior Neurological
Physiotherapist

Kirsty Kat
Senior Neurological
Physiotherapist

Clare Holdsworth
Senior Cardiorespiratory
Physiotherapist

Kathryn Barker
Senior Cardiorespiratory
Physiotherapist

Claire Boote
Senior Cardiorespiratory
Physiotherapist

Clarice Tang
Senior ED Physiotherapist

Caitlin Thompson
Grade 2 Physiotherapist

Jackson Boyd
Grade 2 Physiotherapist,
Member Research Committee

Louise Taylor
Grade 2 Physiotherapist

Melissa Hewitt
Grade 2 Physiotherapist,
Member Research Committee

Tammy Dinh
Grade 2 Physiotherapist

Kirsty May
Grade 2 Physiotherapist

Christine Polmear
Grade 2 Physiotherapist

Sarah Davies
Grade 2 Physiotherapist

Jazmin Cruz
Grade 2 Physiotherapist

Blair Doughton
Grade 2 Physiotherapist

Libby Talbot
Grade 2 Physiotherapist,
Member Research Committee

Melanie Lloyd
Grade 2 Physiotherapist

Kelly Fleury
Grade 2 Physiotherapist

Fiona McManus
Grade 2 Physiotherapist

Candice Poupard
Grade 2 Physiotherapist

Anna Nethercote
Grade 2 Physiotherapist

Emily Cross
Grade 2 Physiotherapist

Anna Matthews
Grade 2 Physiotherapist

Fran Samara
Grade 2 Physiotherapist

Hannah Ware
Grade 1 Physiotherapist

Aruska D'Souza
Grade 1 Physiotherapist,
Member Research Committee

Alistair Nicolson
Grade 1 Physiotherapist

Liesel Jansen

Grade 1 Physiotherapist.
Member Research Committee

Byron Lau

Grade 1 Physiotherapist

Lisa Morriss

Grade 1 Physiotherapist

Dom Vodanovich

Grade 1 Physiotherapist

Tom Bicknell

Grade 1 Physiotherapist

Catherine Giuliano

Exercise Physiologist, Member
Research Committee

Fiona Pazsa

Member, Research Committee

Kathryn Ritchie

Member, Research Committee

OUR RESEARCH STUDENTS**Narelle Watson**

PhD (Department of General
Medicine, Monash University)

Clarice Tang

Clinical Doctorate

Cassandra Raios

B Physio (Hons)

OUR AWARDS AND GRANTS**NHMRC Partnership Grant**

Terry Haines, Lizzie Skinner, Fiona McDermott, Lisa O'Brien,
Dona Markham, Deb Mitchell

*Application of a Novel Research Design To Aid Disinvestment
from Existing Health Technologies with Uncertain Effectiveness,
Cost-Effectiveness and/or Safety.* National Health and Medical
Research Council, Department of Health: \$585,663 (2014–2016)

**Macedon Ranges and North Western Melbourne Medicare
Local After Hours Primary Health Care Fund**

Narelle Watson, Timothy Chiu, David Grace, Vida Pranskunas

*Establishing and Supporting a Primary Contact Physiotherapy
Role at the Melton Urgent Care Clinic.* Macedon Ranges and
North Western Melbourne Medicare Local: \$130,000 (2013–2015)

**Macedon Ranges and North Western Melbourne Medicare
Local After Hours Primary Health Care Fund**

Narelle Watson, Timothy Chiu

*Expansion of Primary Care Physiotherapy at Sunshine Emergency
Department.* Macedon Ranges and North Western Melbourne
Medicare Local: \$90,000 (2013–2015)

**Advanced Musculoskeletal Physiotherapy Implementation
Program**

Narelle Watson, Darren Fraser

*Implementation of a Physiotherapist-Led Post Arthroplasty
Review (PAR) Clinic.* Department of Health: \$60,000 (2013–2015)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT**Lizzie Skinner**

International Editorial Review Board member, Journal of
Physiotherapy

Scientific Conference Committee member, Australian
Physiotherapy Association Cardiorespiratory Conference,
Australian and New Zealand Intensive Care Society/Australian
College of Critical Care Nurses Annual Scientific Meeting,
Victorian Allied Health Research Conference

Journal reviewer, Journal of Physiotherapy, Intensive Care
Medicine, Respiratory Care, Health and Quality of Life Outcomes,
Physical Therapy, Value in Health, Heart Lung and Circulation,
JAPA, Quality of Life Research, Patient Preference and
Adherence, Trials, Australian Critical Care, Heart and Lung:
The Journal of Acute and Critical Care, Physiotherapy

Committee member, Victorian Allied Health Therapy
Research Network

Catherine Giuliano

Therapist, Heart Research Centre

Christine Polmear

Member, Victorian Simulation Alliance, NHET-SIM and Future
Health Leaders

ALLIED HEALTH (cont.)

PODIATRY

The Podiatry Department and Diabetes Foot Service expanded their research focus in 2013. Three projects were undertaken in collaboration with the Endocrinology Department and Vascular Unit. Further research activities are planned for 2014, including collaboration with Victoria University and other Western Health departments.

The Podiatry Department presented twice at Western Health Research Week and had the distinction of winning the Allied Health Research Prize.

OUR RESEARCHERS

Julia Firth
Manager

Michaela Barron
Senior Podiatrist

OUR RESEARCH STUDENTS

Ashlea Dickinson
B Pod (Hons)



PSYCHOLOGY

In 2013, the Psychology Department progressed six major research projects focused on stroke, coronary care and cancer. Each area of study in stroke and coronary care is hoped to increase knowledge and improve effectiveness of rehabilitation following stroke and cardiac events, which are two of the most significant health events experienced in Australia. The cancer research will provide valuable information regarding treatment centre characteristics that influence the psychosocial outcomes for patients.

Future research is anticipated to focus on areas including validation of a Vietnamese translation of the Geriatric Anxiety Scale, evaluation of the usefulness of the Geriatric Anxiety Scale in geriatric inpatient care, maternal mental health and the prevalence of psychological distress in a sample of Western Health cancer patients.

In 2013, the Psychology Department delivered two presentations including one international presentation.

OUR RESEARCH

Investigating Visual Attention Post-Stroke

Diana Perre, Tissa Wijeratne, Essie Low, Sheila Crewther

Collaborators: La Trobe University

This research investigates the ability to detect transient changes while sequentially shifting and sustaining the cognitive stream of incoming information up to six months after stroke. It explores recovery, and rate of recovery, of visual attention within the first three months after initial baseline testing and considers the value of psychophysical tests as markers of recovery by comparing them with commonly used neuropsychological tests of attention and processing speed.

Stroke is a vascular event that leaves persistent motor impairment and, in over 50% of cases, compromise of the visual system and processing of visual information. Recent studies using neuropsychological tools suggest that deficits in visual attention and consequent impairment of information processing are among the most prevalent deficits after stroke, compared to other cognitive aspects, including verbal and visual memory and executive function. However, current rehabilitation interventions are largely aimed at improving motor function without addressing the individual's capacity to visually attend to treatment components and benefit from them.

It is hoped that this project will establish a simple set of computer-based tests that can be used as an adjunct to measuring attention and cognitive deficits post-stroke. Such tests could potentially be used in the development and assessment of rehabilitation programs and provide early predictions of prognosis.

An Examination of the Relationship between Distress Tolerance, Anxiety Sensitivity and Anxiety Symptoms in an Australian Adult Cardiac Sample

Litza Kiropoulos (Supervisor), Julia McGleish (Student Researcher)

This study examines cognitive risk factors that may be implicated in the development of anxiety disorders in a cardiac sample. The aim is to improve understanding of psychological factors that may contribute to increased anxiety reporting in those who have experienced a cardiac event. Identification of psychological variables influencing anxiety reporting can be targeted during psychological therapy, which can aid in anxiety and mood management in those who have experienced a cardiac event.

The Role of Individual Patient, Social and Treatment Centre Variables in the Psychosocial Outcomes of Cancer Patients

Grey Searle, Cathy Hammond, Adele Mollo, Michael Green

Collaborators: Principal Research Study from the University of Newcastle (Australia-wide study)

This study examines patient and non-patient characteristics that might account for psychosocial patient outcomes in cancer treatment – variables that relate to treatment centre characteristics. Patient psychosocial outcomes in cancer treatment are mostly explained by patient characteristics, so this study aims to account for all possible variables in explaining the variance in patient psychosocial outcomes in cancer treatment. Recruitment of 138 patients to the survey phase of the study is a major milestone.

OUR RESEARCHERS

Dr Diana Perre

Team Leader/Senior Clinical Neuropsychologist

Dr Anita Panayiotou

Clinical Neuropsychologist

Grey Searle

Manager/Clinical Psychologist

Dr Catherine Martin

Clinical Neuropsychologist

Dr Diana Harvey

Clinical Neuropsychologist

Dr Litza Kiropoulos

Senior Clinical Psychologist

OUR RESEARCH STUDENTS

Jacenta Abbott

DPsych (Clinical Neuropsychology), La Trobe University

Essie Low

DPsych (Clinical Neuropsychology), La Trobe University

Julia McGleish

Master of Clinical Psychology, Melbourne University

ALLIED HEALTH (cont.)

SOCIAL WORK

Western Health's Department of Social Work and The School of Health Sciences, School of Social Work, University of Melbourne, have participated in a three-year research program implementing a new fieldwork rotation modular teaching program. This multi-site program involves Austin, Northern, St Vincent's and Royal Melbourne Health. The program is in the final stages of evaluation. Early reports indicate positive results from student reports on the clinical opportunities, teaching expertise and professional supervision. It is anticipated that the research will be finalised and published toward the end of 2014.

In 2013, Dr Marty Grace, Professor, School of Social Sciences and Psychology, Social Work Unit at Victoria University and Western Health Department of Social Work senior leadership team commenced a shared teaching program. Senior staff from the Social Work department will twice-yearly co-lecture with university staff in applied practice curriculum. This program was developed through the Chief Social Worker, Ande Szendroe, who is a member of the Schools Advisory Board.

Dr Marty Grace and Dr Doris Testa, Senior Lecturer, in collaboration with Department of Social Work, will undertake a small research project throughout 2014 to explore social work practice in health care with culturally and linguistically diverse communities. The results will contribute to current knowledge in social work practice.

Cancer Services social workers, Jessica Valentine and Laurelle Stalker, and the manager of Social Work and Pastoral Care, Ande Szendroe, attended the 3rd Allied Health Victorian CCC Cancer Care Symposium at Peter MacCallum Cancer Centre in August 2013 and delivered a conference presentation. The conference provided an opportunity for allied health clinicians working in the cancer field to share best practice and innovations in improving patient experiences and outcomes.

OUR RESEARCH

Social Work Practice in Healthcare in a Culturally and Linguistically Diverse Community

Marty Grace, Doris Testa, Ande Szendroe

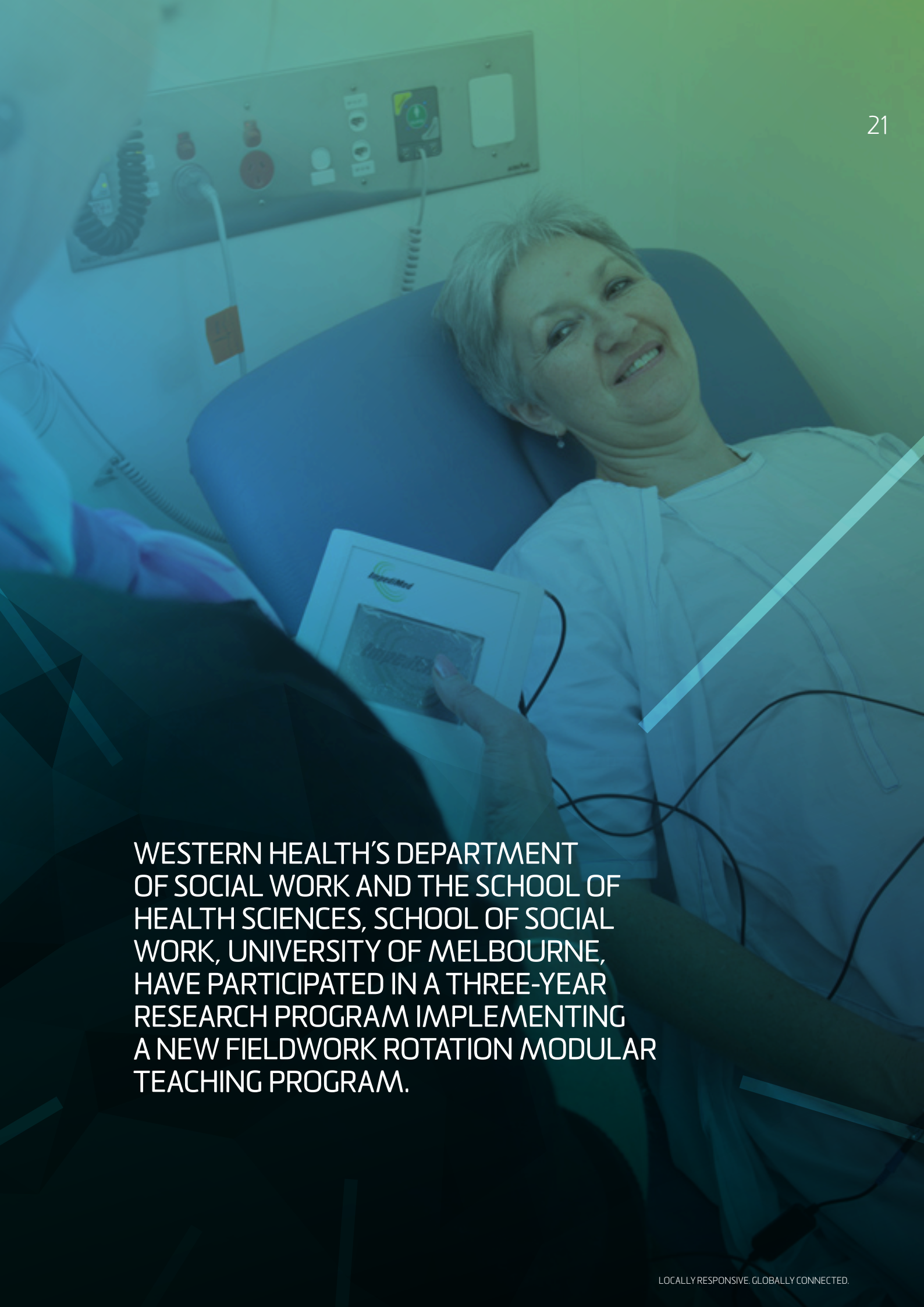
Collaborators: Victoria University

This research project will explore social work practice in healthcare with culturally and linguistically diverse communities, which is a key challenge for Western Health. The research will commence in February 2014 and will be completed for submission in September 2014. Ten social work staff from Western Health will self-select to be interviewed by Doris Testa. The results will contribute to the current body of knowledge in the application of social work practice with culturally and linguistically diverse groups and will apply directly to our consumers.

OUR RESEARCHERS

Ande Szendroe
Manager

Laurelle Stalker
Senior Social Worker

A photograph of a woman with short grey hair, smiling while lying in a hospital bed. She is wearing a white hospital gown. A hand from someone off-camera is holding a framed certificate or award in front of her. The certificate has a logo at the top and some text. In the background, there is a medical control panel with various buttons and a coiled tube. The entire image has a blue-green tint and a diagonal white line running from the top right towards the bottom left.

WESTERN HEALTH'S DEPARTMENT
OF SOCIAL WORK AND THE SCHOOL OF
HEALTH SCIENCES, SCHOOL OF SOCIAL
WORK, UNIVERSITY OF MELBOURNE,
HAVE PARTICIPATED IN A THREE-YEAR
RESEARCH PROGRAM IMPLEMENTING
A NEW FIELDWORK ROTATION MODULAR
TEACHING PROGRAM.

ALLIED HEALTH (cont.)

SPEECH PATHOLOGY

RESEARCH WITHIN THE SPEECH PATHOLOGY DEPARTMENT PROGRESSED SIGNIFICANTLY IN 2013, WITH THE COMPLETION OF A NUMBER OF PROJECTS EVALUATING EXISTING CLINICAL PRACTICES AND NEW SERVICE DELIVERY INITIATIVES.

Implementation of the Western Health Dysphagia Clinic resulted in the delivery of more timely, comprehensive and streamlined care to outpatients presenting with dysphagia. The revised Speech Pathology Pulmonary Rehabilitation Education Package significantly improved patients' knowledge around swallowing, communication and oral hygiene, increasing their ability to manage these aspects of their condition.

An investigation into the prevalence of communication barriers within the geriatric population on our subacute wards has driven initiatives aimed at optimising communication with this population. These initiatives are expected to increase patient engagement and reduce the risk of adverse medical events that are known to result from communication breakdowns. They include the development of a supported communication training package for use across the continuum of care.

Use of the *Global Mealtime Guide* in educating families from culturally and linguistically diverse backgrounds was shown to result in more timely implementation of prescribed food modifications by carers, which reduces the risk of dysphagia-related complications within our paediatric population.

The Speech Pathology Department was responsible for delivering 20 conference/seminar presentations in 2013, five at the national Speech Pathology Australia conference.

In 2014, the Speech Pathology Department will focus on a number of projects that are expected to improve the quality of care provided to patients across all clinical streams. These include evaluating the impact of implementing a 'free water protocol' for patients requiring thickened fluids within the acute hospital setting, and evaluating the psychometric properties of communication assessment/screening tools developed by the Speech Pathology Department.

OUR RESEARCH

Establishment of a Dysphagia Clinic: An Investigation of Patient and Service Delivery Outcomes

Ruth Best, Lauren Belleli

This project assessed the impact of the newly established Western Health Dysphagia Clinic on service provision to outpatients who are referred to Speech Pathology for input regarding their dysphagia. Dysphagia is associated with considerable morbidity, including dehydration, malnutrition,

aspiration, choking or chest infections and is known to significantly impact on patients' quality of life.

This project found that establishment of the clinic has resulted in the delivery of more timely, comprehensive and streamlined care to patients presenting with dysphagia. Specifically, it has resulted in a significant reduction in maximum waiting times from 95 to 28 days; a significant reduction in the occasions of service delivered during each episode of care from a median of two contacts to one contact; a clinically significant reduction in the length of each episode of care from a median of 13 days to one day; increased use of instrumental swallowing assessments from 64% to 80%; and an increase in the recommendation and delivery of interventions designed to remediate the causes of dysphagia.

Identifying Communication Barriers on Geriatric Evaluation and Management (GEM) Wards at Western Health (A Prevalence Study)

Hemant Jeena, Merridy Moore, Sally Howard, Courtney Pocock, Kathryn Langshaw

Effective communication between patients and healthcare providers within the ward environment is essential to the provision of high quality clinical care, with current evidence suggesting a link between good communication and positive healthcare outcomes. Conversely, reduced patient and healthcare provider accessibility to information has been shown to result in adverse medical events such as misdiagnosis, inappropriate treatment, medication errors and even death.

This project revealed that 85% of our patients had reduced ability to effectively communicate their healthcare needs, placing them at risk of adverse events during their hospital stay. Five main barriers to effective communication were identified across all three GEM sites: cognitive/communication impairment, hearing impairment, vision impairment, patients from non-English speaking backgrounds, and environmental factors.

The identification of communication barriers will be used to develop initiatives and projects targeted at improving communication with patients and staff in the GEM setting.

Global Mealtime Guide: An Assessment of Carer and Clinician Perceived Outcomes

Rachel Smith

This project assesses the impact of the *Global Mealtime Guide* on the provision of food modification education to carers from culturally and linguistically diverse backgrounds.

Babies and young children with significant swallowing problems are at risk of malnutrition, dehydration, choking and compromised development. This can be stressful for families and carers as they learn to manage their child's specialised needs through appropriate food modification. The Speech Pathology Department recognised additional challenges for families from culturally and linguistically diverse backgrounds in assimilating prescribed dietary changes into their home cuisine. The *Good Mealtime Guide* was developed to provide a culturally sensitive approach to carer education in food modification using a pictorial reference of common ethnic foods from six most frequently serviced cultural groups, complemented by relevant cultural information.

The assessment project found that introduction of the guide resulted in increased carer understanding of Speech Pathology food modification recommendations (from 20% to 100%); more prompt implementation of prescribed food modifications by carers (as evidenced by fewer consultations required to embed safe feeding practices); and high levels of carer satisfaction (95–100% satisfied) with components of the education sessions including the use of picture prompts to explain their home menu and elimination of the communication breakdown around food. Clinicians also reported increased understanding of cultural groups and their infant feeding practices, and increased efficiency and effectiveness of food modification education sessions.

Evaluation of the Assessment and Diagnosis Process of Autism Spectrum Disorder at Western Health

Renee Debrincat, Sally Butzkueven

The primary aim of this project is to gather feedback about the autism diagnostic service provided by Western Health to ensure it meets the needs of families in our community. Secondary aims are to review the intake and booking procedure, identify areas for improvement in pre- and post-assessment activities, and identify the efficacy of the group program.

OUR RESEARCHERS

Meredith Swaby

Manager, Speech Pathology and Audiology

Ruth Best

Senior Speech Pathologist

Lauren Belleli

Speech Pathologist

Laura Bezzina

Speech Pathologist

Sally Butzkueven

Senior Speech Pathologist, CAHS

Dimitra Chrisikakos

Speech Pathologist

Nikol Faris

Speech Pathologist

Tom Gauci

Speech Pathologist

Sally Howard

Senior Speech Pathologist

Hemant Jeena

Speech Pathologist

Kathryn Langshaw

Speech Pathologist

Louise Malcolm

Senior Speech Pathologist

Anita McKinstry

Senior Speech Pathologist

Richa Mishra

Speech Pathologist

Merridy Moore

Senior Speech Pathologist

Courtney Pocock

Speech Pathologist

Rachel Smith

Speech Pathologist

Monique Stojkovski

Speech Pathologist

ANAESTHESIA AND PAIN MANAGEMENT

THE DEPARTMENT OF ANAESTHESIA AND PAIN MEDICINE CONTINUED TO EXPAND ITS RESEARCH ACTIVITIES IN 2013 AND BENEFIT FROM SOME MAJOR CHANGES IN THE RESEARCH LANDSCAPE.

In 2013, the Anaesthesia, Perioperative and Pain Medicine Unit (APPMU) was established within the Melbourne Medical School, The University of Melbourne, bringing together research and education activities of 14 affiliated hospitals. The foundation Chair, Prof David Story, has strong links with Western Health, particularly through research collaborations and Australian and New Zealand College of Anaesthetists (ANZCA) activities. In 2013, APPMU helped boost Western Health's anaesthesia teaching and research activities by introducing new collaborations across the affiliated sites and providing research expertise and resources.

Also in 2013, the joint Western Health Anaesthesia and Intensive Care Research Unit was formed. This combines the research resources and expertise of the two departments and offers new opportunities as our research activity continues to grow.

The department continued involvement in large multicentre international studies, including ENIGMA-II and POISE-II, as well as investigator-initiated local studies like the OSA trial. A new area of research has focused obesity health outcomes. The MUM SIZE study has enhanced research collaboration across the anaesthesia and obstetric units, as well as external collaborations with the University of Melbourne and other obstetric hospitals.

Department of Anaesthesia staff have continued to provide a strong presence at local and interstate meetings and within educational and college forums. Four years of intensive preparation culminated in the highly successful 2013 ANZCA Annual Scientific Meeting held in Melbourne. As Scientific Co-Convenor of this meeting, Dr David Bramley presided over the organisation of the scientific program, providing a diverse stream of program lectures and workshops and unrivalled international speakers.

OUR RESEARCH

MUM SIZE

Elizabeth Hessian

Collaborators: Study lead: David Story, Head of Anaesthesia, Perioperative and Pain Medicine Unit (APPMU), The University of Melbourne

Participating sites: Sunshine Hospital, Royal Women's Hospital, The Mercy Hospital, Goulburn Valley Hospital, Ballarat Hospital, the Northern Hospital, Northeast Health Wangaratta

This multicentre, observational study of 1,500 patients undergoing caesarean section examines the relationship between body mass index (BMI) and maternal and neonatal outcomes. With the increasing health burden of obesity, this study will provide valuable information about potential complications of obesity and the resources required to manage and care for obese parturients. It will also provide a useful springboard to consider potential interventions to assist patients with controlling weight gain during pregnancy.

OSA (Obstructive Sleep Apnoea) Study

Anne-Marie Southcott, Laina Sheers (Respiratory Department)

Collaborator: David Bramley

This is an observational study looking at postoperative respiratory outcomes in patients at risk of obstructive sleep apnoea. All patients recruited undergo a preoperative sleep study and additional postoperative monitoring on the ward. Postoperative respiratory complications pose a significant safety risk in patients with obstructive sleep apnoea. This study will help direct safe postoperative monitoring practices to minimise these risks.

POISE-II

Andrew Jeffreys, Elizabeth Hessian, Ellen Kinkel

Collaborators: Study led by PJ Devereaux Population Health Research Institute (PHRI) McMaster University, Hamilton Ontario Canada. Local coordinator ANZCA Trials Group

This factorial study looks at whether aspirin and clonidine can reduce cardiovascular morbidity and mortality in patients at risk of these complications. Recruitment of the 10,000 sample was completed towards the end of 2013. As many Western Health patients have risk factors for cardiovascular disease, the results from this study will help guide administration of aspirin and clonidine to potentially reduce these risks in the perioperative period.

OUR RESEARCHERS

Dr Richard Horton

Head of Unit

Prof David Story

Chair, Anaesthesia, Perioperative and Pain Medicine Unit, Melbourne Medical School

Dr Andrew Jeffreys

Clinical Services Director, Division of Perioperative and Critical Care Services

Dr David Bramley

Deputy Director, Department of Anaesthesia and Pain Medicine

Dr Elizabeth Hessian

Deputy Director, Department of Anaesthesia and Pain Medicine

Dr Bob Smith

Consultant Anaesthetist

Dr Adriano Coccianti

Consultant Anaesthetist

Dr Bob Smith

Consultant Anaesthetist

Ms Ellen Kinkel

Research Coordinator

OUR RESEARCH OUTPUT

Publications: 1

Presentations: 8

OUR AWARDS AND GRANTS

MMS Research Seed Funding Grant

David Story, F Martin-Sanchez, M Wlodek, G Teale, E Gerace, Elizabeth Hessian

Risk Factors and MHealth Management for Maternal Obesity. Melbourne Medical School FMDHS: \$10,000 (2013)

ANZCA Trials Group Pilot Grant

David Story

MUM SIZE Study. Australian And New Zealand College of Anaesthetists Trials Group: \$5,000 (2013)

The University of Melbourne: Ethics and Integrity Development Grant 2013

Collaborative survey with Office of Research Ethics and Integrity of HRECs at all UoM affiliated hospitals. Office of Research Ethics and Integrity, The University of Melbourne: \$10,000 (2013)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

David Story

Chair, Anaesthesia, Perioperative and Pain Medicine Unit, Melbourne Medical School, The University of Melbourne

Bob Smith

Reviewer, Perioperative Medicine Journal

Elizabeth Hessian

Chair, Low Risk Ethics Panel, Western Health

Research Grant Reviewer, Australian and New Zealand College of Anaesthetists

Lecturer, Anaesthesia, Perioperative and Pain Medicine Unit (APPMU) within The University of Melbourne

Rick Horton

Research Grant Reviewer, Australian and New Zealand College of Anaesthetists

Abhay Umranikar

ANZCA Final Fellowship Examiner, Australian and New Zealand College of Anaesthetists

Senior Lecturer, Anaesthesia, Perioperative and Pain Medicine Unit (APPMU) within The University of Melbourne

Andrew Jeffreys

Senior Lecturer, Department of Pharmacology, The University of Melbourne

CANCER IN PRIMARY CARE

AT WESTERN HEALTH, OUR GOAL IS TO DEVELOP A COMPREHENSIVE PRIMARY CARE CANCER RESEARCH PROGRAM.

With the appointment of Jon Emery to the Herman Chair of Primary Care Cancer Research in 2014, Western Health is beginning to establish a new research stream on cancer in primary care.

Our research extends across the whole cancer continuum, covering prevention, early diagnosis and survivorship. A cross-cutting theme is risk-stratified care and the development and evaluation of cancer risk tools suitable for primary care. We are also interested in causes and interventions to reduce inequalities in cancer outcomes for specific Australian populations, including people from rural and culturally and linguistically diverse backgrounds.

Our research involves collaborators from several high-profile national and international institutions. Many of these collaborations have been established through the Primary Care Collaborative Cancer Clinical Trials Group, PC4, of which Jon Emery is the Director.

OUR RESEARCH

Risk Assessment Tools to Support Early Cancer Diagnosis in Primary Care

Peggy Chang, Jon Emery

Collaborators: David Glance

QCancer is a validated model that determines the risk of undiagnosed cancer for multiple different sites based on their underlying risk factors and symptom profile.

This project is examining the potential role of a risk assessment tool that implements the QCancer risk model to support GPs' assessment of people with symptoms associated with cancer. This tool could help identify people with undiagnosed cancer and direct their GP to order the most suitable tests. It could lead to earlier cancer diagnosis and, therefore, greater chances of surviving cancer. It may also reduce unnecessary tests in people who are very unlikely to have a serious condition.

Diagnostic Pathways for People with Cancer from CALD Backgrounds

Sharon Liquish, Jon Emery

Collaborators: Penelope Schofield, Michael Green, John Violet

This project is exploring the influence of culturally specific factors on later presentation to healthcare and later diagnosis of cancer. It will identify how people's beliefs about cancer, which are specific to their cultural background, may influence their decision to visit a doctor when they develop symptoms. The aim is to better understand reasons for poorer cancer outcomes for specific cultural groups.

The project is comparing diagnostic pathways that cover symptom appraisal, decisions about help-seeking and healthcare experiences in people of Vietnamese, Italian and Anglo-Australian backgrounds. The outcomes will inform the development of culturally-specific community symptom awareness campaigns aimed at promoting earlier diagnosis of serious illnesses including cancer.

The ProCare Trial of Shared Care for Follow-Up of Men with Prostate Cancer

Jon Emery, Amelia Hyatt, Emily Hapgood, Juanita Doorey

Collaborators: Penelope Schofield, Michael Jefford, Dickon Hayne, John Violet

This randomised controlled trial tests a novel model of shared care that engages general practice in the follow-up of men after they have completed treatment for prostate cancer. This trial is testing a new approach that supports GPs to become more involved in cancer follow-up. It aims to address the physical and psychosocial needs of men, which are often poorly met. The trial is being conducted in Victoria and Western Australia and the findings are due to report in late 2014. It is hoped that the results will lead to improvements in overall care and address some of the common problems men experience after prostate cancer treatment.

OUR RESEARCHERS

Professor Jon Emery

Herman Professor of Primary Care Cancer Research, University of Melbourne

Dr Sharon Liquish

Postdoctoral Research Fellow

Dr Jennifer Walker

Postdoctoral Research Fellow

Dr Peggy Chang

Postdoctoral Research Fellow

OUR RESEARCH OUTPUT

Publications: 9

Presentations: 6

OUR AWARDS AND GRANTS

NHMRC Project Grant

J Emery, D Mazza, N Campbell

CHEST Australia: Reducing Time To Consult in Primary Care with Symptoms of Lung Cancer. \$880,425 (2014–2017)

NHMRC Project Grant

K-A Phillips, J Emery, R Jackson, G Mann

iPrevent: Development and Pilot Testing of an Evidence-Based, Tailored, Computerised Risk Assessment and Decision Support Tool To Facilitate Discussions about Breast Cancer Prevention and Screening Measures. \$404,772 (2014–2016)

NHMRC Project Grant

LTrevena, J Emery, J Dowie, S-A Pearson

Should I Take Low Dose Aspirin? The 'Optimise' Decision Aid Study. \$424,115 (2014–2016)

Cancer Australia

National Primary Care Cooperative Cancer Clinical Trials Group (PC4). \$1,379,786 (2013–2016)

Victorian Comprehensive Cancer Centre

J Emery, P Schofield, M Green

Symptom Appraisal and Help-Seeking in Cancer Patients from CALD Backgrounds. \$32,000 (2013–2014)

Victorian Comprehensive Cancer Centre

Translating Cancer Diagnostic Risk Models In General Practice. \$75,000 (2013–2014)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Jon Emery

Charles-Bridges Webb Medal, Australian Association for Academic Primary Care

Royal College of General Practitioners (UK) Cancer Research Paper of the Year, 'The Molemate Trial' (BMJ 2012;344:e4110 doi: 10.1136/bmj.e4110)

International Cancer Benchmarking Partnership, Academic Reference Group

NHMRC Research Translation Faculty, Primary Health Care Steering Group

NHMRC Assigners Academy

Palliative Care Research Network Victoria, Chair Scientific Committee

NHMRC PSA Testing, Expert Advisory Group

National Bowel Cancer Screening Program, Clinical Advisory Group and Program Advisory Group

CARDIOLOGY

CARDIOVASCULAR DISEASE KILLS ONE AUSTRALIAN EVERY 12 MINUTES AND AFFECTS 3.7 MILLION AUSTRALIANS. THE DEPARTMENT OF CARDIOLOGY DELIVERS A HIGH QUALITY CLINICAL SERVICE, SUPPORTED BY ACTIVE ENGAGEMENT IN STATE, NATIONAL AND INTERNATIONAL RESEARCH.

During 2013, Cardiology was involved in the statewide AVOID Trial, exploring a better way to care for myocardial infarction patients in transit to hospital. We also participated in the multinational FOURIER and GLAGOV mission, aiming to reduce cardiovascular events using a novel lipid-lowering agent. Our investigators play a major role in NHMRC funded projects aimed at improved care for chronic cardiovascular disease management, such as atrial fibrillation and heart failure via the SAFETY and WHICH2 trials.

Western Hospital is one of the few hospitals in Victoria that participates in the SIMPLICITY Registry trial using a novel renal denervation procedure to treat resistant hypertension. Our participation in statewide multicentre registry in STEMI Pre-notification has resulted in the standard practice of ambulance prenotification of STEMI cases prior to arrival at our Emergency Department and improved door-to-balloon time in the treatment of acute MI.

Our research activities are well supported by our research nurses and our cardiologists, nurses and trainees. We have established a platform for our trainees and fellows to experience firsthand how major trials are conducted. They, in turn, participate in individual projects to enhance their clinical experience. We aim to include all our patients in our research projects and apply new knowledge to improve delivery of healthcare to them. Through our research we are learning to improve cost-effectiveness in healthcare delivery for chronic cardiovascular disease, such as atrial fibrillation and heart failure.

In 2014, postgraduate student Nadim Shah will start his doctorate research project in the use of imaging tests for screening at-risk populations for occult coronary artery disease. Our new cardiogeriatric unit is expected to produce interesting clinical data and research opportunities for junior and senior doctors. Based on our research track record, we anticipate more opportunities to participate in new multicentre trials in coming years.

OUR RESEARCH

A Cardiogeriatric Model of Care: Prospective Assessment of a New Method of Care for Elderly Patients Admitted with Heart Failure



Nicholas Cox

Collaborators: Chris Neil, Edward Janus, Kath Cowie

In 2014, Western Health aims to establish a specialised model of care for older patients presenting with heart failure. This model – known as the Cardiogeriatric Unit – will facilitate the admission and management of older patients with heart failure under the care of a cardiologist working in close partnership with Geriatric Medicine, Specialist Aged Care Nursing, Allied Health and Exercise Physiology. The aim is to optimise health outcomes and function over the continuum of care. For patients presenting with a primary diagnosis of acute decompensation of heart failure, admission to a cardiogeriatric service will reduce length of stay, without contributing to an excess of hospital re-admission at 30 days.

Residents of western metropolitan Melbourne have a significantly higher risk of heart failure than residents of other metropolitan areas, which suggests a need to review the models of care available to patients in the Western Health catchment.

Standard vs. Atrial Fibrillation-specific management study (SAFETY)

Chiew Wong

Health outcomes associated with atrial fibrillation (AF) are suboptimal for predominantly older patients who require therapeutic regimes and an individualised approach to management. This project is investigating a specific nurse-led program combined with an AF-specific form of chronic disease management to significantly reduce all-cause mortality and/or unplanned re-admission relative to standard care during follow-up of 24 months. The aim is to develop a specific intervention for patients with AF to improve their quality of life and also reduce unplanned hospital events and costs associated with AF healthcare.

The Which Heart failure Intervention is most Cost-effective in reducing Hospital Stay (WHICH? II Trial)

Chiew Wong

Outcome data from the WHICH? Trial suggests that further improvement is needed in the cost-efficacy of chronic heart failure management programs, particularly around recurrent hospital stay, which is the major component of chronic heart failure health-related expenditure.

The WHICH? II Trial will test the hypothesis that a more intense, nurse-led, post-discharge, multidisciplinary chronic heart failure management program, incorporating outreach home-based intervention and enhanced by structured telephone support, will be superior to a standard form of chronic heart failure management program in reducing the total cost of health care (15% or more) during 18-month follow-up. This project will use a heart failure-specific form of the newly developed Green Amber Red Delineation of risk And Need (GARDIAN) risk profiling tool to identify high-risk individuals and those at risk of a premature death to receive more intensive management.

OUR RESEARCHERS

A/Prof Nicholas Cox

Director of Cardiology/site P.I for HREC/12/SVHM/38

A/Prof Kean Soon

Co-Director of Cardiac CT/site P.I. for HREC/13/HNE/61

A/Prof Chiew Wong

Head of Non-invasive services/site P.I for HREC/13/HNE/153 and the SAFETY and WHICH? II studies

Vanessa Lee

Cardiology Research Coordinator

Dr Chris Neil

Consultant Cardiologist

Dr Sal Rametta

Consultant Cardiologist/site P.I for HREC/10/Alfred/52

Dr Dinesh Natarajan

Advanced Trainee Cardiology Registrar

Dr Nadim Shah

Cardiac Catheterization Laboratory Fellow

OUR RESEARCH STUDENTS

Jason Bloom *MBBS*

Victoria Green *MBBS*

OUR RESEARCH OUTPUT

Publications: 8

Book chapters: 2

Proceedings: 5

Presentations: 3

OUR AWARDS AND GRANTS

Western Health Research Grant 2013

Nadim Shah, Chiew Wong, Kean Soon

Prevalence of Asymptomatic Coronary Heart Disease in the Siblings of Young Myocardial Infarction Patients and the Utility of Coronary CT Angiography as a Screening Tool. Western Health: \$10,000 (2013)

DRUG HEALTH SERVICES

Drug Health Services in 2013 focused on development of research capacity and evaluation of clinical practice models. Building on work commenced with Associate Professor Craig Fry of Victoria University, the service is a foundation member of the Western Alcohol and Other Drug Health Research Network. This network has expanded to include key stakeholders throughout the western suburbs, with initial emphasis on identifying existing research gaps. It is anticipated that a number of related demonstration projects will commence in 2014, the first of which will identify alcohol and other drug health research gaps in the West. This presents an exciting opportunity to develop a coordinated research agenda that targets the West and is developed in response to actual need.

Other projects undertaken at Drug Health Services in 2013 focused on the implementation and evaluation of new clinical models of practice; in particular, mindfulness-based group therapies. Two projects contributed to embedding mindfulness groups across Drug Health Services, demonstrating a commitment to clinical innovation and responding to growing international interest in mindfulness for the treatment of substance abuse.

Drug Health Services had six articles published in peer-reviewed journals in 2013. Associate Professor Michael McDonough, Head of Addiction Medicine and Toxicology, continued to demonstrate a commitment to leadership within the field, having been involved in the publication of five articles. He has also been a key driver behind the development and implementation of a chronic disease management model for treating complex substance use disorders. It is anticipated that an evaluation of this model will occur in 2014. Diem Tran conducted research as part of a graduate diploma in psychology, contributing to the evidence base on youth engagement in substance abuse treatment.

OUR RESEARCH

Mindfulness Group Evaluation within the Adolescent Drug Health Services Adolescent Unit

Louise Newing, Sandra Hocking

Applying Acceptance and Commitment Therapy (ACT) in the Residential Withdrawal Setting

Liz Cooper, Ben Williams

OUR RESEARCHERS

Associate Professor Mike McDonough

Head of Unit, Addiction Medicine and Toxicology

Ruben Ruolle

Acting Community Programs Manager, Drug Health Services

Dr Helen Sweeting

Addiction Medicine Specialist

Brad Roberg

Team Leader Specialist Services, Drug Health Services

Scott Withy

Clinician, Specialist Pharmacotherapy Program

Ben Williams

Clinician, Intake Team, Drug Health Services

Marcus Forsythe

Nurse Practitioner

OUR RESEARCH OUTPUT

Publications: 6

Presentations: 1

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Michael McDonough

Reviewer, Medical Journal of Australia; Drug and Alcohol Review; Addiction; Internal Medicine Journal

Editorial Committee Member, Journal of Alcoholism and Drug Dependence

Professional association memberships, APSAD, TIAFT, FACTA, EAPCCT, APAMT, AChAM (RACP)

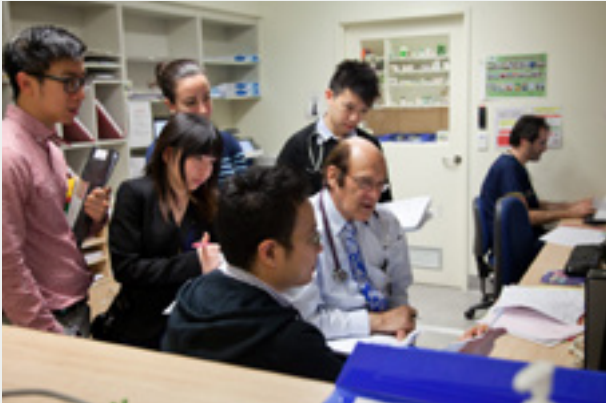
Committee memberships, Board Management Justice Health; Drugs of Dependence Advisory Committee, (DoH)

Chair, Western Health Adverse Drug Reactions Committee; Board Management, Wicking ABI Project, Winttingham Group

Chief Advisor, Department of Health, Addiction Medicine

GENERAL INTERNAL MEDICINE

IN 2013, GENERAL INTERNAL MEDICINE CONTINUED A DIVERSE PROGRAM OF RESEARCH AND COLLABORATION WITH STATE, NATIONAL AND INTERNATIONAL BODIES.



Highlights in 2013 included the awarding of a five-year NHMRC Career Development Fellowship to Associate Professor Harin Karunajeewa; the selection of physician trainee Dr Eloise Williams as an Adult Medicine finalist for the Victorian State Committee RACP Trainee Research Awards; and the awarding to Sam McArthur (Radiology) and Harin Karunajeewa of an Excellence Award for research on foetal growth charts.

In 2013, physician trainee projects with Dr Karunajeewa covered a range of areas, including community acquired pneumonia, ethics in malaria, urinary tract infections, gastroenteritis (hospital/community acquired), endocarditis, cellulitis, osteomyelitis, sepsis and delirium, focusing on patient population characteristics, determinants of adverse outcomes and critically evaluating management compared to existing consensus guidelines.

An earlier General Internal Medicine study has led to collaboration with Monash University's College of Pharmacy on a multicentre study of prescribing practice for acute coronary syndromes. Large NHMRC funded studies on diabetes prevention (MDPS) and prevention of diabetes after gestational diabetes (MAGDA) continue and a pilot study of epigenetic factors in gestational diabetes is underway. Professor Janus continued to collaborate on the award-winning Hong Kong Cardiovascular Risk Factor Study, which he set up in 1994–96 and which is now in its 18-year follow-up stage.

Dr Karunajeewa continues international collaborative research on malaria and clinical research into infectious diseases with the ultimate aim of eliminating malaria from some of the small countries of the South Pacific. With the University of Melbourne and Walter and Eliza Hall Institute collaborators he is developing novel diagnostic systems for diarrhoeal disease and gastrointestinal pathogens.

In a collaborative project with CSIRO, *Community Care - Moving beyond Bed-Based Care at Western Health*, we identified determinants of excess length of stay and patient cohorts amenable to increased use of community care. The next objective is to develop a tool for use on admission to predict length of stay and raise red flags for serious events.

OUR RESEARCH

Preventing Diabetes in Pregnancy from Progressing to Type 2 Diabetes: Macro-Level System Change in South Australia and Victoria

Edward Janus, Peter Ebeling

Collaborators: JA Dunbar, JD Best, R Carter, J Oats, P Reddy, J Carnie, P Phillips, Victorian and South Australian governments

In an NHMRC Partnership Grant, Professors Janus and Ebeling work on a gestational diabetes register to ensure long-term follow-up and an intervention (MAGDA) to decrease progression of GDM mothers to type 2 diabetes. Almost 600 subjects have been recruited for the lifestyle intervention vs. usual care trial and results should be available by mid-2015.

Ten per cent of pregnancies at Western Health are complicated by gestational diabetes. As well as optimal treatment during pregnancy, follow-up is critical to prevent later development of type 2 diabetes and its complications in these mothers. This project aims to address the lack of process and effective interventions.

EPI-FIND - Epigenetic Factors in Diabetes

Edward Janus, Peter Ebeling

Collaborators: The University of Melbourne and Deakin University colleagues

This is a spin-off project that aims to identify epigenetic (environmental) effects on gene expression in the development of diabetes during pregnancy. Subjects are drawn from Western Health gestational diabetes and non-gestational diabetes clinics.

It appears that environmental factors interact with genes to produce adverse effects on mothers and their babies. For example, malnutrition during pregnancy has long-term health implications for the babies who may develop heart disease and diabetes in adult life. Understanding how this happens will inform strategies to prevent intergenerational transmission of these common diseases.

GENERAL INTERNAL MEDICINE (cont.)

Prevalence of Factors that Influence Prescribing of Key Therapies at Discharge Following Acute Coronary Syndrome

Kevin McNamara and Eva Hoff (Monash University's College of Pharmacy) with Edward Janus, Harin Karunajeewa

Collaborators: Rochelle Gellatly, Rohan Elliott, Karen Sanders, Melanie Welsh, Danny Lay, Adam Pastor, Susan Poole, Omar Farouque

An earlier Western Health study has led to this collaboration with Monash University's College of Pharmacy on a multicentre study of prescribing practice for acute coronary syndromes under Cardiology and General Medicine units at four hospitals.

The study showed a high degree of compliance to best practice in General Medicine at Western Health. It also highlighted specific treatment issues in older patients with multiple co-morbidities, for whom some of the widely recommended guidelines that have been produced for younger patients were inappropriate for older patients. This a national issue.

OUR CLINICAL RESEARCHERS

Prof Edward Janus

Head of Unit

A/Prof Harin Karunajeewa

Physician and Director of Research, Division of Medicine

A/Prof Mahesan Anpalahan

Physician

Dr Elke Hendrich

Physician and Director of Physician Training

Dr Albert Leung

Physician: see under Rheumatology

A/Prof Craig Nelson

Physician: see under Nephrology

A/Prof Vicki Levidiotis

Physician: see under Nephrology

Dr Kushma Nand

Physician: see under Nephrology

Dr Mathew Rodrigues

Physician: see under Respiratory and Sleep Medicine

Dr Adrian Tramontana

Physician: see under Infectious Diseases

Dr Mohammed Al-Moktar

Advanced Trainee in General Medicine

Dr Laura Bywater

Basic Trainee

Dr Luis Cuadros

Basic Trainee

Dr Nuttaya Chavalertsakul

Basic Trainee

Dr Julia Girdwood

Advanced Trainee in General Medicine

Dr Zeb Jamrozik

Advanced Trainee in General Medicine

Dr Binara Jayasinghe

Advanced Trainee in General Medicine

Dr Kamya Kameshwar

Basic Trainee

Dr Belinda Lin

Advanced Trainee in General Medicine

Dr Eloise Williams

Basic Trainee

Dr Jesse Zanker

Basic Trainee

Anabel Bartolo

Research Assistant NHMRC MAGDA Study (Mothers after Gestational Diabetes in Australia)

Dr Kevin McNamara

Monash University, Senior Lecturer

Dr David Sier

CSIRO Computational Informatics

Dr Dinusha Thanipulli

Advanced Trainee in General Medicine

Dr Ping Zhang

CSIRO Computational Informatics

OUR RESEARCH STUDENTS

Eva Hoff

Pharmacy Research Student, University of Utrecht, Netherlands

RESEARCH OUTPUT

Publications: 13

Presentations: 20

OUR AWARDS AND GRANTS

NHMRC Career Development Fellowship

Harin Karunajeewa

NHMRC: \$250,000 (2014–2019)

Partnership Grant

JA Dunbar, JD Best, ED Janus, R Carter, J Oats, P Reddy, J Carnie and P Phillips, with AI Ebeling

Preventing Diabetes in Pregnancy from Progressing to Type 2 Diabetes: Macro-Level System Change in South Australia and Victoria. NHMRC: \$1,292,000 (2010–2014)

Peter Ebeling and Mahesan Anpalahan

Project Grant: See Endocrinology, Kidney Health Australia: See Endocrinology (See Endocrinology)

Project Grant

Harin Karunajeewa

Trial of Primaquine for Radical Cure of Plasmodium Vivax in Vanuatu and the Solomon Islands. Asia Pacific Malaria Elimination Network: \$100,000

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Edward Janus

President, Heart Research Centre Board Melbourne

Treasurer, Asian Pacific Society of Atherosclerosis and Vascular Diseases

Reviewer, NHMRC grants, Hong Kong Government Health and Medical Research Fund

Atherosclerosis, BMC Public Health, Clinical Endocrinology, Journal of Diabetes Investigation, Journal of Research in Diabetes, Medical Journal of Australia, Preventive Medicine

Mahesan Anpalahan

Reviewer, Internal medicine, BMC Nephrology, PLOS-ONE, case reports in Internal Medicine

Harin Karunajeewa

Academic Editor Reviewer, PLoS ONE, PLoS Medicine, PLoS One, Tropical Medicine and International Health, American Journal of Tropical Medicine and Hygiene

GERIATRIC MEDICINE

THE DEPARTMENT OF GERIATRIC MEDICINE CARES FOR OLDER ADULTS WITH COMPLEX MEDICAL ISSUES, GERIATRIC SYNDROMES AND FRAILITY LIVING IN THE CULTURALLY DIVERSE WESTERN SUBURBS.

The Department of Geriatric Medicine prioritises research that focuses on our elderly community's unique needs, improves the experience of elderly patients in hospital, and synthesises and implements evidence to guide best management of the older patient in a variety of care settings.

Highlights in 2013 include Dr Sook Meng Lee's sabbatical to further her research on squalor and hoarding. Dr Lee is investigating the neuropsychological profile associated with this condition, which is often encountered by the community-based Aged Care Assessment Service. Dr Lee also continued work on the impact of interpreter assistance in the performance of cognitive assessments in the Asian community.

Several department members chaired committees that have overseen the creation of evidence-based guidelines to direct best management of common geriatric syndromes encountered in hospitalised patients, such as delirium, incontinence and the need for restraints. Audits of the extent and management of common geriatric syndromes, including osteoporosis and incontinence, formed useful projects for our advanced trainees. Work on incontinence by an advanced trainee was recognised with a prize during Western Health Research Week.

Opportunities for collaboration with other institutes have been facilitated by successful NHMRC project grants. Dr Stephanie Ward and Dr Elizabeth Daparin will participate in a randomised controlled trial of aspirin for management of chronic venous leg ulcers, led by Monash University. Dr Stephanie Ward, also an affiliate of Monash University, continued her work on preventive therapies in the elderly, including work on the NHMRC funded study of low dose aspirin in sleep apnoea.

OUR RESEARCH

Point Prevalence Study of Incontinence for Elderly Patients during Hospitalisation

Shiki Joseph, Robynne Dakis, Yasmin Sheik

Collaborators: K Kirby, K Mangion, A Panagiotou, D Kerr

Incontinence is a disabling age-related morbidity that is frequently unrecognised. The aim of this project is to explain the burden of incontinence experienced by older Western Health patients.

Development of Guidelines for Management of Dementia and Delirium in Western Health

Barbara Sabangan (chair), Claire McKie, Stephanie Ward

Collaborators: Organisational heads

The burden of cognitive impairment is increasing and frequently complicates the inpatient stay of many older adults in our hospital. The aim of this project is to create evidence-based guidelines for use locally to guide optimal management of delirium and cognitive impairment.

Neuropsychological Profile of Squalor and Hoarding

Sook Meng Lee

Collaborators: Stephen MacFarlane, Matthew Lewis, Deborah Leighton, Ben Harris, Brian Long

The aim of this study is to investigate the features of neuropsychology that are found in older individuals who display the disabling pattern of hoarding in their own homes. The Western Aged Care and Assessment Service is frequently involved in responding to the difficult management situation of an older adult living in squalor. These situations can have significant health and safety outcomes for older adults; however there is not a complete understanding of this condition.

OUR RESEARCHERS

Dr Sook Meng Lee

Geriatrician

Dr Stephanie Ward

Geriatrician

* on maternity leave in 2013

Dr Claire McKie

Geriatrician

Dr Jenny Schawrz

Geriatrician, Head of
Department

Dr Mark Johansson

Geriatrician

Dr Barbara Sanagnagn

Geriatrician

OUR RESEARCH OUTPUT

Publications: 1

Book chapter: 1

Presentations: 1

OUR AWARDS AND GRANTS

NMHC Project grant /ANZ Trustees Mason Foundation

Stephanie Ward CIB (Monash University Grant)

SNORE-ASA. NMHC: \$850,000 (2014–17)

ASPREE Longitudinal Study Older Person. ANZ Trustees:
\$100,000 (2013)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Elizabeth Dapiran

Conference Convener. ANZSGM ASM Organising Committee

Stephanie Ward

Committee Member. ANZSGM ASM Organising Committee

Jenny Schwarz

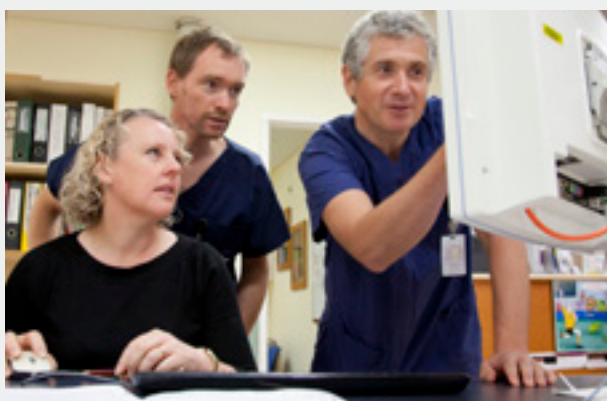
Committee Member. ANZSGM (Victorian branch) and Western
Health Low Risk Panel

THE DEPARTMENT OF
GERIATRIC MEDICINE
PRIORITISES RESEARCH
THAT FOCUSES ON OUR
ELDERLY COMMUNITY'S
UNIQUE NEEDS.

INTENSIVE CARE UNIT

RESEARCH ACTIVITY IN INTENSIVE CARE EXPANDED CONSIDERABLY DURING 2013. WE COMMENCED THREE NEW COLLABORATIVE CLINICAL TRIALS, TWO OF WHICH ARE ANTICIPATED TO CONTINUE FOR THE NEXT 2-3 YEARS.

Mortality outcomes for patients with septic shock remain high and, despite many clinical trials, results are divergent and debate continues about the use of steroids as therapy for this patient group. The ADRENAL trial is aiming to address the important question about use of low dose hydrocortisone in sepsis patients. Western Health has emerged as a leading recruitment site for this collaborative international trial.



While the use of antipyretic drugs to reduce fever amongst patients with infection has been a long-standing practice, there is a growing body of research that questions this approach. Intensive Care has commenced recruiting for the HEAT trial, which aims to provide important data on paracetamol use for critically ill patients. This study has generated much interest amongst our clinical staff as it is highly relevant to clinical practice.

The Intensive Care Unit is proud to be collaborating with the Dorevitch/Western Health Blood Bank service on the TRANSFUSE study. TRANSFUSE is investigating the impact of age of red blood cells on outcomes amongst critically ill patients. Our medical team is leading the way with patient selection and recruitment, and communication with the Blood Bank service is vital to the study success.

We continue to foster collaborations with pharmaceutical sponsors, university affiliates and the Australian and New Zealand Intensive Care Society (ANZICS) clinical trials group (CTG). The CTG is recognised as a world leader in intensive care trial work and its structure and format are being emulated around the globe. We are very proud to be supporting many CTG-initiated trials and Associate Professor Craig French has been appointed Vice-Chair of the CTG.

In addition to our commitment to all our research activities, Intensive Care is providing growing support and guidance to new investigators and allied health units working across the discipline. Our research staff have never been busier, as we continue to expand our research practice.

OUR RESEARCH

A Randomised Blinded Placebo Controlled Trial of Hydrocortisone in Critically Ill Patients with Septic Shock (the ADRENAL study)

Craig French, John Mulder, Sathyajith Velandy Koottayi, Forbes McGain, Zia Ansari

Collaborators: The George Institute for Global Health, ANZICS CTG

Septic shock remains a leading cause of mortality in the critically ill. The use of steroids in the treatment of sepsis has been much debated for over 40 years. Previous research has suggested that the use of low dose steroids may have short-term benefits in improving circulation. However, there is no agreement amongst doctors around the world about whether treatment with or without low dose steroids improves overall mortality.

The purpose of this study is to find out whether adult patients admitted to the Intensive Care Unit with septic shock who are given hydrocortisone compared to placebo will have an improved rate of survival at 90 days. This study aims to enrol 3,800 patients from more than 50 international sites. Western Health has recruited 27 patients to date and emerged as a leading recruitment site.

STandaRd Issue TrANSfusion versuS Fresher red blood cell Use in intenSive carE (TRANSFUSE) – a randomised controlled trial

Craig French, John Mulder, Sathyajith Velandy Koottayi, Forbes McGain, Zia Ansari

Collaborators: The ANZIC research centre, ANZICS CTG, Australian Red Cross Blood Service

Once blood is donated it can be stored for up to 42 days. We know that when blood is stored, changes occur and these are known as 'storage lesion'; however we do not know if these changes are harmful to patients. It is standard practice to use the oldest blood stored in the blood bank to minimise the amount that is wasted by reaching its 'use-by' date. This study will determine the effect of transfusing the freshest blood in the inventory compared to transfusing the oldest blood (the current standard of care). We will determine if these two inventory management approaches affect mortality in critically ill patients.

Blood transfusion is a very common and potentially life-saving treatment. Hundreds of thousands of Australians and an estimated 16 million people worldwide receive a blood transfusion each year and about one-sixth of these occur in the ICU. In Australia, almost 800,000 units of blood are required each year.

This study will provide critical information for blood banks and the results are expected to impact transfusion policy worldwide and may, ultimately, save many thousands of lives.

The Permissive Hyperthermia Through Avoidance of Paracetamol in Known or Suspected infection Trial – the HEAT trial

Craig French, John Mulder, Sathyajith Velandy Koottayi

Collaborators: The George Institute for Global Health, ANZICS CTG, Medical Research Institute of New Zealand

Severe infections are an important cause of mortality. There is substantive evidence that fever caused by severe infections is an adaptive response that occurs widely within the animal kingdom. Suppression of the febrile response to infection with paracetamol has been shown to increase the risk of mortality in animals with severe infection. Observational data suggest that in patients with bacterial infection fever reduces mortality. However, in patients with infections in the ICU, control of fever may have beneficial effects that relate to factors such as decreased demands on the heart and the lungs. Overall, it is unclear whether paracetamol use in patients with infections and fever in the ICU is beneficial or harmful.

In this trial, ICU patients with infection will be randomly assigned to receive paracetamol or placebo to treat elevated temperature in order to determine whether paracetamol is beneficial or harmful and whether further studies are needed.

OUR RESEARCHERS

A/Prof Craig French
Director of Intensive Care

Dr Forbes McGain
Intensive Care Physician/
Consultant Anaesthetist

Dr John Mulder
Deputy Director of Intensive
Care

**Dr Sathyajith Velandy
Koottayi**
Intensive Care Physician

Dr Zia Ansari
Intensive Care Physician

Samantha Bates
Research Coordinator

Anna Tippet
Research Coordinator

Miriam Towns
Research Coordinator

RESEARCH OUTPUT

Publication: 2

Presentations: 5

OUR AWARDS AND GRANTS

Forbes McGain

SACS Leadership award

Leadership awards – Non-executive category, SACS Leadership award: \$7500 (2013)

ANZCA

Environmental Effects of Producing Morphine, ANZCA: \$18,000 (2013)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Forbes McGain

Member, Review Panel, Melbourne Health Human Research Ethics Committee

Member, Antibiotic Stewardship Panel, Western Health

Member, Western Health Sustainability Committee

Craig French

Treasurer, ANZICS Clinical Trials Group

Vice-Chair, ANZICS Clinical Trials Group

Member of management committees, EPO-TBI Trial (Chief Investigator), TRANSFUSE Study.

Member, Centre of Research Excellence for patient blood management in critical illness and trauma

Member, NHMRC/National Blood Authority Expert Advisory Group and Clinical Consumer Reference Group

JOSEPH EPSTEIN CENTRE FOR EMERGENCY MEDICINE RESEARCH

THE FOCUS OF THE CENTRE IS CLINICAL RESEARCH IN EMERGENCY MEDICINE AND PRE-HOSPITAL CARE THAT INFORMS OR CHANGES MANAGEMENT OF EMERGENCY PATIENTS.

In 2013, our projects focused on:

- understanding and risk stratification of patients with chest pain, in particular whether rapid rule out processes could safely be applied to selected patients
- the accuracy of proposed clinical decision rules for investigation of subarachnoid haemorrhage
- accuracy and utility of mathematically arterialised blood gas parameters (in partnership with Aalborg University, Denmark)
- standardised nursing handover in emergency departments (in partnership with Victoria University).

We also commenced projects looking at the impact of quality improvement activities on outcomes of chronic obstructive airways disease and prediction of the need for surgery in renal colic.

OUR RESEARCH

Accelerated Diagnostic Processes for Selected Low Risk ED Patients with Chest Pain

Anne-Maree Kelly, Sharon Klim, Kean Soon

Many people present to the Emergency Department (ED) with chest pain. They are assessed with ECGs and blood tests, which usually takes several hours and can cause anxiety, discomfort and inconvenience for the patient or their family. Some recent research suggests that for some patients a shorter process may be safe. This has not been confirmed and this study is trying to do this.

The purpose of this project is to investigate whether patients who present to the ED with chest pain have any adverse events in the week and month after being treated in the ED and to test different ways of identifying which patients are at low risk.

Oxygen Therapy and Mortality in Patients Presenting to the Emergency Department with Chronic Obstructive Airways Disease

Anne-Maree Kelly, Sharon Klim, Keshav Khullar, Kash Katechia, Joanna Chow

There is growing evidence that use of controlled oxygen therapy in the emergency care of patients with exacerbation of chronic obstructive airways disease (COAD) reduces mortality compared to high flow oxygen therapy. This study aims to explore the impact of controlled oxygen therapy after initial assessment in the ED on inpatient mortality and length of stay.

Early intervention of high flow oxygen therapy for patients with an exacerbation of COAD would not only reduce inpatient mortality, it would enable timely management decisions to be made, which would improve the quality of clinical outcomes and reduce length of inpatient stay.

Predictors of Analgesia Requirement, Length of Stay and Requirement for Surgical Intervention in Emergency Department Patients with Renal Colic

Anne-Maree Kelly, Sharon Klim, Gary Middleton, Tanya Dean

Renal colic is common in Emergency Departments. Most patients are treated in the ED and discharged home for outpatient follow-up. A proportion of patients, however, fail to improve in ED and require an extended hospital stay and/or surgical intervention for stone removal.

This study aims to explore the predictors of analgesia requirement (total dose of morphine in ED stay), length of stay, and requirements for surgical intervention in this patient group. If the need for surgical intervention and an extended hospital stay could be predicted early in the ED stay, it would enable timely management decisions, which would improve the quality of care and reduce inconvenience and delays for patients. It would also assist planning and management within the ED and bed flow within the hospital setting.

OUR RESEARCHERS

Prof Anne-Maree Kelly

Director, Principal Investigator

Kerrie Russell

Administrator

Sharon Klim

Research Manager, Associate Investigator

RESEARCH OUTPUT

Publications: 20

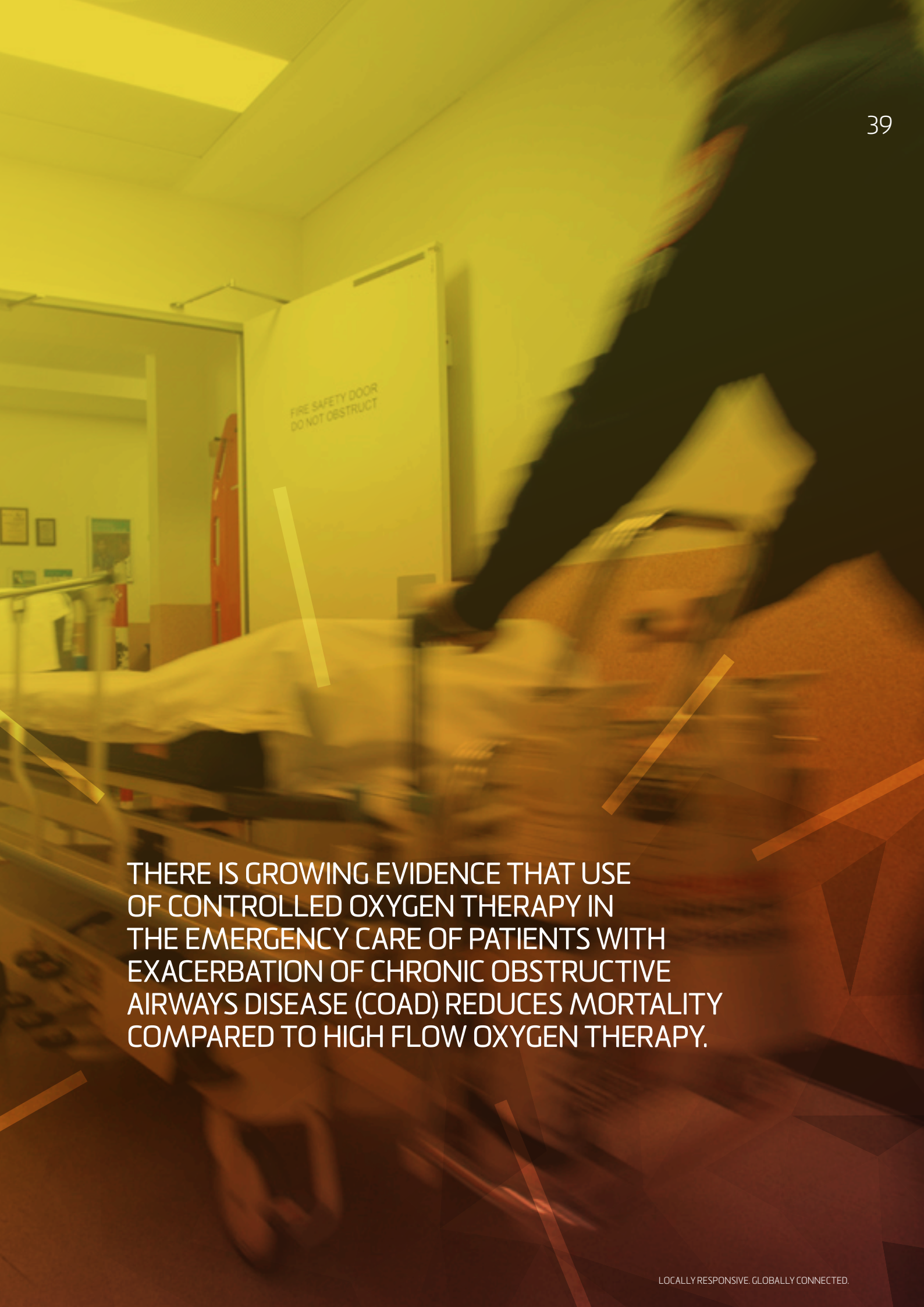
Presentations: 4

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Anne-Maree Kelly

Editorial Board, Annals of Emergency Medicine, Emergency Medicine Australasia, Hong Kong Journal for Emergency Medicine

Reviewer for more than 20 specialist and general medical journals



THERE IS GROWING EVIDENCE THAT USE OF CONTROLLED OXYGEN THERAPY IN THE EMERGENCY CARE OF PATIENTS WITH EXACERBATION OF CHRONIC OBSTRUCTIVE AIRWAYS DISEASE (COAD) REDUCES MORTALITY COMPARED TO HIGH FLOW OXYGEN THERAPY.

NEPHROLOGY

In 2013, the Department of Nephrology continued to participate in national trials coordinated by the Australasian Kidney Trials Network. The Primary Care project, eMAP CKD:VIC, a collaborative project between Western Health, Kidney Health Australia, Networking Health Victoria and Macedon Ranges NorthWestern Melbourne Medicare Local funded by the Department of Health in Victoria, Renal Health and Aboriginal Health Clinical Networks, continued in 2013 with 22 primary care practices recruited and more than 300,000 patients. Progress presentation received a 2013 Innovation Award from the Health Round Table Innovations conference in Brisbane. The HUG program, a world first pilot of telehealth in home dialysis funded through the Department of Health Victoria, commenced and is due for completion in June 2014.

OUR RESEARCH

EMAP-CKD VIC: Electronic Mapping and Assistance to Primary Care in CKD Detection and Management in Victoria – A Pilot Project



Craig Nelson

Collaborators: Department of Health Victoria/Western Health, Kidney Health Australia, Networking Health Victoria and Macedon Ranges NorthWestern Melbourne Medicare Local

Western Health has a large burden of chronic kidney disease (CKD) in its catchment. This project aims to develop processes to reduce the burden and late presentation of kidney disease to our health service and to establish a Western Health catchment CKD data repository. The aim is to detect unrecognised CKD in the community and improve primary care through management strategies provided via outreach from the health service to primary care using electronic processes.

HUG Project – Home dialysis Utilizing telehealth Guidance

Craig Nelson

Collaborators: Department of Health Victoria

This project aims to use telehealth solutions to enable patients to safely perform home dialysis. Through telehealth we can provide real-time answers to questions in multiple languages and offer real-time video links for technical troubleshooting 24 hours per day.

Improve Trial: The IMPROVE-CKD trial: A Randomised, Double-Blind, Placebo-Controlled Trial To Assess the Effect of Phosphate Reduction with Lanthanum Carbonate on Arterial Compliance and Vascular Calcification in Patients with Chronic Kidney Disease Stages 3-4

Craig Nelson

Collaborators: Australasian Kidney Trials Network

Cardiovascular disease is the number one cause of death in patients with kidney disease and this may be contributed to by vascular calcification. This project aims to test if phosphate binders not containing calcium have an impact on vascular calcification before the commencement of dialysis therapy.

OUR CLINICAL RESEARCHERS

A/Prof Craig Nelson
Director

A/Prof Vicki Levidiotis
Staff Specialist

Dr Sandra Crikis
Staff Specialist

Dr John Katsoulous
Staff Specialist

Dr Kushma Nand
Staff Specialist

Dr Rosemary Masterson
Staff Specialist

A/Prof Solomon Cohney
Staff Specialist

Dr Anastasia Chrysostomou
Staff Specialist

Dr Louis Huang
Staff Specialist

Dr Peggy Teh
Advanced Trainee

Dr Leny Hidayati
Advanced Trainee

Debbie Broomfield
Renal Research Coordinator

Marie McIntosh
eMAP CKD:VIC Project Manager

Catherine Blackamore
HUG Project Manager

OUR RESEARCH OUTPUT

Publications: 10

Presentations: 4

OUR AWARDS AND GRANTS

Enhancing Home Dialysis Project Grant

Craig Nelson

HUG Project - Home Dialysis Utilizing Telehealth Guidance.
Department of Health Victoria, RHCN: \$250,000 (2012–2014)

Roche Research Grant

Craig Nelson

EMAN-Anaemia Pilot Project: An Open Labelled Randomised Control Trial of the Synchronized Electronic MANagement of Anaemia in Chronic Kidney Disease (CKD) compared to Usual Care Anaemia Management. Roche Pharmaceuticals: \$385,000 (2010–2014)

Project Grant

Craig Nelson

EMAP-CKD VIC: Electronic Management and Assistance to Primary Care in CKD Detection and Management in Victoria – A Pilot Project. Department of Health Victoria, RHCN and Aboriginal Health: \$560,000 (2011–2014)

Amgen Research Grant

Craig Nelson

EMAP-CKD VIC extension, Managing complications of Stage 3+ CKD in Primary Care

Amgen Pharmaceuticals: \$60,000 (2013–2015)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Craig Nelson

Strategic Action Group Member, Department of Health Renal Health Clinical Network

CKD Pathway Working Group Member, Department of Health Renal Health Clinical Network

Committee Member, KCAT: Kidney Health Australia

Executive, Webmaster, Asian Pacific Society of Nephrology

Reviewer, Nephrology, BMC Nephrology, ANZSN Scientific Meeting Abstracts

Vicki Levidiotis

Chair of Local Organising Committee, ANZSN 2014 Meeting

Solomon Cohney

Chair, VTTAC

Chair, IVIG User Group

Chair, National TTP Steering Committee

ISN Ambassador, Thailand

Member, International Consensus Group on Management of Diabetes after Transplantation

Associate Editor, American Journal of Transplantation

Reviewer, Transplant International, American Journal of Transplantation, Transplantation, Kidney International

Anastasia Chrysostomou

CKD Pathway Working Group Member, Department of Health Renal Health Clinical Network

Reviewer, AJKD

NEUROLOGY

During 2013, Western Health Neuroscience Research Unit was active in clinical research in stroke, multiple sclerosis and epilepsy. Patients were recruited for many international, randomised, double blind trials, including five acute stroke clinical trials and several clinical trials in multiple sclerosis.

Significant collaborations are in place with neuroscience units in the Asia Pacific region, Sri Lanka and India in particular. Distinguished scientists from Germany, Thailand, Scotland, Sri Lanka and the United States of America visited the unit in 2013 and several collaborative projects will be undertaken as a result of these visits.

Dr Jacinta Abbott completed her PhD in neuropsychology through strong collaboration with the stroke team at Western Health. A clinical neurology fellowship was established to facilitate these research activities. Dr Nadie Rathnayake, an overseas neurologist in training, filled this position in 2013.

In 2014, we plan to embark on several research projects in the western region, including western stroke awareness study; neurophobia among students and junior doctors; the feasibility of shared management in the primary care setting of TIA and minor strokes; western young stroke survey; study of central neuropathic pain; study of peripheral neuropathic pain; seizures in the elderly; neurologic deterioration after stroke; and sleep disorders and stroke.

We will continue to foster local collaborations with leading academic institutions, including the University of Melbourne, Victoria University, Monash University and La Trobe University, to facilitate clinical research in neurosciences in the western region.

OUR RESEARCH

Clinical Epidemiology and Neurophysiological Characteristics of Central Post-Stroke Pain

Tissa Wijeratne, Ashwini Chandra

Collaborators: Robert D Helme, The University of Melbourne

Western Health admits 700–900 strokes per year and central post-stroke pain (CPSP) is a debilitating adverse outcome for 6–8% of stroke patients. There is a limited number of studies available on this subject.

We have established the prevalence of CPSP in the Western Health stroke population and are currently studying the potential neurophysiological methods that may predict CPSP among stroke patients. Early detection may help us commence pain-modulating therapy earlier on and may prevent some patients developing CPSP in the future.

Insulin Resistance Intervention after Stroke (IRIS)

Tissa Wijeratne, Zelko Matkovic, Grant Scott, Victor Chong, Sandra Petty

Collaborators: Yale University USA Harvard Medical School Stroke Centre, USA NST, Australia

STroke imAging pRevention and Treatment-Extending the time for Thrombolysis in Emergency Neurological Deficits (START- EXTEND)

Tissa Wijeratne, Zelko Matkovic, Grant Scott, Victor Chong, Sandra Petty

Collaborators: NST, Australia, Florey Institute, Melbourne, National Stroke Research Institute Australia

Other leading stroke centres in Australia and New Zealand

A Very Early Rehabilitation Trial for Stroke (AVERT)

Tissa Wijeratne, Elizabeth Mackey

Collaborators: Florey Institute, Melbourne, National Stroke Research Institute Australia and other leading stroke centres in Australia and New Zealand

OUR RESEARCHERS

Associate Professor Zelko Matkovic
Head of Unit

A/Prof Tissa Wijeratne
Director, Neuroscience Research Unit

Natalie Teasdale
Research Coordinator

Sherisse Celestino
Research Coordinator

Sena Gocuk
Research Coordinator

Ms Hasanathi
Research Assistant

Surangi Somaratne
Research Fellow

Dr Nadie Rathnayake
Research Fellow

OUR RESEARCH STUDENTS

Kenji Hinde

MD Student.
University of Melbourne

Thanh Huynh

MD Student.
University of Melbourne

Kasun Wickramarachchi

MD Student.
University of Melbourne

Jessica Lesmana

MD Student.
University of Melbourne

OUR RESEARCH OUTPUT

Publications: 15

Presentations: 9

OUR AWARDS AND GRANTS

Tissa Wijeratne

BI Neuroimmunology fellowship grant: \$15,000 (2013)

Norvatis Neuroimmunology fellowship grant: Norvatis: \$30,000 (2013)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Hans Tu

MBS Review of Electrocardiogram for Arrhythmias, Department of Health

Tissa Wijeratne

Chairman, International Working Group of Young Neurologists and Trainees Section, World Federation of Neurology Fellow status, American Academy of Neurology Regional Ambassador for the Asia Oceania Region for 65th AAN meeting, San Diego, 2013 Regional Editorial Board Member, Asia Oceania Region, Neurology in Clinical Practice Journal, American Academy of Neurology

First Visiting Professor of Neurology, Faculty of Medicine, University of Rajarata, Sri Lanka



NORTHWEST ACADEMIC CENTRE

The NorthWest Academic Centre is part of the University of Melbourne's Faculty of Medicine, Dentistry and Health Sciences. The centre is the operational hub, incorporating staff from the Melbourne Medical School and other schools and departments at Western Hospital and the Western Centre for Health Research and Education Facility (WCHRE) at Sunshine Hospital.

Research at the NorthWest Academic Centre is aligned with the departments of Medicine, Endocrinology and Surgery at Western Health along with collaborative partnerships with universities across Australia and at key centres around the world. The Centre is also a foundation member of The Australian Institute for Musculoskeletal Science (AIMSS).

OUR RESEARCH INCORPORATES A BROAD RANGE OF INTERESTS INTO MUSCULOSKELETAL SCIENCE, INCLUDING OSTEOPOROSIS, OSTEOARTHRITIS, FALLS AND FRACTURES, VITAMIN D, ACL INJURY, MECHANOBIOLOGY, BONE BIOMECHANICS AND OSTEOPOROSIS HEALTH ECONOMICS.

We use a multidisciplinary approach, linking clinical research, basic science and bioengineering. Additional and emerging research themes are diabetes mellitus, colon cancer and the genetics of cancer metastasis, health economics, the epidemiology of disease and social disparities in healthcare, maternal foetal medicine, and paediatric endocrinology. To strengthen our research areas, key appointments for 2014 will be a Professor of Medicine and a Professor of Surgery.

We will continue to expand our research initiatives with key researchers at Western Health and Victoria University through AIMSS and continue to perform collaborative research with the research team that involves the NHMRC Centre for Research Excellence in Sun and Health, with members being associated with Queensland University of Technology (QUT) and Queensland Institute of Medical Research (QIMR), Australian National University in Canberra and the University of Melbourne at Western Health. We are also consolidating links with Victoria University to expand our research into colon cancer.

OUR RESEARCH

Evaluation of Kinetic and Kinematics Parameters of Patients with Cystic Fibrosis (CF) Using Low Cost Microsoft Kinect Sensors

G Coates

Collaborator: The University of Melbourne

Risk Factors for Aged Care Assessment: Development of Predictive Tool

H Gould

Collaborator: The University of Melbourne

Human Osteoblast Biology on Novel Implantable Scaffolds

T Fernandes

Collaborator: The University of Melbourne

Exploring Determinants of 25-Hydroxyvitamin D and Altered Vitamin D Metabolism in HIV-Infected Adults

K Klassen

Collaborator: The University of Melbourne

Sunlight Exposure and Risk of Type 2 Diabetes

C Shore-Lorenti

Collaborator: The University of Melbourne

Does Teriparatide Reverse Osteonecrosis of the Jaw in Patients with Cancer? A Randomised Controlled Trial

I-W Sim

Collaborator: The University of Melbourne

Effects of Low or High Dietary Calcium Intake on Bone Density and Fractures in a Population-Based Longitudinal Cohort

B Khan

Collaborator: The University of Melbourne

The Cost and Quality of Life Associated with Fractures at Sites other than Hip, Spine and Wrist

Y Zhang

Collaborator: The University of Melbourne

Association between Nutrition and Body Composition a cross Socioeconomic Strata in Older Australians

X Shang

Collaborator: The University of Melbourne

Born Small and Exercise: Can Exercise in Those Who Were Born Small Normalise Bone and Glucose Homeostasis?

P Ebeling

Collaborator: Institute for Sport, Exercise and Active Living (ISEAL), Victoria University; The University of Melbourne

Osteocalcin and Glycaemic Control

P Ebeling

Collaborator: Institute for Sport, Exercise and Active Living (ISEAL), Victoria University; The University of Melbourne; Austin Health

Vitamin D, Physiological and Biomechanical Assessments, and Risk of Falls in Osteoarthritis

K Sanders, P Ebeling

Collaborator: Institute for Sport, Exercise and Active Living (ISEAL), Victoria University; The University of Melbourne

The Associations between Characteristics of Sarcopenia, Vitamin D and Falls in Community-Dwelling Older Adults

D Scott, K Sanders, P Ebeling, E Skinner

Collaborator: The University of Melbourne

Aetiology and Prognosis of Femoroacetabular Impingement in Skeletally Mature and Immature Individuals

C Fary, P Tran, J O'Donnell

Collaborator: The University of Melbourne, St Vincent's Institute

The Effect of Moderate-Intensity Cardiovascular Fitness Training Compared to Standard Care in People with a Diagnosis of Stroke: A Pilot Randomised Controlled Trial

H Reynolds, S Kenny, J Tillyard, E Skinner

Collaborator: Institute for Sport, Exercise and Active Living (ISEAL), Victoria University; The University of Melbourne

Objective Assessment of Physical Activity in Older Adult Populations and Associations with Health and Physical Performance

D Scott

Collaborator: Institute for Sport, Exercise and Active Living (ISEAL), Victoria University; The University of Melbourne

The Validity and Reliability of a 3-Dimensional Body Scanner for Evaluating Body Composition

P Ebeling, D Scott

Collaborator: Institute for Sport, Exercise and Active Living (ISEAL), Victoria University; The University of Melbourne

Role of the Eph/Ephrin Cell Signalling System in the Progression and Metastasis of Colon Cancer

P Senior, S Chan

Collaborator: Victoria University

Effect of Bone Specific Surface on Bone Remodelling in Osteoporosis

P Pivonka, C Lerebours, P Ebeling

Collaborator: The University of Melbourne

Assessment of Local Drug Transport in Bone Using Titania Nanotubes in an Ex-Vivo Bone Bioreactor System

P Pivonka, H Mokhtarzadeh

Collaborator: The University of Melbourne

Development of a Novel Clinical Assessment Tool for the Diagnosis of Sarcopenia Using Gait Analysis Data Together with Musculoskeletal Modelling

H Mokhtarzadeh, P Pivonka

Collaborator: The University of Melbourne

Musculoskeletal Modelling of ACL Injury and Development of Osteoarthritis

P Pivonka, H Mokhtarzadeh

Collaborator: The University of Melbourne

Mechanobiology of Musculoskeletal Tissue

P Pivonka, J Gooi

Collaborator: The University of Melbourne

OUR RESEARCHERS

Prof Peter Ebeling

Chair NorthWest Academic Centre

A/Prof Kerrie Sanders

Principal Scientist

A/Prof Peter Pivonka

Associate Professor of Medicine

A/Prof Joanne Said

Maternal Fetal Medicine

Dr Sharon Brennan

Research Fellow

Dr David Scott

Postdoctoral Fellow

Dr Hossein Mokhtarzadeh

Postdoctoral Fellow

Dr Jonathan Gooi

Research Fellow

Dr Amy Chui

Postdoctoral Fellow

A/Prof Christine Rodda

Paediatrics

Prof Steven Chan

Professor of Surgery

Dr Paul Senior

Senior Research Fellow

NORTHWEST ACADEMIC CENTRE (cont.)

OUR RESEARCH STUDENTS

Haslinda Gould
PhD

Tania Julie Fernandes
PhD

Belal Ahmed Khan
PhD

Yu Zhang
PhD

Catherine Shore-Lorenti
PhD

Dr Ie-Wen Sim
PhD

Dr Cherng Huei (Joe) Kong
Masters of Surgery

Dr Rashid Al Rahbi
Masters of Surgery

Gino Coates
PhD

Karen Klassen
PhD

Xianwen Shang
PhD

Kai Hsiang Lee
PhD

Anna Hamilton
Honours

Malyna Phongthai
Honours

Philip Azzopardi
UROP

OUR RESEARCH OUTPUT

Publications: 118

Presentations: 22

OUR AWARDS AND GRANTS

AIMSS Seed Funding

H Mokhtarzadeh

Development of a Novel Clinical Assessment Tool for the Diagnosis of Sarcopenia Using Gait Analysis Data Together with Musculoskeletal Modelling. AIMSS: \$10,000 (2013)

NHMRC Training Fellowship (1012472)

S Brennan, G Nicholson

Investigating the Psychosocial and Socioeconomic Predictors of Osteoporosis. NHMRC: \$290,032

K Sanders

The Australian Study of Cost and Utilities Related to Osteoporotic Fractures. Merck, Sharp & Dohme (Australia) Ltd: \$150,000

NHMRC Project Grant (1030371)

P Ebeling, G Borromeo, J Seymour

Does Teriparatide Reverse Osteonecrosis of the Jaw in Patients with Cancer? A RCT (2012-2014). NHMRC: \$385,000

NHMRC Project Grant (1022660)

A Carr, J Hoy, P Ebeling, N Pocock

Strategic: Bisphosphonate Therapy with Zoledronate or Tenofovir Switching to Improve Low Bone Mineral Density in HIV-Infected Adults: a Randomised Trial. NHMRC: \$687,807 (2012-2014)

Early Career Research Grant

S Brennan

Early Career Researcher Grant: Sex Bias in Referral for Bone Densitometry: 1991-98 to 2003-10. The University of Melbourne: \$38,173

2013 Arthritis Australia Grant-in-aid Project Grant

The Association between Socioeconomic Status and Total Joint Replacement across Australia. Funded by Zimmer Australia: \$10,000 (2012)

NHMRC Centre for Research Excellence in Sun and Health

M Kimlin, D Whiteman, R Lucas, C Sinclair, R Neale, P Ebeling, P Youl, L Gordon, M Janda

NHMRC: \$2,379,750 (2010-2015)

NHMRC Project Grant (1046681)

R Neale, B Armstrong, P Ebeling, D English, M Kimlin, A Venn, J van der Pols, R O'Connell

D-Health: A Randomised Trial of Vitamin D for Prevention of Cancer and Mortality. NHMRC: \$2,930,705

AIMSS Seed Funding

C Fary, P Tran, J O'Donnell, N Sims, A Takla

Aetiology and Prognosis of Femoroacetabular Impingement in Skeletally Mature and Immature Individuals. AIMSS: \$6,650 (2012-2013)

Collaborative Research Network Start-up Funds

A Hayes, P Levinger, R Begg, A Petersen, K Sanders, F Cicuttini

Optimal Exercise and Nutritional Strategies to Improve Bone/Muscle Strength and Gait Function for Falls Prevention. Victoria University: \$18,000 (2012-2013)

Collaborative Research Network Start-up Funds

G McConell, G Kaur, P Ebeling, M Wlodek, A McAinch, P Sinnayah

Born Small and Exercise (Can Exercise in those Who Were Born Small Normalise Bone and Glucose Homeostasis?). Victoria University: \$15,000 (2012-2013)

AIMSS Seed Funding

D Scott, E Skinner, P Levinger, T Haines, P Ebeling, K Sanders

The Associations between Characteristics of Sarcopenia, Vitamin D and Falls in Community-Dwelling Older Adults. AIMSS: \$20,000 (2012–2013)

The Faculty of Health, Engineering and Science Collaborative Research Grants Scheme

K Nurgali, P Senior

The Role of EphB4 Receptor in the Development and Spread of Colorectal Cancer. Victoria University: \$15,000 (2013)

NHMRC Project Grant (1004952)

J Said, P Murthi, Prof S. P. V Ignjatovic, PM Monagle

Understanding How Proteoglycans in the Placenta Cause Restriction of Fetal Growth

(Project Grants) awarded by NHMRC 2011–2013. NHMRC: \$361,032 (2011–2013)

NHMRC Project Grant (1042239)

J Said, P Murthi, Prof S. P. V Ignjatovic, PM Monagle, JM Whitelock, J Kingdom

Understanding the Role of Endogenous and Pharmacologic Glycosaminoglycans in Preventing Pre-Eclampsia NHMRC: \$500,146 (2013–2015)

Faculty Research Development Grant – University of Auckland

J Said

The EPPLi Trial: Enoxaparin for the Prevention of Pre-Eclampsia and Intrauterine Growth Restriction - A Pilot Randomised Controlled Trial. University of Auckland: \$109,372 (2011–2014)

The Ian Potter Foundation Travel Grant

A Chui

The Ian Potter Foundation Travel Grant (Travel and Conference Grants) awarded by The Ian Potter Foundation: \$1965 (2013)

Saskatchewan Canadian Institute of Health Research Regional Partnership Program

P Pivonka, J Clement, D Thomas, D Cooper

Age- and Sex-Related Changes in Cortical Bone Cellular Organization across the Human Lifespan. SK-CIHR: Regional Partnership Program: \$100,000 (2013–2014)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

P Ebeling

Medical Director, Osteoporosis Australia

Director, Australian Institute for Musculoskeletal Science

Theme Leader – Bone, Australian Institute for Musculoskeletal Science

Councillor, American Society for Bone and Mineral Research

Board Member, International Osteoporosis Foundation, Geneva

K Sanders

Member, Osteoporosis Australia Member of the Medical and Scientific Advisory Board

Member, American Society of Bone and Mineral Research

Member, Australian and New Zealand Bone and Mineral Society

P Pivonka

Theme Leader - Joint, Australian Institute for Musculoskeletal Science

Member, Australian and New Zealand Bone and Mineral Society (ANZBMS)

Member, Australian and New Zealand Orthopaedic Research Society (ANZORS)

Overseas member, European Cooperation in Science and Technology (COST): Materials, Physics and Nanosciences: from Nano to Macro Biomaterials (NAMABIO)

Member, Australian and New Zealand Industrial and Applied Mathematics Society (ANZIAMS), Mathematical Biology

J Gooi

Member, Australian and New Zealand Bone and Mineral Society

Council Member, Society of Obstetric Medicine Australia and New Zealand (SOMANZ)

Council Member, Secretary, Perinatal Society of Australia and New Zealand (PSANZ), Victorian Branch

NURSING AND MIDWIFERY

DURING 2013, A NUMBER OF RESEARCH PROJECTS HAVE TRANSLATED INTO CHANGES OR IMPROVEMENT IN CLINICAL PRACTICE.

Projects in 2013 included the review of nursing practice in the treatment of incontinence; improved support for carers of people with dementia; development of a new online education program for high-risk/disadvantaged women to promote self-management of gestational diabetes mellitus; incorporating simulation learning into the Graduate Study Day program to ensure sustainability of the STRIPE program; and changes to the Rapid Response Team process.

The Nursing and Midwifery Division commenced the process of recruiting a Professor of Nursing role by seeking a university partner. The aim of the role is to support translational research in nursing and midwifery. The process of recruitment is underway.

OUR RESEARCH

STRIPE Phase I and Phase II

Janet Beer, Claire Holdsworth

Point Prevalence Study of Incontinence for Elderly Patients during Hospitalisation

Kathryn Kirby, Shiki Joseph, Robynne Dakis, Y Sheikhy, Debra Kerr, Kate Mangion

Collaborators: Western Health, Victoria University

What Indicators Do Nurses Place Most Value upon that Measure Point of Care Practice? A Survey of Western Health Nurses

Lisa Heslop, S Lu, J Xu, Wendy Watson

Collaborators: Victoria University, Western Health

Addressing the Needs of Carers through the Provision of an Onsite Support Group

Anna Panayiotou, Debra Kerr, Kathryn Kirby

Collaborators: Western Health, Victoria University

Barriers and Facilitators to Achieving Wellness after Breast Cancer Treatment

S Cipolla, Debra Kerr, Leanne Storer, Meron Pitcher, Terence McCann

Collaborators: Western Health, Victoria University

Women's Experiences of Directed and Non-Directed Pushing in the Second Stage of Labour: A Systematic Review

Laura Biggs, Jane Morrow

Collaborators: Western Health, Australian Catholic University

Developing an Innovative Educational Program for High-Risk Women with Gestational Diabetes Mellitus

Mary Carolan-Olah, Cheryl Steele

Collaborators: Victoria University, Western Health

Does Rounding Have an Effect on Referral Rate and Unplanned Admissions to the Intensive Care Unit?

Gary Blackburn, Anna Green

OUR RESEARCHERS

Associate Professor Denise Patterson

Executive Director of Nursing

Dr Cate Nagle

Senior Research Fellow,
Midwifery

Dr Debra Kerr

Senior Lecturer, Honours
Coordinator, Victoria University

Louise McKinlay

Director Education and
Learning, Western Health

Doug Mill

Director of Nursing,
Williamstown Hospital

Ghada Elias

Registered Nurse, Ward 2C

Justine Mizen

Nurse Unit Manager, Ward 3A

Elizabeth Mackey

Registered Nurse, Ward 3A

Davina Taylor

Clinical Nurse Consultant

Kathy Kirby

Project Manager, Best Care
for Older People, Division of
Subacute and Aged Care

Kate Mangion

Manager, Best Care for Older
People, Division of Subacute
and Aged Care

Janet Beer

Simulation Coordinator

OUR RESEARCH OUTPUT

Publications: 4

Presentations: 3

OUR AWARDS AND GRANTS

Health Workforce Australia – Simulated Learning Environment

Janet Beer, Claire Holdsworth, David Mai

STRIPE Phase 111. Health Workforce Australia: \$180,000 (2013)

Medicare Local

Cate Nagle, Marita Walsh, Christine Kerr

Medicare Local Small Grant: *Telephone Lactation Consulting*. Macedon Ranges and North Western Melbourne Medicare Local: \$20,000 (2013)

Medicare Local Small Grant: *Increasing breastfeeding rate in Vietnamese women in our community*. Macedon Ranges and North Western Melbourne Medicare Local: \$22,000 (2013)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Anna Green

Chair, International Nurse Practitioner/Advanced Practice Nursing Network, International Congress of Nurses

Member, Recognising and Responding to Clinical Deterioration Advisory Committee, Australian Commission on Safety and Quality in Healthcare

Chair, ICU Liaison Special Interest Group, Australian College of Critical Care Nurses

Janet Beer

Board Member, Victorian Simulation Alliance

Susan McGregor

Member National Haemovigilance Advisory Committee, National Blood Authority

Cate Nagle

Nominated member, NHMRC Postdoctoral Reference Group, NHMRC

Appointed member, Maternity and Newborn Clinical Network, Leadership Group, Department of Health Victoria

Member, Midwifery Academics Victoria (MIDAC)

Peer Reviewer, International Journal of Nursing and Midwifery, Medical Journal of Australia, Prenatal Diagnosis, Obstetrics and Gynecology, Worldviews on Evidence Based Nursing, Health Promotion International, National Health and Medical Research Council Project Grants



ONCOLOGY HAEMATOLOGY UNIT



As a founding member of Cancer Trials Australia and a partner in the Victorian Comprehensive Cancer Centre in Parkville, Western Health has long been recognised as an important provider of cancer care to Victorians.

We hold partnerships across industry and with collaborative research groups such as the Australian Gastrointestinal Trials Group, Australia and New Zealand Breast Cancer Trials Group, International Breast Cancer Study Group, Australia and New Zealand Germ Cell Trials Group, Gynaecologic Cancer Intergroup, Australian and New Zealand Urogenital and Prostate Cancer Trials Group and the Australasian Leukaemia and Lymphoma Study Group.

RESEARCH WITHIN CANCER SERVICES HAS GONE FROM STRENGTH TO STRENGTH IN 2013. ONGOING STRONG PERFORMANCES IN OUR KEY TUMOUR STREAMS OF COLORECTAL, LUNG AND UPPER GASTROINTESTINAL WERE SUPPLEMENTED BY MARKED GROWTH IN BREAST AND HAEMATOLOGY, MOST NOTABLY IN LYMPHOMA AND MULTIPLE MYELOMA.

We have continued to build on our commercial and collaborative group relationships to attract a broader spectrum of research to Western Health. Covering the spectrum from Phase I to Phase IIIb projects, we recruited 280 patients to 33 active trials, with a large component of our colorectal and upper GI patients participating in the groundbreaking CtDNA research being driven by A/Prof Peter Gibbs and Dr Jeanne Tie in conjunction with the Walter and Eliza Hall Institute.

The Victorian Cancer Agency Grant awarded to Cancer Services in 2012 with the objective of improving access and accrual to colorectal and haematology trials certainly achieved its primary goal with improvements to trial accruals of 265% in colorectal and 33% in haematology. As recipients of the Additional Funding Intervention Trial (AFIT) grant awarded by the Cancer Council of Victoria, we demonstrated a 124% increase in patient accruals in 2012. The grants were well utilised to support research activity by allowing the recruitment of highly skilled senior research nurses and an administrative assistant and providing dedicated time for generation of enthusiastic investigators to develop their research skills.

As we look to the future, our key objective is to build the clinical trial program to a level that gives every new cancer patient of Western Health the opportunity to be involved in clinical research. We plan to develop an early phase molecular screening clinic, which will give our patients greater access to early phase clinical trials.

OUR RESEARCH

A Phase III Prospective, Two-Cohort Non-Randomized, Multi-Centre, Multinational Open Label Study to Assess the Safety of Assisted and Self-Administered Subcutaneous Transtuzumab as Adjuvant Therapy in Patients with Operable HER2-Positive Early Breast Cancer [SafeHer Study]

Catherine Oakman

Collaborators: Roche Products Pty Ltd

This research will assess the feasibility and safety of a self-injection technique for Herceptin. With 13 patients receiving the treatment on study, Western Health was the top recruiter in Australia for this international study, which may revolutionise the lives of many breast cancer patients. Enabling patients to self-administer this medication, as opposed to the traditional method of intravenous administration involving day oncology admission, will significantly improve their quality of life and markedly reduce the need for day treatment chairs and the associated costs to the community.

A Multicenter, Single Arm Study of Trastuzumab Emtansine (T-DM1) in HER2 Positive Locally Advanced or Metastatic Breast Cancer Patients Who Have Received Prior Anti-HER2 And Chemotherapy-Based Treatment (Kamilla)

Catherine Oakman

Collaborators: Roche Products Pty Ltd

The aim of this study was to test the safety and tolerability of trastuzumab emtansine (a novel combination of trastuzumab Herceptin and DM1/Emtansine) in patients with metastatic HER2-positive breast cancer. This combination drug has been proven to be an effective and tolerable treatment in early HER2-positive breast cancer and this was the first time it was being tested in patients who have already had multiple lines of treatment for their disease.

Western Hospital successfully recruited and treated seven patients (the maximum allowed) with this highly sought after treatment. We have seen some exceptional responses in the patients treated so far.

ctDNA in Stage 2 Colorectal and Rectal Cancer

Jeanne Tie, Peter Gibbs

Collaborators: NHMRC

The aim of this study is to further develop the use of circulating tumour DNA as a sensitive biomarker test for colorectal cancer. In developing this biomarker test for colorectal and rectal cancers, we have the potential to make a significant impact on the decisions made when treating these cancers. For stage II patients, this test will allow for earlier detection of cancer recurrence. The stage IV cohort looks into ctDNA being an early indicator for treatment failure. The use of ctDNA as a biomarker will allow better informed decision making when planning treatment. For patients with advanced colorectal cancer, testing will allow for treatment to be ceased or swapped if proving non-effective at an earlier stage. In each instance, this test will prove to be an advantage to both the patient and the treating facility in avoiding prolonging of non-effective, costly and potentially toxic treatments.

OUR RESEARCHERS

Prof Michael Green
Director of Cancer Services

Dr Dishan Gunawardana
Deputy Director of Cancer Services

Dr Sumitra Ananda
Associate Site Director, Cancer Trials Australia; Consultant Medical Oncologist

Dr S T Fan
Consultant Oncologist

Dr JC Ding
Consultant Oncologist

A/Prof Peter Gibbs
Consultant Oncologist

A/Prof Lara Lipton
Consultant Oncologist

Dr Shirley Wong
Consultant Oncologist

Dr Jeanne Tie
Consultant Oncologist

Dr Suzanne Kosmider
Consultant Oncologist

Dr Ben Tran
Consultant Oncologist

Dr Catherine Oakman
Consultant Oncologist

Dr David Campbell
Consultant Oncologist

Dr Sally Greenberg
Consultant Oncologist

Dr Frances Barnett
Consultant Oncologist

Dr William Renwick
Consultant Haematologist

Dr Duncan Carradice
Consultant Haematologist

Dr Nicholas Murphy
Consultant Haematologist

Dr Christopher Hart
Oncology Research Fellow

Dr Shu Min Wong
Advanced Trainee Haematology

Helen Brasier
Cancer Research Manager (until September 2013)

Shannon Uren
Cancer Research Manager (from September 2013)

Angela Baugh
Research Nurse

Nathan Hope
Research Nurse

Isobel Marshall
Research Nurse

Jessica Mifsud
Research Nurse

Siobhan Rainford
Research Nurse

Heike Raunow
Research Nurse

Leanne Reddick
Administrative Assistant

Lisa Wilkinson
Study Coordinator

Gina Akers
Research Nurse

ONCOLOGY HAEMATOLOGY UNIT (cont.)

OUR RESEARCH OUTPUT

Publications: 47

Presentations: 19

OUR AWARDS AND GRANTS

NHMRC Project Grant

Peter Gibbs

Circulating Tumour DNA in the Diagnosis of Colorectal Cancer. NHMRC: \$480,000 (2014–2016)

Lustgarten Foundation Project Grant

Peter Gibbs

Circulating Tumour DNA in the Diagnosis and Prognosis of Pancreatic Cancer. Lustgarten Foundation: \$90,000 (2013–2015)

WCMICS Funding Program

Angela Mellerick

Development of an Innovative Nursing Workforce Strategy To Manage Service Expansion and Growth. Western and Central Melbourne Integrated Cancer Services (WCMICS): \$75,000 (2013–2014)

Victorian Cancer Agency Additional Funding Intervention Trial

Michael Green

Research – Trial Capacity Building Project (Colorectal and Haematology). Victorian Cancer Agency (VCA): \$250,000 (2012–2014)

VCA Grant

M Green, P Gibbs, S Kosmider, J Tie, D Desai, D Carradice, W Renwick

Increasing Translational Research Capability, Collaboration and Trials Participation in the Western Region through Expanding Capacity of Existing Programs and Promoting Developing Tumour Streams. VCA: \$250,000 (2012–2014)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Ben Tran

Reviewer, Journal of Clinical Oncology, Journal of the National Cancer Institute

Member, American Society of Clinical Oncology (ASCO), Medical Oncology Group of Australia (MOGA), Australia and New Zealand Urological and Prostate Cancer Group (ANZUPCG)

Shannon Uren

Member, ASCO, COSA, Cancer Nurses Society of Australia (CNSA)

William Renwick

Reviewer, BMC Health Services Research



AS A FOUNDING
MEMBER OF CANCER
TRIALS AUSTRALIA
AND A PARTNER
IN THE VICTORIAN
COMPREHENSIVE CANCER
CENTRE IN PARKVILLE,
WESTERN HEALTH HAS
LONG BEEN RECOGNISED
AS AN IMPORTANT
PROVIDER OF CANCER
CARE TO VICTORIANS.

ORTHOPAEDIC UNIT

Over the past year, the Orthopaedic Unit has placed a major focus on research. We have been extremely busy with 20 successful submissions to ethics, along with multiple ongoing projects. With a team of dedicated senior and junior staff, we aim to improve patient outcomes through research, by providing our community with the best orthopaedic care.

Our future research objectives are to:

- improve on today's treatment to transform those of tomorrow
- gain a better understanding of areas of neglected research
- promote an environment that fosters excellence in patient care, education and clinical research
- seek answers and resolutions that will ultimately impact the diagnosis, treatment and quality of life for orthopaedic patients.

OUR RESEARCH

The Use of Internet-Based Patient Education To Improve Informed Consent for Common Orthopaedic Procedures

Andrew Fraval, Phong Tran

Obtaining informed consent is an essential step in the surgical pathway and has remained largely unchanged since the term 'informed consent' was first coined in 1957. Informed consent is important from the perspective of a modern-day, patient-centred health care system that places emphasis on effective communication between doctor and patient. As such, methods that may improve the quality of informed consent, without significantly impinging on the demands placed on the surgeon, are of great value. This study aims to use a free, up-to-date internet-based source of information to enhance the consent process.

The research question is: 'Does exposing patients to a website containing accurate, free and easily accessible information related to the operation to be performed as part of the consent process improve the informed consent attained?' This will be measured by accessing three end points: comprehension, satisfaction and anxiety.

Hip Arthroscopy vs MRI-Diagnostic Accuracy

Lucas Annabell, Phong Tran, Brett Moreira, Alex Rhodes, Vahid Masters

Collaborators: Orthopaedic Unit, Radiology Department

The aetiology of hip pain is often difficult to diagnose in a young patient population. While hip arthroscopy is the gold standard, knowing the accuracy of MRI can aid clinicians in treating their patients.

This research investigated the question: 'How sensitive and specific is Magnetic Resonance Imaging (MRI) for diagnosing hip pathology: specifically, ligamentum teres tears, labral tears, and chondral damage?' We analysed patients who had an MRI six months or less prior to hip arthroscopy and compared findings, using two independent blinded musculoskeletal radiologists to interpret MRI findings and the results from one experienced hip arthroscopic surgeon.

We now know that MRI has a good positive predictive value but a poor negative predictive value, and is inaccurate up to 10% of the time. Having an experienced musculoskeletal radiologist reading findings may improve accurate diagnosis. We have implemented a new pathway for hip pain: that is, if an MRI is negative, an intraarticular injection of corticosteroid and local anaesthetic may diagnose hip pathology as the source of pain.

MSA Bone Remodelling Study

Phong Tran, Chris Haw, Justin Lade, Ish Hussaini, Robert Pianta, Richard Freeman, Simon Talbot, Brett Jackson, Rags Unni, Ray Crowe

Short length femoral stems have the potential theoretical advantage of being bone conserving. A number of short length stems are being introduced into the Australian market, but their efficacies have yet to be established. Our study analyses the bone remodelling on DEXA scans as a surrogate marker of longevity. A multicentre prospective consecutive series on 66 patients and nine surgeons was performed from 25 November 2010 to 7 May 2012. The study aim was to analyse 200 patients with an end of study cut-off criteria of five patients needing revision surgery. Recruitment of patients was ceased in June 2012, due to two revisions being performed with a further three patients under close observation for suspected early loosening. As of May 2013, five patients have been revised to standard stems due to early loosening. All patients will continue to be monitored with DEXA scanning for two years.

OUR RESEARCHERS

Mr Phong Tran

Head of Orthopaedic Unit,
Orthopaedic Consultant

Mr Cam Fary

Orthopaedic Consultant

Mr Audi Widjaja

Orthopaedic Consultant

Mr Abhay Khot

Orthopaedic Consultant

Mr Richard Freeman

Orthopaedic Consultant

Mr Chris Harris

Orthopaedic Consultant

Mr Brett Jackson

Orthopaedic Consultant

Mr Simon Talbot

Orthopaedic Consultant

Mr Chris Haw

Orthopaedic Consultant

Mr Robert Pianta

Orthopaedic Consultant

Mr Richard Dallalana

Orthopaedic Consultant

Mr Ishfaq Hussaini

Orthopaedic Consultant

Mr Raghaven Unni

Orthopaedic Consultant

Mr Duy Thai

Orthopaedic Consultant

Dr Amy Gibbens

Registrar

Dr Pandelis Dimitrou

Registrar

Dr Marc Friso

Registrar

Dr Andrew Fraval

Resident

Dr Lucas Annabell

Resident

Dr Andrew Chong

Resident

Dr Brett Moreira

Resident

Dr Jack Pang

Registrar

Dr Marc Friso

Registrar

Dr Pandelis Dimitrou

Registrar

Dr Navid Navarian

Registrar

Dr Janan Chandrananth

Intern

Dr Yew Ming Chong

Intern

Shelley Westgarth-Nugent

Orthopaedic Research
Coordinator

OUR RESEARCH STUDENTS

Renee Hou

Research Intern - 4th Year
Pharmaceutical Science student
from RMIT

Dharsh Musiienko

4th Year MD - University
of Melbourne

Ryan McMahon

4th Year MD - University
of Melbourne

Joel Buikstra

4th Year MD - University
of Melbourne

Bulungo Mwilambwe

4th Year MD - University
of Melbourne

Arun Bilgi

4th Year MD - University
of Melbourne

Lillian Coventry

4th Year MD - University
of Melbourne

Danielle Matic

4th Year MD - University
of Melbourne

Arzu Terlemez

Biomedical Science Students
- Victoria University

Katherine Damjanovski

Biomedical Science Students
- Victoria University

Kelly Nguyen

Biomedical Science Students
- Victoria University

Phila Masango

Biomedical Science Students
- Victoria University

OUR RESEARCH OUTPUT

Publications: 4

Presentations: 10

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Phong Tran

Scientific Secretary, Victorian Australian Orthopaedic Association

PAEDIATRIC EMERGENCY MEDICINE

Paediatric Emergency Medicine deals with acute presentations in children from near newborns to 16 years of age. Children present, usually with a family member, with a variety of illnesses, injuries and social issues. Research specific to this cohort is vital as extrapolation from adult data may not be valid. In addition, disease and injury processes are different and the social/family milieu in which these processes take place also differ. Sunshine Paediatric Emergency Medicine is nestled within a general ED that manages more than 60,000 presentations per annum. Children represent approximately one-third of these presentations.

Over the years, our research has attempted to be collaborative with other departments to improve the applicability of our findings and increase the pool of patients able to be recruited and the pool of potential researchers able to do the work. This was no different in 2013.

Key research projects undertaken in 2013 include:

- The rate of CT brain after head injury in children
- Bronchiolitis admissions to paediatric intensive care units
- Medication use in infants admitted to hospital with bronchiolitis
- Case report - otomastoiditis
- The use of complementary and alternative medications in children attending emergency departments
- 'Off-label' medication use in children attending emergency departments
- The parental understanding of fever in children (PUFIC) study
- Chest radiography in infants with bronchiolitis - an audit of practice
- Anaphylaxis and urticaria management in a suburban ED - comparison with national guidelines
- Vitamin D status in children with long bone fractures

OUR RESEARCH

Vitamin D Status in Children with Long Bone Fractures

Dae Kwan, Christine Rodda, Abhay Khot, David Krieser

Vitamin D is involved in calcium metabolism and is therefore partly responsible for healthy and strong bones. We are looking at children who break bones in their limbs to see if their Vitamin D level is appropriate. There may be a role in preventing fractures by ensuring Vitamin D is replete in children.

Parental Understanding of Fever in Children (Pufic) Study

Doris Tham, David Krieser

Fever has been a messenger of illness for all of human history, which has created fear of fever in most cultures around the world. Medicine has demonstrated that it is the reason for the fever, rather than the fever itself, that causes disease. This study asks parents of children under five what worries them about fever. We work in a multicultural area of Melbourne and our study involves a questionnaire in English, Vietnamese, Mandarin and Arabic. The findings will inform public education regarding fever.

Head Injury in Children - A New Questionnaire to Predict Risk after Minor Head Injury

Coco Bernard, Renee Testa, David Krieser

Minor head injury is a very common presentation to the Paediatric ED. A number of children will experience longer-term symptoms including learning, memory and behaviour changes. While the number is small, we have no clear way of working out early which children are at greatest risk of these complications.

After completion of this study, a questionnaire may assist in identifying children who need follow-up for the complications of head injury.

OUR RESEARCHERS

Dr David Krieser

Paediatric Emergency
Physician

Dr Renee Testa

Clinical Neuropsychologist

Dr Julie Belousoff

Paediatrician

OUR RESEARCH STUDENTS

Coco Bernard

Psychology PhD

Dr LiLian Kuan

Basic Trainee in Paediatrics

Dr Zoe Asher

Advanced Training in
Paediatrics

Dr Doris Tham

Advanced Training in
Paediatrics and Paediatric
Emergency Medicine

Dr Cara Lacey

Basic Trainee in Paediatrics

Claire Nogic

Medical Masters program
- Notre Dame

OUR RESEARCH OUTPUT

Publications: 3

Proceedings: 4

Presentation: 1

OUR AWARDS AND GRANTS

Western Health Research Week - Best Poster Prize

David Krieser, Rachel May

Computed Tomography in Children with Head Injury: Change in Usage Rates and Radiation Dose over Time. Western Health Foundation: \$1,000

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

David Krieser

Reviewer, Trial Safety Committee Member

A photograph of two men in a laboratory or office setting. The man on the left has blonde hair and a beard, wearing a light blue shirt. The man on the right has dark hair, wears glasses, a light blue shirt, and a dark striped tie. They are both looking at a document or screen. In the background, there is a large screen displaying a grid of colored squares (purple, blue, green, yellow, orange) and a bookshelf filled with binders. The image has a green and blue color overlay and several white diagonal lines.

A KEY FOCUS OF PHARMACY
DEPARTMENT RESEARCH IS
THE QUALITY USE OF MEDICINES
AND MEDICATION SAFETY.

A key focus of Pharmacy Department research is the quality use of medicines and medication safety.

The project on the development and promulgation of safe handling and distribution guidelines for new anticancer molecules by hospital personnel is a collaboration project with Western and Central Melbourne Integrated Cancer Service (WCMICS) and Peter MacCallum Cancer Centre. It aims to provide guidelines for health professionals, such as pharmacists, nurses and medical staff, regarding the safe handling of monoclonal antibodies.

The department is participating in a multicentre study in the use of dexmedetomidine in Australian intensive care units. This study is looking at current prescribing practice in different hospitals and seeks to develop a guideline that reflects both evidence base and current practice.

The management of medication wastage and identification of ways to prevent wastage and implement cost-saving measures is another significant initiative. A dispensary returns audit was performed to evaluate the types, costs and origins of pharmaceutical items returned to dispensary from the wards and improve efficiency.

Over the coming year, the Pharmacy Department will continue to be involved in sponsored and investigator driven studies in the areas of oncology, gastroenterology, respiratory, endocrinology, neurology, anaesthetic and pain medicine, intensive care, cardiology and nephrology, and will be expanding our research into new areas, including paediatrics, obstetric medicine and urology.

OUR RESEARCH

Dexmedetomidine Use in Australian Intensive Care Units – A Multicentre Audit

Ivy Tan, Adrian Weeks, Jo Muk

Collaborators: Intensive Care Unit Western Hospital (this is a multicentre research project across Australia and New Zealand)

This project describes the current practice of dexmedetomidine use in Australian intensive care units. The aim is to ensure dexmedetomidine is being prescribed correctly and safely and to develop a guideline that reflects both an evidence base and current practice.

Dispensary Returns Audit – Western Hospital

Lian Lee, Ivy Tan, Adrian Weeks

This project will quantify the financial effects of pharmaceutical items returned to the Western Hospital Dispensary by evaluating the types, costs and origins of pharmaceutical items over a sample period. The aim is to reduce cost and waste of medications across the network.

Development and Promulgation of Safe Handling and Distribution Guidelines for “New” Anticancer Molecules by Hospital Personnel including Pharmacy, Nursing and Medical Personnel – Research on Handling Safety of Monoclonal Antibodies

Michael Green, Sue Kirs, Julie King, Marliese Alexander, Kent MacMillan

Collaborators: WCMICS, Peter MacCallum Cancer Centre

The aim of this project is to develop and implement safe handling and distribution guidelines for hospital personnel. The new guidelines will provide a safe measure for the healthcare personnel involved with these new anticancer molecules.

OUR RESEARCH OUTPUT

Publications: 1

Presentations: 3

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Victor Reginato

President, Committee member

Association of Hospital Pharmacists (AHP), Health Services Union Victoria No.4 Branch Committee of Management

Ivy Tan

Member of Central and Western CPN Strategic Project – Clinical Supervision Education Working Group, Subject Matter Expert for Community Services and Health Industry Skills Council Pharmacy Support Review Group, Member of SHPA PEP Working Party

Lei Ching Yeoh

Review Panel, Western Health Low Risk Ethics Panel Committee

Joanna Edwards

Agenda Secretary, Victoria Branch Society of Hospital Pharmacists (SHPA)

Julie King

Vice President, Committee Member: Association of Hospital Pharmacists (AHP), Health Services Union Victoria No. 4 Branch Committee of Management

Nhi Dinh

Australian Health Practitioner Regulation Agency (AHPRA) Pharmacy Board National Registration Examiner

RESPIRATORY AND SLEEP DISORDERS MEDICINE

The Department of Respiratory and Sleep Disorders Medicine is a busy clinical service dealing with the diagnosis and management of patients with a broad range of respiratory and sleep disorders. It also provides the state service for review of immigrants issued with Tuberculosis Health Undertakings by the Commonwealth Government.

Our research areas examine the services that we provide and seek to evaluate their effectiveness and efficiency, with the aim of improving our service.

We also undertake clinical trials sponsored by pharmaceutical companies with the aim of helping to develop new therapies for the treatment of respiratory diseases.

OUR RESEARCH

Treatment of Latent Tuberculosis (TB) in Migrants to Victoria, Australia

Michael Flynn

The objective of the research is to determine the proportion of eligible persons in the Migrant Screening Clinic who were tested for latent TB, offered treatment and completed treatment of latent TB during the years 1996–2006. The research aims to understand the effectiveness of the TB screening service at Western Health in comparison to other services.

BAL in Diagnosis of Suspected Pulmonary TB

Sanjeevan Murugunandan, James Bartlett, Anne Marie Southcott

Collaborators: John Hunt, Matthew Rodrigues, Shavita Kuckreja (added 2014)

This study compares Bronchoalveolar lavage with bronchial washing in the diagnosis of suspected pulmonary TB at bronchoscopy. Currently, the sampling techniques used during bronchoscopy to diagnose TB are not standardised. This will help to identify the most useful test.

Reliability of DLco Measurements at 2, 4 and 6 Minute Time Intervals in Healthy Subjects

Lynnette Reid-Price

Collaborators: Georgette Mchaileh, Ceilito Samson, Lata Jayaram, Anne Marie Southcott

Currently, the requirement to wait four minutes between each measurement when assessing gas transfer in the lung function laboratory lengthens the duration of the test. The aim of the study is to see if testing intervals impact on the test result. If shorter testing intervals are equivalent, this may shorten the duration of testing for patients, improving their comfort and increasing the efficiency of the diagnostic service.

OUR RESEARCHERS

Dr Anne Marie Southcott
Head of Unit and Principal Investigator

Dr Simon Frenkel
Co-Investigator

Dr Thilini Basnayake
Co-Investigator

Dr Melvin Lim
Co-Investigator

Dr Laina Sheers
Co-Investigator

Sue Casanelia
Study Coordinator

Lynnette Reid-Price
Sleep Scientist

Rachel McConnell
Sleep Scientist

Dr Jibin Thomas
Co-Investigator

Dr Sanjeevan Murugunandan
Co-Investigator

Dr Thilini Basnayake
Co-Investigator

Dr Lata Jayaram
Principal Investigator

Dr James Bartlett
Principal Investigator

Dr Matthew Rodrigues
Bronchoscopist

Dr John Hunt
Bronchoscopist

Dr Mary Qian
Registrar

OUR RESEARCH OUTPUT

Publications: 6

Presentations: 3

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Anne Marie Southcott

Reviewer, Internal Medicine Journal

A photograph of a healthcare professional, a woman with short blonde hair wearing a black top and a pink and white striped scarf, assisting an elderly patient with short grey hair. The patient is lying in a hospital bed, wearing a white gown, and has several medical wires connected to her arm. The professional is leaning over the patient, adjusting the wires. The background shows a typical hospital room with medical equipment on a stand. The entire image is overlaid with a green tint and several white diagonal lines.

OUR RESEARCH AREAS
EXAMINE THE SERVICES
THAT WE PROVIDE AND
SEEK TO EVALUATE THEIR
EFFECTIVENESS AND
EFFICIENCY, WITH THE AIM OF
IMPROVING OUR SERVICE.

RHEUMATOLOGY

The Rheumatology Department has a strong research interest in osteoarthritis and associated pain evaluation, a common problem given our obesity epidemic and ageing population. We are also interested in conducting descriptive studies in our patients with rheumatoid arthritis to further understand how this condition impacts our culturally diverse population.

OUR RESEARCH IS CLINICALLY ORIENTED WITH THE ETHOS OF IMPROVING OUR UNDERSTANDING AND MANAGEMENT IN ORDER TO OPTIMISE CARE OF THE COMMON RHEUMATOLOGICAL PROBLEMS WE ENCOUNTER IN CLINICAL PRACTICE.

We strive to become national and regional leaders in osteoarthritis and, as the first step in this process, some unit members play active roles in collaborative projects with our Asia-Pacific neighbours. Our Head of Unit, A/Prof Keith Lim, has been invited to local and international conferences to share our clinical research experiences. Dr Albert Leung has been an invited guest speaker at the University of Philippines-Philippine General Hospital. We will provide training and support for a rheumatology fellow from Myanmar and have received requests from other resource-limited countries in the region.

We have presented our research at the Osteoarthritis Research Society International conference in Philadelphia with our back pain project accepted for presentation at Asia Pacific League Associations for Rheumatology congress in the Philippines. We are also in the process of translating commonly used questionnaires into Vietnamese, reflecting the demographics of our hospital community.

Our vision for the department is to be at the forefront of osteoarthritis clinical research as well as providing our trainees with the best advance training across the Melbourne hospitals. It is hoped that our trainees develop a strong appreciation of clinical and research practices.

OUR RESEARCH

Differences between Patients with Hip and Knee Osteoarthritis

Kim Le Marshall, Bernard Yee, Paul Dieppe, Albert Leung, Carolyn Page, Peter Choong, Sharmayne Brady, Keith Lim

Collaborators: Carolyn Page (SVH), Peter Choong (SVH), Bernard Yee (UK), Paul Dieppe (UK)

This study provides new insight into the clinical characteristics of patients with hip and knee osteoarthritis (OA). Our initial analysis shows that patients with hip OA present later compared with knee OA. This study can provide clinicians with a greater

understanding of the natural history of hip and knee OA, thereby tailoring treatment accordingly.

Use of Caudal Epidural Injections for Radicular Low Back Pain

Albert Leung, Jau Ann How, Stephanie Low, Shom Bhattacharjee, Keith Lim

Collaborators: Maninder Mundaie, Suba Nadesapillai

This study evaluates and attempts to predict outcomes from steroid injections in people with low back pain. It is examining why some people respond better to steroid injections than others and the findings may help us identify and provide more appropriate therapy to patients with low back pain.

The Use of QST to Predict Response to Steroid Injections in Knee Osteoarthritis

Albert Leung, Shom Bhattacharjee, Kristy Yap, Joanna Hall and Keith Lim

Collaborators: Paul Dieppe (UK), Tissa Wijeratne (WH), Danny Liew (RMH)

This study evaluates the use of quantitative sensory testing (QST) in predicting a patient's response to steroid injections for knee osteoarthritis. The use of QST can help a clinician identify which patients with knee osteoarthritis will respond better to steroid injections and those who may need earlier surgical intervention.

OUR RESEARCHERS

Associate Professor Keith Lim Head of Unit
Puong Tran Research Nurse

Dr Albert Leung
Consultant

OUR RESEARCH STUDENTS

Stephanie Low
Medical student

Ron Glick
Medical student

Jau Ann How
Medical student

Jason Kollios
Medical student

RESEARCH OUTPUT

Presentations: 5

Proceeding: 1

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Keith Lim

Senior Editor, International Journal of Rheumatic Diseases

Research undertaken by the Urology Unit focuses on assessing outcomes and caseload volumes for genitourinary oncology (prostate, kidney, ureteric, bladder and penile carcinomas).

The unit participates in collaborative research as part of multicentre clinical trials with local and international centres and undertakes many collaborative research projects with the Western Health Oncology Unit, especially in areas of prostate cancer treatment. Clinical initiatives implemented based on our research activities in 2013 include appointment of a Data Manager to maintain and manage the unit's clinical databases; revision and updating of the existing cystectomy database for bladder carcinoma; and creation of new databases to assess the unit's outcomes for treatment of specific carcinomas.

In 2013, the unit also commenced the creation and implementation of an Extended venous thromboembolism protocol for urology patients undergoing major pelvic surgery; and established patient data sheets to capture operative caseload and allow prospective data entry into the urology databases by the Data Manager. Unit members participated in the quarterly Urology Journal Club program and the Annual Unit Research Meeting (held Feb 2014) to discuss ideas for new research projects and methods to further existing research projects during the coming year.

Future objectives include:

- obtaining ethics approval for use of information within urology databases for analysis and publications
- increasing research participation and publications by Urology residents and interns by encouraging them to select a specific research project that they can complete during the next 12 months
- encouraging publication of research projects and presentations of unit research at peer reviewed scientific meetings
- encouraging attendance of Urology Unit at upcoming scientific meetings.

OUR RESEARCH

Intravesical Bacillus Calmette-Guerin (BCG) for Patients with Non-Muscle Invasive Bladder Cancer (NMIBC): Do Local Results Reflect those in the Published Literature?

Bushra Othman, Daniel Steiner, Sue Wallace, Douglas Travis

Collaborator: Albury Base Hospital Urology Unit

The Urology Unit treats a high volume of patients with NMIBC. This review of current practice and outcomes from this program will assist in determining whether our current clinical practice requires modification.

Treatment Outcomes for Penile SCC – Single Centre Experience

Imeldha Motoronko, Mariolyn Raj, J Kandiah, D Agarwal, J Chee, S Wallace, D Travis

Western Health receives high numbers of referrals for Rx of penile carcinoma from surrounding hospitals. This research

project will assist us in evaluating if our current Rx is in keeping with international standards and highlighting if specific areas require review. The study aims to assess if surgical treatment offered to patients with penile carcinoma at Western Health is in keeping with international standards.

The Duration and Impact of Delay to Nephroureterectomy for Patients Undergoing Ureteroscopic Biopsy of Upper Tract TCC

Dixon Woon, Jason Ooi, Brian Soh, Bushra Othman, Douglas Travis

Ureteroscopic diagnosis of upper urinary tract (UUT) lesions has been reported to have better diagnostic accuracy compared with conventional evaluation with contrast imaging and urinary cytology. However, this involves a delay in the time to definitive surgery. This project will evaluate the duration of delay to nephroureterectomies secondary to ureteroscopy and the impact of this delay on pathological staging.

OUR RESEARCHERS

Mr Doug Travis

Head of Unit and Director of Surgery

Tracy Jefferys

Data Manager

Dr Mariolyn Raj

Urology Fellow

Dr Janice Cheng

Urology Registrar

Dr Dixon Woon

Urology Registrar

Dr Bushra Othman

Urology Registrar

Sue Wallace

Urology CNC

OUR RESEARCH OUTPUT

Presentations: 7

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

All Urology Unit Consultants: Membership of Urological Society Australia and NZ Royal Australasian College Surgeons

Phil Dundee (Consultant Urologist)

Convenor Trainee Masterclass, Australian Prostate Cancer Symposium, Melbourne 2013

Training Accreditation and Education Supervisor, Western Hospital

Justin Chee (Consultant Urologist)

Invited Faculty and Live Surgery Demonstrator including live Webcast 17–21 July 2013 Society of Genitourinary Reconstructive Surgeons Outreach Charity Surgical Mission, Pune, India

Co-Chair Residents Forum Session: Societe Internationale Urologie 2013, Vancouver, Canada, 10 Sep 2013

Daniel Steiner (Consultant Urologist)

Western Health Medical student teaching session: Topics covered Prostate Cancer, Urinary Retention, BPH

MELBOURNE NEUROPSYCHIATRY CENTRE

The Melbourne Neuropsychiatry Centre (MNC) is a clinical research centre of the University of Melbourne and Melbourne Health and is based in three sites: the National Neuroscience Facility (NNF) at Parkville, the Neuropsychiatry Unit, Royal Melbourne Hospital and the Western Centre for Health Research and Education (Western CHRE) at Sunshine Hospital.

The centre was established in 2004 and focuses on understanding the neurobiology of mental disorders from childhood to adulthood. The centre receives support through major grants from NHMRC and Australian Research Council as well as other national and international funding agencies. Since 2004, the centre has received over \$11 million in direct grant funding and over \$30 million in collaborative grants and has produced over 600 publications.

The centre consists of four streams:

Psychosis and Developmental Neuropsychiatry seeks to understand the neurobiology of disorders emerging in childhood and adolescence, including autism and psychotic disorders, particularly schizophrenia. Our studies investigate these disorders longitudinally and within the context of brain maturation. We seek to identify neurobiological and genetic markers of these illnesses related to onset of the illness or its progression.

The **Affective Neuropsychiatry** group is interested in how the brain supports complex human emotional experiences and behaviours. This research is primarily focused on how alterations in normal function may contribute to common mood and anxiety disorders. During 2012, the group established a base at Western CHRE and Sunshine Headspace, involving recruitment and treatment of young people with affective disorders and brain imaging using the latest MRI scanning at Sunshine Hospital.

The **Clinical Neuropsychiatry** team at RMH investigates the link between psychiatric and neurological disorders. A focus has been the relationship of schizophrenia to frontal-temporal dementia (FTD), including recruitment of patients in the West.

Systems Neuropsychiatry is focused on the application of new methods to map the human connectome, to examine brain connectivity organisation and maturation and how brain connectivity is disrupted by mental illness.

OUR RESEARCH

The OPTiMiSE Study

Christos Pantelis, Patrick McGorry, Dr Marc Seal, Chad Bousman, Aswin Ratheesh, Sashin Kumar, Antonia Merritt

Collaborators: The OPTiMiSE Consortium, Europe, ORYGEN Youth Health, The Melbourne Clinic, Monash Health

This study focuses on optimising current treatments in schizophrenia and exploring novel therapeutic options for schizophrenia. Recruitment of first episode psychosis participants at a number of services around Melbourne is ongoing. It is possible that the project will lead to evidence that is directly applicable to treatment guidelines and will identify potential mechanisms for new medication development.

The CRC Psychosis Study

Christos Pantelis, Ian Everall, Brian Dean, Chad Bousman, Suresh Sundram, Naveen Thomas, Christina Phassoulitis

Collaborators: The Cooperative Research Centre (CRC) for Mental Health (sponsor)

The CRC Psychosis Study is recruiting a sample of patients with psychosis who are resistant to treatment, their immediate family members and a healthy comparison group. This study aims to characterise the three study groups using clinical, blood-based molecular and neuroimaging techniques to help identify biomarkers of psychosis that may confer risk or resilience to developing the illness and treatment-resistance. The study has currently recruited 100 participants.

Identification of biomarkers for psychosis can potentially enable early diagnosis and novel treatment strategies and improve long-term clinical outcomes.

An Investigation of Pervasive, Social and Interpersonal Difficulties in Childhood: Cognitive, Motor, Language and Neurological Functioning

Renee Testa, Harvey Jones (student), Nola Ross, Marc Seal, Bruce Tonge, Christos Pantelis

Collaborators: Monash University, National Institute of Mental Health (NIMH), Washington DC (Dr Nitin Gogtay)

The first aim of this study is to characterise the clinical phenotype of children with pervasive social and interpersonal difficulties in childhood (and who are considered to have a schizotypal condition). This analysis will focus on clinical, behavioural and cognitive features of presenting children. The second aim is to assess the clinical utility of an assessment tool that has been developed to identify and characterise children with Sensory Processing Disorder (SPD) features (The Melbourne Assessment of Schizotypy in Kids [MASK]). Thirdly, we aim to use functional brain imaging (fMRI) to examine the brain networks (default mode network) in children demonstrating a preoccupation with an imaginative and fantasy world

This study will define the features and condition of schizotypy in children and examine their brain function. We aim to follow these children into adolescence to assess outcomes.

A Cluster Analysis Exploration of the Characteristics of High-Functioning Subgroups within the Autism Spectrum in Children Aged 8–12 Years

Renee Testa, Felicity Klopfer (student), Christos Pantelis, Bruce Tonge, Stan Skafidas

Collaborators: Centre for Neural Engineering at Melbourne University, Monash University

The primary objective of this study is to employ cluster analysis to explore whether children with high-functioning Autism Spectrum Disorder (ASD) can be differentiated into clinically meaningful subgroups on the basis of cognitive, behavioural, developmental and medical variables. Furthermore, it is predicted that the clusters will differ in their receptive language and pragmatic communication ability, their pattern of restricted and repetitive behaviours and interests, and also in the ratio of affected males to females. This work will examine and detail the characteristics of children with high functioning autism.

A Neuroimaging Study of Mood Regulation in Youth with Major Depression

Ben Harrison, Christopher Davey, Christos Pantelis, Patrick McGorry, Rebecca Kerestes, Chad Bousman, Katerina Stephanou, Sarah Whittle

Collaborators: Orygen Youth Health

The principal aim of this project is to use functional magnetic resonance imaging (fMRI) to characterise in detail the brain systems that underlie impaired emotion regulation and self-related processing in young people with major depressive disorder (MDD). Approximately 140 of the patients will be recruited from a randomised control trial (YODA-C), which aims to assess the efficacy of antidepressant medication in addition to cognitive behavioural therapy in adolescent depression. Recruitment of these patients will allow the assessment and utility of neuroimaging biomarkers (or predictors) of treatment response. We also aim to systematically investigate how the brain regulates mood and anxiety in healthy youth.

To date, approximately 100 young people (both healthy and depressed) have been assessed. This project may lead to the development of better treatments for young people who suffer from depression and increase awareness within the community. Further, this project may identify neuroimaging biomarkers, or predictors of response to treatment, for adolescent depression. This may enable the identification of individuals who might be more or less likely to benefit from certain treatments.

Understanding the Neural Basis of the Experience of Moral Emotions in Adolescent Depression

Sarah Whittle, Ben Harrison, Chris Davey, Nick Allen, Michael Berk, Coralie Bastin

Collaborators: Orygen Youth Health

Adolescent depression is commonly characterised by excessive experiences of guilt and shame, yet we know very little about the mechanisms underlying these experiences.

The broad aim of this study is to better understand experiences of guilt and shame in depressed adolescents by investigating the unique neural correlates of these 'moral' or 'self-conscious' emotions. This will be achieved via the development and use of a novel moral dilemma paradigm that, for the first time, will enable the investigation of the unique mechanisms underlying these emotions. To date, the novel paradigm has been developed and piloted in the scanner. The findings of this study may lead to the development of better treatments for young people suffering with depression.

Relapse Prevention in Schizophrenia

Mahesh Jayaram, Ian Everall, Carol Harvey, Anthony Stratford, Lisa Brophy, Vera Morgan, Cherrie Galletly, Christos Pantelis, David Castle, Rajiv Siotia in collaboration with colleagues in UK (Clive Adams, Richard Morriss, Alan Montgomery, Diane Whitham, Vivek Furtado, Julie Repper, Fiona Lobban, Peter Woodruff, Nigel Mathers, Max Marshall, Sir Robin Murray)

Collaborators: The University of Melbourne, MIND, University of Western Australia, University of Adelaide

St Vincent's Health, Latrobe Regional Hospital, University of Nottingham (UK) Nottinghamshire Healthcare NHS Trust (UK), Lancaster University (UK), University of Sheffield (UK), Lancashire Care NHS Foundation Trust, Institute of Psychiatry, Kings College London

Relapse prevention in schizophrenia continues to be a major treatment challenge leading to repeated admissions to hospital and progressive disability. Identifying signs of relapse early can lead to development of management strategies to prevent relapse, which will have a significant impact on reducing the burden of this illness on the individual, their families, the clinical service and the community.

The aim of the study is to survey current practice, develop a manual for use in routine care to identify very early warning signs of impending relapse and investigate the feasibility of a trial of this intervention among people with schizophrenia.

MELBOURNE NEUROPSYCHIATRY CENTRE (cont.)

OUR RESEARCHERS

Prof Christos Pantelis

Professor of Neuropsychiatry and Scientific Director, NHMRC Senior Principal Research Fellow

Dr Ben Harrison

Postdoctoral Fellow, NHMRC Clinical Career Development Fellowship

Dr Chris Davey

Consultant Psychiatrist and Research Fellow

Dr Renee Testa

Child Neuropsychologist and Research Fellow

Dr Vanessa Cropley

Postdoctoral Fellow, NHMRC Postdoctoral Training Clinical Fellow

Christina Phassouliotis

Postdoctoral Fellow

Dr Mahesh Jayaram

Senior Lecturer in Psychiatry

Dr Naveen Thomas

Consultant Psychiatrist and Honorary Research fellow

Dr Anita Panagiotou

Postdoctoral Fellow

Dr Rebecca Kerestes

Postdoctoral Fellow

Tony Dann

Professional Staff

Chester Kang

Professional Staff

Barbara Stachlewski

Professional Staff

Antonia Merritt

Research Coordinator

Hannah Cross

Research Assistant

Annabel Burnside

Research Assistant

Courtenay Purdie

Research Assistant

OUR RESEARCH STUDENTS

Harvey Jones

Dpsych (Clinical Neuropsychology)

Felicity Klopfer

Dpsych (Clinical Neuropsychology)

Jeggan Tiego

Dpsych (Clinical Neuropsychology)

Cherie Strikwerda-Brown

Dpsych (Clinical Neuropsychology)

Erica Pyalanda

Honours

Coralie Bastin

Doctor of Philosophy

Katerina Stephanou

Doctor of Philosophy

OUR RESEARCH OUTPUT

Publications: 58

Presentations: 36

OUR AWARDS AND GRANTS

Senior Principal Research Fellowship

Christos Pantelis

Understanding Brain Changes in Adolescence and Neuropsychiatric Disorders. NHMRC: \$841,250 (2010–2014)

NHMRC Training Fellowship

Vanessa Cropley

SPECT Imaging of Cortical Muscarinic Acetylcholine Receptors in Schizophrenia: Is it a Useful Biomarker? NHMRC: \$290,032 (2011–2014)

NHMRC Clinical Career Development Award

Ben Harrison

Cortico-Striatal Network Alterations in Obsessive-Compulsive Disorder. NHMRC: \$377,000 (2010–2013)

NARSAD Distinguished Investigator Grant

Christos Pantelis

Neuroimaging Biomarkers of Psychosis Onset - PET Study Examining Inflammatory Markers (Microglial Activity) in the CNS of Patients Developing Acute Psychosis. The Brain and Behavior Research Foundation in the US: \$100,000 (USD) (2011–2013)

NHMRC-EU Grant

Christos Pantelis, Patrick McGorry, Marc Seal, Chad Bousman, Aswin Ratheesh, Sashin Kumar

Optimising Current Therapeutic Approaches to Schizophrenia: The OPTiMiSE Consortium. NHMRC: \$979,375 (2010–2014)

NHMRC Career Development

Sarah Whittle

Sensitivity to Environment: Risk and Resilience for Adolescent Depression. NHMRC: \$384,160 (2012–2015)

NHMRC-EU Grant

Patrick McGorry, Christos Pantelis

Gene – Environment Interactions as Predictors of Clinical Outcome in the At Risk Mental State. NHMRC: \$997,875 (2010–2014)

NHMRC Enabling Grant

V Carr, U Schall, R Scott, A Jablensky, B Mowry, P Michie, S Catts, F Henskens, C Pantelis

NHMRC Enabling Grant (extended funding): Australian Schizophrenia Research Bank (ASRB). NHMRC: \$440,650 (2011–2012)

CRC for Mental Health

Christos Pantelis, Ian Everall, Brian Dean, Chad Bousman, Suresh Sundram

Identification of Biomarkers of Treatment-Resistant Schizophrenia and Other Psychotic Disorders: Can We Predict Clozapine Response? CRC for Mental Health: \$330,000 (2011–2013)

NHMRC Project Grant

Patrick McGorry, Antony Jorm, Ian Hickie, Christos Pantelis, Alison Yung

Emerging Mental Disorders in Young People: Using Clinical Staging for Prediction, Prevention and Early Intervention. NHMRC: \$1,460,000 (2009–2013)

NHMRC Project Grant

Christopher Davey, Patrick McGorry, Andrew Chanen, Sarah Hetrick, K Yuen

Youth Depression Alleviation: A Randomised Controlled Trial of Cognitive Behavioural Therapy with Fluoxetine or Placebo. NHMRC: \$1,200,000 (2012–2017)

NHMRC Project Grant


Ben Harrison, Murat Yucel, Chris Davey, Jesus Pujol, Nick Allen, Alex Fornito

A Brain-Based Measure of Anxiety Sensitivity. NHMRC: \$265,000 (2012–2014)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT**Chris Davey**

Editor, PLOS ONE

Reviewer, Molecular Psychiatry, Biological Psychiatry, Neuroimage, Human Brain Mapping, Neuroscience and Biobehavioral Reviews



THE CLINICAL AND
COMMUNITY CARE UNIT
CARRIES OUT RESEARCH IN
KEY AREAS INCLUDING HEALTH
INFORMATION TECHNOLOGY,
PROMOTING HEALTH AND
WELLBEING, IMPROVING QUALITY
OF CARE, AND PROVIDING
CULTURALLY SENSITIVE CARE.

VICTORIA UNIVERSITY AT WESTERN CENTRE FOR HEALTH RESEARCH AND EDUCATION

69

Research in the School of Biomedical and Health Sciences and Nursing and the School of Nursing and Midwifery at the Western Centre for Health Research and Education is predominantly undertaken within the Biomedical and Lifestyle Diseases Unit and the Clinical and Community Care Unit.

The Biomedical and Lifestyle Diseases Unit research is focused on expanding our knowledge of the role that lifestyle associated diseases play in limiting our lifespan and quality of life. Our ability to age well and productively is affected by a number of health issues, including obesity, diabetes, cardiovascular disease, cancer, inflammation, gastrointestinal issues and musculoskeletal health. To expand our knowledge, the Biomedical and Lifestyle Diseases Unit uses laboratory-based scientific inquiry and applied clinical and therapeutic interventions to promote health and prevent illness, to restore health and to promote the wellbeing of individuals.

The Clinical and Community Care Unit carries out research in key areas including health information technology, promoting health and wellbeing, improving quality of care, and providing culturally sensitive care. Mental health research focuses on three main areas: prevention and early intervention in people with mental health problems, including alcohol and drug misuse issues; promotion of recovery in people with severe and enduring mental illness; and promotion of primary caregiver/family coping and wellbeing. Pregnancy research focuses on women's pregnancy experiences, adverse outcomes and risk in pregnancy, perinatal health and morbidity, gestational diabetes, older maternal age, and sexual health. Acute and chronic illness research concentrates on investigating interventions that will enhance standards of community and hospital care in collaboration with health service providers, in particular, evaluation of current practice and the generation and use of evidence to improve patient outcomes.

OUR RESEARCH

Developing an Innovative Educational Program for High Risk Women with Gestational Diabetes Mellitus (GDM) Phase 2

Mary Carolan-Olah, Cheryl Steele, Mridula Bandopadhyay, Gill Gurjeet

Collaborator: Ian Potter Foundation

Gestational diabetes mellitus (GDM), or diabetes that is first diagnosed in pregnancy, is one of the greatest health challenges of the 21st century. Rates of GDM have increased dramatically in the past two decades related to increasing population rates of obesity and high-risk ethnic groups. In the Western region of Melbourne, rates of GDM are as high as 15%, approximately three

times the national average. GDM gives rise to serious problems such as stillbirth and breathing problems in the infant, and high blood pressure and later development of type 2 diabetes in the mother. When GDM is well managed all of these complications are reduced.

The aim of this project is to develop and test information sheets and resources, including videos, to assist women with GDM to understand their condition and motivate them to make the necessary dietary and lifestyle changes to improve their health and the health of their unborn baby. Resources are now developed and are at the testing stage.

Food for Thought: Eating for Your Baby

Mary Carolan-Olah, Cheryl Steele

Collaborator: Diabetes Australia

The aim of this project is to develop and test a self-management behavioural intervention that will be delivered via a computerised program and will assist women to develop the skills to self-manage their gestational diabetes mellitus.

Effect of Vitamin D on Muscle Function

Alan Hayes, Erik Hanson, Nicola Andreacchio, Emma Rybalka, Ronnie Blazev

Collaborators: Kerrie Sanders and David Scott, The University of Melbourne

This project has shown that altered dietary vitamin D has effects on skeletal muscle force and fatigue. As Vitamin D deficiency is associated with weakness and increased falls risk, understanding how it affects skeletal muscle will improve its potential as a therapeutic compound.

Immune Function in Prostate Cancer Patients Following Acute Exercise

Erik Hanson, Samy Sakkal, Swati Baidur-Hudson, Shadney Que, Alan Hayes

Exercise is becoming an important aspect of cancer management and it is important to understand whether the same immune changes with exercise occur to prevent overtraining and maximise effect. The study aims to investigate the effects of immune cell function in prostate cancer patients, with a particular interest in natural killer cells. An honours thesis has been submitted and participant recruitment is nearing completion.

VICTORIA UNIVERSITY AT WESTERN CENTRE FOR HEALTH RESEARCH AND EDUCATION (cont.)

Role of Diet and Exercise in Reducing Side Effects of ADT in PCa Patients

Erik Hanson, Alan Hayes, John Tarle

Collaborators: John Violet (WH), Gillian Duschene (Peter Mac), Stuart Phillips (McMaster)

As muscle wasting is a major source of decreased longevity and quality of life in cancer patients, understanding whether muscles can adapt to training or other strategies to increase mass is vital.

This study investigates whether prostate cancer patients on androgen suppressant therapy are still able to adapt to resistance training and/or a protein source.

Linking Subacute Care to Community Support Services: A Carer Focused Intervention

Anita Panayiotou, Kath Kirby, Debra Kerr, Odette Randall, Michelle Ball

Collaborator: Carers Victoria

The ageing population, increased level of age-related disability and growing number of older people living in the community are placing a great deal of strain on the healthcare system and informal supports. Improved awareness of government-funded support programs and community care entry points will ensure formal services continue to play an effective role in early intervention and provide coordinated support for growing numbers of carers.

It is hoped that carers who are provided with information and encouragement to attend a specialist support service while their friend or family member is an inpatient at Western Health, will have higher levels of access and engagement with support services in the community. Engagement in community support programs is likely to lead to positive outcomes for carers, including reduced levels of stress, anxiety, depression and degree of burden. These positive outcomes will potentially enable carers to continue providing care over a longer period of time and so reduce the need for, and additional costs associated with, repeated hospital presentations and admissions, and permanent residential care. In turn, this may enhance quality of life for the care recipient by helping them remain in their home for as long as possible.

This project is proposed as a pilot study to explore whether an educational intervention increases the awareness and uptake of community support services by carers.

Effects of Early Motivational Interviewing on Post-Stroke Depressive Symptoms: Randomised Controlled Trial of the Good Mood Intervention Program

Debra Kerr, Elizabeth Mackey, Tissa Wijeratne, Terence McCann

Collaborator: Stroke Foundation

Depression is a frequent consequence of stroke. While it can adversely affect recovery and lead to greater mortality, it is often undetected or treated inadequately. While antidepressants can be used to treat post-stroke depression (PSD), they increase the risk of side effects, which complicates recovery. This randomised controlled trial evaluates a new brief intervention, the Good Mood Intervention program. The aim of the study is to investigate if motivational interviewing (MI) improves patients' mood post-stroke. It will be conducted at the Stroke Unit, Western Hospital, and will recruit inpatients with acute stroke.

Improving patients' mood can assist recovery from stroke and, indirectly, provide an economic saving to the healthcare system and reduce families' burden of care. An advantage of using MI is it can be incorporated readily into usual care provided by health professionals, with minimal training in the technique. This increases the likelihood of its adoption and sustainability in the longer term in settings where patients with stroke receive care. The proposed study will administer the intervention during the acute hospitalisation period.

OUR RESEARCHERS

A/Prof Debra Kerr

Discipline Group Leader

Prof Mary Carolan-Olah

Professor Midwifery, Victoria University

Cheryl Steele

Diabetes Education Manager, Western Health

Liz Mackey

Nurse Practitioner

A/Prof Tissa Wijeratne

Neurologist

Prof Terence McCann

Director, Research, College of Health and Biomedicine

A/Prof Alan Hayes

Assistant Dean

Emma Rybalka

Academic Research

Samy Sakkal

Academic Research

Ronnie Blaze

Academic Research

Swati Baindur-Hudson

Academic Research

Dr Erik Hanson

Postdoctoral Fellow

Dr Mridula Bandopadhyay

Postdoctoral Fellow

OUR RESEARCH STUDENTS

Cara Timpani

PhD

John Tarle

Honours

Shadney Que

Honours

Sumaya Allami

Honours

Nicola Andreacchio

Honours

Cara Timpani

Honours

OUR RESEARCH OUTPUT

Publications: 16

Presentations: 4

Proceedings: 8

OUR AWARDS AND GRANTS

Stroke Foundation of Australia Small Project Research Grant

Victoria University Early Career Research Development Grant

Debra Kerr, Elizabeth Mackey, Tissa Wijeratne, Terence McCann

Effects of Early Motivational Interviewing on Post-Stroke Depressive Symptoms: Randomised Controlled Trial of the Good Mood Intervention Program.

Stroke Foundation of Australia: \$20,000 (2013)

Victoria University: \$29,000 (2013)

Diabetes Australia research trust DART

Prof Mary Carolan-Olah

Food for Thought: Eating for Your Baby. Diabetes Australia: \$59,000 (2013)

Ian Potter Foundation Grant

Prof Mary Carolan-Olah

Developing an Innovative Educational Program for High Risk Women with Gestational Diabetes Mellitus (GDM) Phase 2. Ian Potter Foundation: \$50,000 (2012–2013)

International Collaborative Researcher Grants Scheme

Alan Hayes, Matt Cooke

Metabolomic Analysis of Responses to different Exercise Intensities in Obese and Diabetic Individuals. Victoria University: \$10,000 (2013–2014)

Postdoctoral Fellowship Scheme

NK Stepto, A Hayes, M Cooke, M McAinch, GK McConell, JA Hawley

Obesity Induced-Insulin Resistance and Exercise, the Role of MicroRNA and the Next Frontier in the Development of Therapeutic Targets. Victoria University: \$569,949 (2014–2017)

AIMSS Seed Funding

J Firth, A Hayes, P McLaughlin, E Skinner

The Effect of Offloading Devices on Quality of Life, Muscle Strength and Overall Cardiovascular Condition in Patients Treated with Diabetes Related Foot Ulceration. AIMSS: \$9,893 (2014)

OUR PROFESSIONAL AND COMMUNITY ENGAGEMENT

Debra Kerr

Deputy Chair, Low Risk Ethics Panel, Western Health

Member, Research Advisory Council, Western Health

OUR PARTNERS





OUR PARTNERS – VICTORIA

COLLABORATORS

Alfred Health
 Ambulance Victoria
 ANZ Breast Cancer Trials Group
 ANZ Intensive Care Society Clinical Trials Group
 ANZ Intensive Care Research Centre (ANZICRC)
 Asia Pacific Association of Young Neurologists and Trainees
 Austin Health
 Australasian College for Emergency Medicine (ACEM) Clinical Trials Group
 Australasian Leukemia and Lymphoma Group
 Australian Medical Association, Victorian Branch
 Australian Sports Medicine Association
 Australasian Kidney Trials Network
 Australian Lung Trials Group
 Baker IDI Heart and Diabetes Institute
 Bendigo Health Care Group
 Beyond Blue
 Bio21 Cluster
 BioGrid
 Cancer Trials Australia (CTA)
 Cochrane Renal Group
 College of Intensive Care Medicine of Australia and New Zealand
 CRC for Mental Health
 Dorevitch Pathology
 Deakin University
 Department of Health, Victoria
 Diabetes Australia (Victoria)
 Diabetes Australia Research Foundation
 Eastern Health
 Florey Neurosciences Institutes
 Geelong Hospital
 General Practice Victoria
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 Knox Private
 LaTrobe University
 Ludwig Institute of Cancer Research
 Macedon Ranges and North Western
 Melbourne Medicare Local
 Melbourne Neuroscience Institute
 Melbourne Brain Centre
 MonashHeart, Southern Health
 Monash Medical Centre (MMC)
 Monash University
 Murdoch Children Research Institute
 National Stroke Research Institute
 Networking Health Victoria
 Neuroscience Trials Australia (NTA)
 North-East Health Wangaratta
 Nurses Board of Victoria
 ORYGEN
 Osteoporosis Australia
 Peter MacCallum Cancer Centre
 Royal Australasian College of General Practitioners (RACGP)
 Royal Australasian College of Physicians (RACP)
 Royal Melbourne Hospital (RMH)
 Royal Melbourne Institute of Technology (RMIT)
 St Vincent Hospital (SVH)
 Stroke Society of Australasia
 The Cancer Council of Victoria (CCV)
 The Heart Foundation
 The Royal Women's Hospital (RWH)
 The Royal Children's Hospital (RCH)
 The University of Melbourne
 The Victorian Forensic Paediatric Medical Service (VFPMS)
 Victorian and Interstate Health Services
 Victoria University
 Victorian Cancer Agency (VCA)
 Victorian Comprehensive Cancer Centre (VCCC)
 Victorian Stroke Clinical Network
 Walter and Eliza Hall Institute (WEHI)
 Wangaratta Hospital
 Western Region Health Centre
 Wollongong Hospital

●
HORSHAM

●
WARRNAMBOOL

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Merck, Sharp and Dohme (MSD)
Ormond College
Pfizer Oncology
Pharmaxis
PPD Australia

Roche Pharmaceuticals
Sanofi-Aventis
Servier Australia
Shire Pharmaceuticals
SIRTeX Medical Ltd
Victorian Cancer Agency (VCA)
Windermere Foundation
Western and Central Melbourne
Integrated Cancer Service (WCMICS)
Western Region Health Centre
Wyeth Australia Pty Ltd

WODONGA

● BENDIGO

● BALLARAT

● MELBOURNE

GEELONG

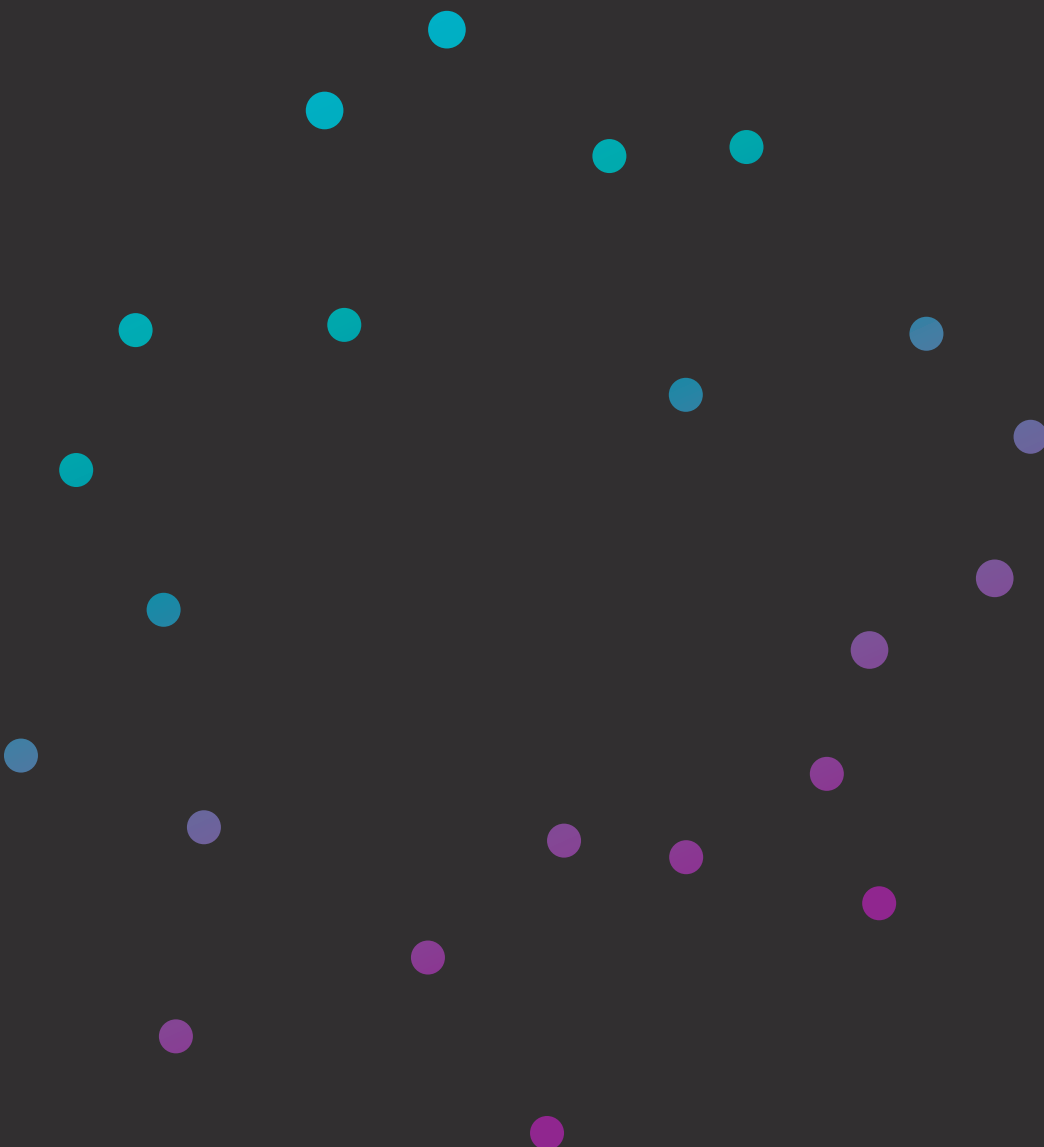
BAIRNSDALE





Western Health

Together, caring for the West



WESTERN HOSPITAL
Gordon Street
Footscray VIC 3011
Locked Bag 2
Footscray VIC 3011
8345 6666

SUNSHINE HOSPITAL
Furlong Road
St Albans VIC 3021
PO Box 294
St Albans VIC 3021
8345 1333

SUNSHINE HOSPITAL
RADIATION THERAPY CENTRE
176 Furlong Road
St Albans VIC 3021
8395 9999

WESTERN CENTRE FOR HEALTH
RESEARCH AND EDUCATION
Sunshine Hospital
Furlong Road
St Albans VIC 3021
8345 1333

SUNBURY DAY HOSPITAL
7 Macedon Road
Sunbury VIC 3429
9732 8600

WILLIAMSTOWN HOSPITAL
Railway Crescent
Williamstown VIC 3016
9393 0100

DRUG HEALTH SERVICES
3-7 Eleanor Street
Footscray VIC 3011
8345 6682

HAZELDEAN TRANSITION CARE
211-215 Osborne Street
Williamstown VIC 3016
9397 3167