Exercise Medicine Research Institute



STRATEGIC RESEARCH INSTITUTE

# 2021 ANNUAL REPORT Exercise Medicine Research Institute



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# **Director's report**

I am delighted to present the 2021 Annual Report for the Exercise Medicine Research Institute (EMRI), at Edith Cowan University.

EMRI is a pioneer in the prescription of exercise for the management of chronic disease. By researching solutions for patients and clinicians, we have established best practice in exercise medicine, informed patient management, and improved the efficiency of standard therapies and treatments for disease.

With EMRI's understanding of human physiology and modern research, we are discovering how essential exercise is to the management of and recovery from complex diseases like cancer. Our research in exercise medicine has changed clinical recommendations, with a significant impact on patient outcomes.

The Institute's research output and income performed strongly in 2021. New research grants totalled in excess of \$4.3 million. Of note, EMRI researchers are part of a new project funded by a National Health and Medical Research Council (NHMRC) Partnership Project grant of \$1.13 million, which will be matched by local, national and international health partners as part of a total injection of \$2.25 million into research to improve the lives of prostate cancer survivors. Professors Daniel Galvão (EMRI Director) and Rob Newton (EMRI Deputy Director) will lead the exercise medicine component of the four-year project in the collaboration led by the University of Southern Queensland, with the Prostate Cancer Foundation of Australia and NHMRC's Centre for Research Excellence in Prostate Cancer Survivorship among other partners.

Also of significance, EMRI Professor Dennis Taaffe will lead a federal government grant of more than \$560,000 awarded to the University to treat pancreatic cancer. The funding is part of the NHMRC, Medical Research Future Fund – 2021 Rare Cancers, Rare Diseases and Unmet Need (RCRDUN) Initiative. EMRI will test the effects of exercise medicine for patients with cancer of the pancreas. ECU was the only Western Australian university to be awarded funds from the RCRDUN.

In alignment with our goal to attract, grow and retain the best researchers, the Institute supervised 19 HDR students in 2021. Six of EMRI's academic members received Exercise Medicine Research Institute Early Career Researcher Awards for their research in topics ranging from cancer to neurological disorders. I congratulate recipients Dr Favil Singh, Dr Georgios Mavropalias, Dr Onno Van Der Groen, Dr Kristina Kendall, Dr Caitlin Fox-Harding and Mr Oliver Schumacher for their innovative research.

I also congratulate Joanne Dickson, who received an academic promotion from Associate Professor to Professor during the year. Professor Dickson brings much-valued expertise in health psychology to EMRI.

A total of 77 research papers were published during 2021 – 38 with international co-authors and 18 with HDR students – which is testament to our goal to undertake world-class research on exercise medicine. EMRI research was also published in 52 prestigious Q1 publications. Pleasingly, the

Institute's research featured on the cover of the journal *Nature Reviews Urology*'s September 2021 issue for exercise-induced myokines and their effect on prostate cancer cell growth.

EMRI's research excellence and pioneering researchers attracted significant worldwide media attention and a slew of awards and recognition throughout the year.

The team at the Institute's Vario Health Clinic featured in the national SBS TV series *Australia's Health Revolution*, hosted by renowned British television journalist Dr Michael Mosley. In addition, Professor Rob Newton was a finalist in Research Australia's 18<sup>th</sup> Annual Health and Medical Research Awards and was 'Highly Commended' in the Frontiers Research category for his work in exercise oncology.

In November 2021, Professors Daniel Galvão and Rob Newton were officially recognised by the Governor of Western Australia and Prostate Cancer Foundation of Australia (PCFA) Patron, Mr Kim Beazley AC, for their significant contributions in cancer research, at the PCFA's 25<sup>th</sup> anniversary celebration.

I acknowledge the dedicated efforts of all EMRI staff during another year of the Covid-19 pandemic. Each of us is committed to ensuring that all people benefit from exercise medicine regardless of location, access or finances by extending our allied health clinics and telehealth services. As we did during 2021, we will continue to work with clinicians, community groups and not-for-profit organisations to understand the issues they encounter, and respond with targeted research and clinical programs that improve health care and patient outcomes.

**Professor Daniel Galvão** Director, Exercise Medicine Research Institute

## Who we are

Established in 2003, the Exercise Medicine Research Institute (EMRI) at Edith Cowan University (ECU) is an international leader in exercise as a medicine in the management of chronic disease, with a primary focus on cancer and neurological disorders. The Institute houses an innovative, multidisciplinary and productive research team in exercise science and behavioural medicine that is dedicated to investigating the extent to which exercise can be employed in cancer management to materially improve patient outcomes.

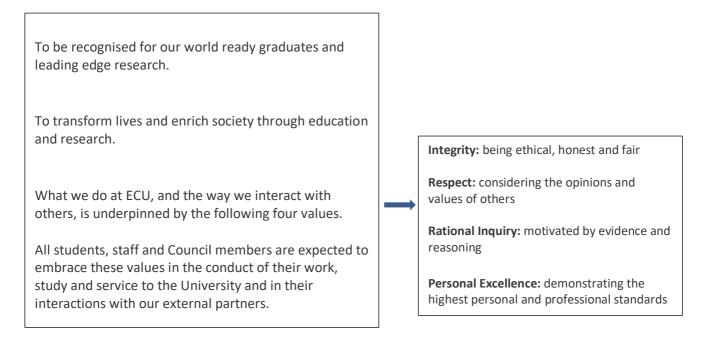
EMRI is a National Health and Medical Research Council (NHMRC) Centre for Research Excellence in Prostate Cancer Survivorship and has received continuous nationally competitive research funding since its establishment including from the NHMRC, Prostate Cancer Foundation of Australia (PCFA), Cancer Australia, Cancer Council Western Australia and the Movember Foundation.

EMRI has extensive national and international linkages, and continues to build collaboration among researchers, clinicians, industry and government to optimise health and improve the quality of life and survival for people with cancer.

The research team's unique convergence of clinical patient care, exercise medicine and innovation in health intervention underpins the Institute's achievement in cancer research.

#### Our vision, purpose and values

In line with the University's vision, purpose and values, EMRI's vision is for a world where exercise is an accepted medicine for complex chronic conditions. Through research informed by health consumers and clinicians, EMRI advocates for best practice in exercise medicine, informs best practice patient management and changes the narrative around the treatment of chronic disease.



## **Our strategic focus**

The Exercise Medicine Research Institute is committed to meeting the goals and objectives of the University's *Strategic Plan 2017–2021 – World Ready*, which outlines the plan's five strategic themes:

- 1. Dedicated to our students.
- 2. Connecting with our community and the world.
- 3. Building strategic partnerships and collaborations.
- 4. Fostering strong alumni relations.
- 5. Promoting equality, diversity and social responsibility.

#### EMRI's goals

- 1. Attract, support, grow and retain the best researchers.
- 2. Undertake world-class research on exercise medicine, from benchtop to bedside.
- 3. Ensure exercise medicine is innovative and integrated for patient care.
- 4. Change the narrative around management of chronic disease.

#### ECU's strategic goals

- 1 Enhancing learning and teaching
- 2. Advancing research and knowledge translation
- 3. Growing internationalisation
- 4. Ensuring organisational sustainability

# Awards and recognition

- Associate Professor Joanne Dickson was promoted to full Professor
- Professor Rob Newton was bestowed with a Higher Doctorate (DSc) for research in exercise oncology by The University of Queensland
- Professor Rob Newton was a finalist in Research Australia's 18<sup>th</sup> Annual Health and Medical Research Awards and was Highly Commended in the Frontiers Research category
- Oliver Schumacher, a PhD candidate in Exercise Oncology, won the inaugural Helen Crowe Poster Award, for the best poster in the Nursing and Allied Health discipline, at the 22<sup>nd</sup> Asia Pacific Prostate Cancer Conference 2021
- Christelle Schofield received the EMRI Covid-19 Scholarship Award (\$14,300)
- Dr Favil Singh, received an EMRI Early Career Researcher Award (\$3,000)
- Dr Georgios Mavropalias, received an EMRI Early Career Researcher Award (\$3,000)
- Dr Onno Van Der Groen received an EMRI Early Career Researcher Award (\$3,000)
- Dr Kristina Kendall received an EMRI Early Career Researcher Award (\$3,000)
- Dr Caitlin Fox-Harding received an EMRI Early Career Researcher Award (\$3,000)
- Mr Oliver Schumacher received an EMRI Early Career Researcher Award (\$3,000)



From left: Professor Rob Newton, Dr Favil Singh, Dr Georgios Mavropalias, Dr Onno Van Der Groen, Dr Kristina Kendall, Dr Caitlin Fox-Harding and Professor Daniel Galvão

# **Report on performance**

In 2021, EMRI responded to the strategic goals and objectives set out in the University's Strategic Plan in important ways, meeting or exceeding the Institute's targets. Key highlights of EMRI's achievements during the year follow.

## Highlights: Strategic goal 1: Enhancing learning and teaching

#### Higher Degree by Research (HDR)

In line with EMRI's objective to foster HDR excellence, 2021 saw strong numbers in the HDR cohort who enrolled with the Institute.

Number of HDR Completions	4
Number of HDR Enrolments	19
Number of Publications co-authored by a HDR student	18

Compliance	
Research Integrity Training (number and % of members completed)	100%

#### **HDR students**

- Kylie Cormack (PhD)
- Brendan Crosby (MSc)
- Kedar Deshpande (PhD)
- Brianna Fleay (MSc)
- Sarah Ford (MSc)
- Min-Jyue Huang (PhD)
- Jin-Soo Kim (PhD
- Christine Kudiarasu (PhD)
- Yang Li (PhD)
- Pedro Lopez Da Cruz (PhD)

- Amber Louw (PhD)
- Hao Luo (PhD)
- Lorna Mansell (MSc)
- Callum McCaskie (PhD)
- Sanjay Ramakrishnan (PhD)
- Christelle Schofield (PhD)
- Oliver Schumacher (PhD)
- Matthew Springham (PhD)
- Hong Ngoc Thai Vo (MSc)

## Highlights: Strategic goal 2. Advancing research and knowledge translation

Clinical treatment of complex conditions is constantly evolving. EMRI's ongoing research program is responding to this. For example, we are discovering the underlying biological mechanisms through which exercise medicine suppresses cancer cell growth and enhances the effectiveness of radiation therapy. Our neurorehabilitation program will deliver first-in-Australia technology to transform exercise medicine for patients with neurological disorders. This includes exoskeleton rehabilitation robots, immersive digital therapies and telehealth platforms for patients to access from home.

Research excellence		
Grants awarded/ Research income	\$4.3 million / \$2 million	
Number of publications	77 (refer p. 18 for details)	
Number of Q1 publications	52	
Number of publications with an international co-author	38	
Book chapters	1	

#### New research grants

- 2022-2026, A multi-component exercise medicine program in patients with pancreatic cancer undergoing neoadjuvant therapy (the EXPAN trial): a two-armed phase I randomised controlled trial, NHMRC, Medical Research Future Fund – Clinical Trials Activity (Rare Cancers, Rare Diseases and Unmet Need) Initiative, \$561,910.
- 2021, Prostate cancer survivorship essentials for men with prostate cancer on androgen deprivation therapy: transforming care to improve outcomes, NHMRC Partnership Project Grant, **\$2.25 million**.
- 2021-2025, Australasian Malignant Pleural Effusion (AMPLE)-3 trial, NHMRC, Clinical trials and cohort studies (CTCs) **\$1,105,74**.
- 2021-2023, Weight loss for overweight and obese prostate cancer patients: a randomised trial of a clinic-based versus telehealth-delivered exercise and nutrition intervention, Cancer Council WA Inc, Prostate Cancer Research Initiative, **\$472,739**.

## **Continuing grants**

- 2021 Industry Engagement Scholarship (DOM) Institute for Respiratory Health, \$65,000.
- 2021 Industry Engagement Scholarship (DOM) Institute for Respiratory Health, \$35,000.
- 2020-2022, Exercise as adjuvant therapy to increase prostate tumour oxygenation and improve effectiveness of radiotherapy, Cancer Council WA Inc, Grant, **\$94,449**.
- 2020-2022, Medical and Health Research Infrastructure Fund (MHRIF) 2019 (Round 23), Department of Health WA, Medical and Health Research Infrastructure, **\$49,651**.
- 2020-2022, Lower-body injury risk stratification in female and male recruits through muscle-bone imaging., Department of Jobs, Tourism, Science and Innovation (JTSI), Defence Science Collaborative Research Grants, **\$150,000**.

## Continuing grants (cont'd)

- 2020-2022, Physical health during isolation, including chronic disease progression in older Western Australians, JTSI, Covid-19 Research Fund, **\$200,000**.
- 2020-2022, The added value of BAP1 immunohistochemistry and fluorescence in-situ hybridisation for CDKN2A/p16 in the diagnosis and prognostication of pleural mesothelioma, Institute for Respiratory Health, Scholarships to Support Industry Engagement PhD Projects, **\$150,000**.
- 2020-2021, Implementation of routine 'eccentric' exercises to maintain health and fitness improve vigilance and attention and optimise decision-making in the submarine, Department of Defence Science and Technology Group Scholarship / JTSI DSc Research Higher Degree Student Grant, **\$29,000**.
- 2019-2024, Spinal Cord Injuries Australia Industry (SCIA) Scholarship, SCIA, Scholarships to Support Industry Engagement PhD Projects, **\$105,000**.
- 2019-2023, Examining the effect of creatine supplementation in augmenting adaptations to resistance training in prostate cancer patients undergoing androgen deprivation therapy: a randomised, double-blind, placebo-controlled trial. Cancer Council WA, Collaborative Cancer Grant Scheme, **\$50,000**.
- 2019-2022, Muscle morphology and function in women with advanced-stage ovarian cancer: Response to exercise medicine and implications for treatment, Cancer Council WA, PhD Top Up Scholarship, **\$30,000**.
- 2019-2022, Assessment of elite AFL athletes and the integration of data analytics, Pernix, Scholarships to support Industry Engagement PhD projects, **\$52,500**.
- 2019-2022, Develop a systematic profiling of neurological conditions that will facilitate personalised treatment and streamline service delivery, Multiple Sclerosis Society of Western Australia (MSWA), MSWA Research funding for social and applied research, **\$3.3 million**.
- 2018-2024, An exploratory study to determine if exercise can impact the gut microbiota composition of men receiving androgen suppression therapy for prostate cancer, PCFA, Grant, **\$98,875**.
- 2018-2023, Intense exercise for survival among men with metastatic castrate-resistant prostate cancer (INTERVAL – MCRPC): a multi-centre, randomised, controlled, phase III study, The Movember Group, Movember – GAP4 Prostate Cancer Exercise and Metabolic Health, \$635,910.
- 2018-2023, Can exercise delay transition to active therapy in men with low grade prostate cancer? A multi-centre randomised controlled trial, NHMRC, Project Grants, **\$596,084**.
- 2018-2023, The effect of cognitive and exercise training on brain atrophy and cognitive decline in breast cancer patients treated with adjuvant chemotherapy agents, Cancer Council WA, Collaborative Cancer Grant Scheme, **\$99,932**.
- 2018-2021, From Research to Practice: the development, implementation and evaluation of an intervention to integrate exercise into standard of care for people with cancer, GenesisCare, Genesis Cancer Care, Grant, **\$5,000**.
- Influence of set-configuration on delayed neuromuscular physical and reaction time performance, **\$27,947**.
- 2019 Industry Engagement (DOM) Institute for Respiratory Health, \$60,000.
- 2018 RTP Scholarship (DOM) / Cancer Council WA/ 2021 SMHS Research Completion Scholarship, **\$1,000**.
- 2017-2021, Exercise medicine prior to open radical cystectomy: feasibility and preliminary efficacy, ANZUP Clinical Trials Group Limited, Below the Belt Research Fund, **\$45,455**.
- 2016-2024, Centre for Research Excellence in Prostate Cancer Survivorship, NHMRC, Centres of Research Excellence, **\$1,172,654**.
- 2016-2022, GAP4 exercise and metabolic health trial exercise central coordinating centre, The Movember Group, Movember GAP4 Prostate Cancer Exercise and Metabolic Health, **\$418,856**.
- 2015-2022, Spinal Cord Injury Collaborative Research Program: A partnership between SCIA and ECU 2015-2017, SCIA, SCIA Grant, **\$1,389,440**.



## **Current research studies**

- INTense exercise for survival among men with metastatic castrate-resistant prostate cancer (INTERVAL – MCRPC): a multi-centre, randomised, controlled phase III study.
- Examining the effect of creatine supplementation in augmenting adaptations to resistance training in prostate cancer patients undergoing androgen deprivation therapy: a randomised, double-blind, placebo-controlled trial.
- Weight loss for overweight and obese prostate cancer patients: a randomised trial of a clinic-based versus telehealth delivered exercise and nutrition intervention.
- The effects of accentuated eccentric resistance training on muscle mass and strength in prostate cancer patients undergoing androgen-deprivation therapy.
- An exploratory study to determine if exercise can impact the gut microbiota composition of men receiving androgen suppression therapy for prostate cancer.
- A randomised controlled trial of exercise medicine for men undergoing active surveillance for prostate cancer.
- Exercise as adjuvant therapy to increase prostate tumour oxygenation and improve the effectiveness of radiotherapy.
- The effect of a supervised resistance exercise intervention on muscle in advanced-stage ovarian cancer survivors who have completed first-line treatment.
- The effects of structured exercise on melanoma patients receiving immunotherapy.
- The effects of conventional and accentuated eccentric resistance exercise training on tissue composition and inflammation in patients with lung cancer cachexia.
- Physical health during isolation, including chronic disease progression in older Western Australians.
- Exercise medicine prior to open radical cystectomy: feasibility and preliminary efficacy.
- Effect of chronic and acute exercise-induced myokines on prostate cancer cells.
- Exploring moderators of resistance exercise effects and dosage in men with prostate cancer: from aggregate to individual patient data meta-analyses.
- Develop a systematic profiling of neurological conditions that will facilitate personalised treatment and streamline service delivery.

## **Book chapters**

• Kraemer, W., Ratamess, N., French, D., Newton, R. (2021). 'Modern theories of strength and power training for men and women'. *The Dynamics of Modern Rugby* (43-55). Routledge. https://doi.org/10.4324/9781003159537-5-5.

## EMRI in the media (summary of major events reported)

- EMRI research featured on the cover of *Nature Reviews Urology*'s September 2021 issue for the paper 'Exercise-induced myokines and their effect on prostate cancer': <u>https://www.nature.com/articles/s41585-021-00476-y</u>
- The EMRI team featured in the national SBS TV series *Australia's Health Revolution* with renowned British television journalist Dr Michael Mosley.
- EMRI research and clinical work featured in the ABC series *How to Live Younger*.
- Researchers from EMRI authored the paper 'Myokine expression and tumor-suppressive effect of serum following 12 weeks of exercise in prostate cancer patients on ADT' featured in *Medicine & Science in Sports & Exercise*. Mainstream media picked up the research, which garnered 261 mentions across 17 countries, with highlights in Britain's *Daily Mirror* and the *Daily Telegraph* reaching more than 50 million people in the United Kingdom alone. In total, the story reached a global audience in excess of 324 million people, with an estimated advertising value of more than \$3 million. 'Cancer breakthrough: Exercise may stop disease in its tracks': <a href="https://www.ecu.edu.au/newsroom/articles/research/cancer-breakthrough-exercise-may-stop-disease-in-its-tracks">https://www.ecu.edu.au/newsroom/articles/research/cancer-breakthrough-exercise-may-stop-disease-in-its-tracks</a>
- 'Self-regulatory goal motivational processes in sustained New Year resolution pursuit and mental wellbeing' was published 44 times across 36 media outlets, with a reach of more than 183 million: <u>https://www.eurekalert.org/news-releases/850152</u>
- EMRI research was published in *Prostate Cancer and Prostatic Diseases* (Springer Nature) on exercise medicine to improve psychological distress in men with prostate cancer. 'Exercise now proven to have mental health benefits for prostate cancer' was published across five outlets: <u>https://www.scimex.org/newsfeed/exercise-now-proven-to-have-mental-health-benefits-forprostate-cancer</u>.



## Highlights: Strategic goal 3. Growing internationalisation

In 2021, EMRI continued to nurture existing international collaborations and pursue prestigious international partnerships; for example, with the University of California San Francisco, University of Cologne and the University of Montreal Hospital Center.

Long-term industry partnerships include global pharmaceutical company Abbvie, multinational pharmaceutical and biotechnology company AstraZeneca, and Technogym, which is the pre-eminent exercise equipment in the world.

## Highlights: Strategic goal 4: Ensuring organisational sustainability

EMRI houses advanced, world-class facilities, enabling the transformation of teaching, learning and research into real-world practice. Over the past 15 years, we have secured funding for research equipment and clinical and research personnel from the NHMRC, PCFA, Commonwealth and State Departments of Health and from philanthropic support, which is testimony to our reputation.

In addition, our commercial operations have generated net profits which have been reinvested to acquire new infrastructure and equipment.

In 2021, EMRI continued its aim to secure funding for infrastructure to ensure that our state-of-the-art facilities and equipment at Vario Health Clinic and NeuroMoves remain at the forefront of advances in technology.

## Vario Health Clinic

#### **Current Programs**

- Exercise Medicine for Life
- Exercise Medicine for Life Wellness
- Medicare Exercise Physiology, Physiotherapy and Dietetics
- Medicare Exercise Physiology, Physiotherapy and Dietetics (Telehealth)
- Medicare Group Allied Health Type 2 Diabetes Exercise Program
- Department of Veterans' Affairs Exercise Physiology, Physiotherapy and Dietetics
- Cancer Council Life Now Exercise Program
- National Disability Insurance Scheme Exercise Physiology, Physiotherapy and Dietetics
- Be Inspired Foundation Exercise Physiology and Dietetics
- WorkCover WA Exercise and Physiotherapy Rehabilitation Program

#### Services

- Exercise physiology
- Dietetics
- Physiotherapy
- NeuroMoves SCIA

#### Number of patients

• 28,786 client visits

# **Report on operations**

#### Governance

EMRI is governed by an external Advisory Board, which oversees compliance of the Institute's governance responsibilities and provides strategic advice. An internal Steering Management Committee manages the Institute's operations and affairs.

## Meetings in 2021

Number of External Advisory Board meetings held in 2021 (for Institutes)	1 Board meeting with members 4 adhoc meetings with individual members
Number of Steering Management Committee meetings held in 2021	21

## **Key committees**

## **Advisory Board members**

- Professor Daniel Galvão, Director, Exercise Medicine Research Institute
- Professor Rob Newton, Deputy Director, Exercise Medicine Research Institute
- Ms Anne Elam, Consumer Representative, Vario Health Clinic
- Professor Paul Lavery, School of Science, Edith Cowan University
- Professor Anna Nowak, Medical Oncologist, The University of Western Australia
- Dr Tom Shannon, Urologist, Hollywood Private Hospital

#### **Steering Management Committee**

- Professor Daniel Galvão, Director, Exercise Medicine Research Institute
- Professor Rob Newton, Deputy Director, Exercise Medicine Research Institute
- Ms Catherine Bell, Business Manager, Exercise Medicine Research Institute
- Professor Dennis Taaffe, Professor, Exercise Medicine Research Institute

## **External Committee appointments**

- NHMRC Grant Review Panel (GRP) Member CTCs, Canberra, Daniel Galvão
- Research Grants Committee of the Medical and Scientific Advisory Panel, Cancer Council WA, Daniel Galvão
- National Research Advisory Committee, PCFA, Daniel Galvão
- 22<sup>nd</sup> Asia-Pacific Prostate Cancer Conference 2021, Organising Committee Allied Health, Daniel Galvão
- The Healthy Male Member, Board of Directors, Rob Newton
- Australian Research Council Medical Research Advisory Group, Rob Newton
- National Breast Cancer Foundation Peer Review Committee, Rob Newton
- Western Australian Health Translation Network Management Committee, Rob Newton
- Cancer Council WA Pre-doctoral Research Grants Advisory Subcommittee, Favil Singh
  - Western Australian Bone Research Collaboration Committee, Jodie Cochrane Wilkie
  - Raine Musculoskeletal Special Interest Group, Jodie Cochrane Wilkie
  - Editorial Board for BMC Sports Science, Medicine and Rehabilitation, Jodie Cochrane Wilkie

## Staff profile

#### Academic staff

- Professor Daniel Galvão, Director
- Professor Rob Newton, Deputy Director
- Professor Joanne Dickson
- Professor Dylan Edwards
- Dr Caitlin Fox-Harding
- Dr Kristina Kendall
- Associate Professor Philippa Lyons-Wall

#### **Adjunct Academic Staff**

Associate Professor Lauren Buffart VU University Medical Centre, Amsterdam

Associate Professor Vinicius Cavalheri South Metropolitan Health Service, Curtin University

**Professor Suzanne Chambers** Australian Catholic University

**Clinical Associate Professor Raphael Chee** GenesisCare and Perth Radiation Oncology

**Professor Kerry Courneya** University of Alberta, Canada

**Clinical Associate Professor Kynan Feeney** St John of God Hospital (Murdoch)

**Professor Frank Gardiner** Royal Brisbane and Women's Hospital

**Dr Nicolas Hart** Caring Futures Institute Cancer Survivorship Program, Flinders University

**Dr Emily Jeffery** Curtin University

**Clinical Professor David Joseph** Sir Charles Gairdner Hospital & GenesisCare

- Dr Georgios Mavropalias
- Dr Carolyn McIntyre
- Professor Ken Nosaka
- Dr Favil Singh
- Professor Dennis Taaffe
- Dr Onno Van Der Groen
- Dr Jodie Cochrane Wilkie

**Professor William Kraemer** The Ohio State University

**Professor Gary Lee** University of Western Australia Medical School

**Professor Fred Saad** Chum Research Centre, Université de Montréal

**Professor Christobel Saunders** University of Melbourne

**Clinical Associate Professor Tom Shannon** The Prostate Clinic

**Clinical Professor Aris Siafarikas** Princess Margaret Hospital

**Clinical Professor Nigel Spry** Exercise Medicine Research Institute

Associate Professor Colin Tang Sir Charles Gairdner Hospital and 5D Clinics

Clinical Associate Professor Daphne Tsoi St John of God Hospital (Subiaco and Murdoch)

**Dr Yvonne Zissiadis** GenesisCare and Fiona Stanley Hospital

## Staff profile (cont'd)

#### **Business Manager**

• Ms Catherine Bell

#### **Research Coordinators**

- Ms Christine Kudiarasu
- Mr Kyle Smith
- Mrs Cailyn Walker

#### **Vario Health Clinic**

- Mr Sam Adams Accredited Exercise Physiologist
- Ms Christine Kudiarasu Accredited Exercise Physiologist
- Mrs Nathalie Long Accredited Exercise Physiologist
- Mrs Claire Mason Accredited Exercise Physiologist
- Mr Jake Nimmo Accredited Exercise Physiologist
- Mr Simon Pratt Physiotherapist
- Mr Kyle Smith Accredited Exercise Physiologist
- Dr Angus Stewart Dietitian
- Ms Lydia Yap Accredited Exercise Physiologist

#### **Administrative Officers**

- Ms Audrey Cox
- Ms Jackie Gilbert

#### **NeuroMoves Clinic**

- Ms Jessica Barclay Accredited Exercise Physiologist
- Mr Vishaan Devchand Physiotherapist
- Mr Marco Kapp Accredited Exercise Physiologist
- Mr Joel Latham Accredited Exercise Physiologist
- Ms Hayley Paterson Accredited Exercise Physiologist
- Mr Daley Peters Accredited Exercise Physiologist
- Mr Nate Worthy Accredited Exercise Physiologist

# **Publications**

#### Research Articles (PubMed Indexed Papers [search: EMRI affiliation and year: 2021])

- Lopez P, Newton RU, Taaffe DR, Singh F, Lyons-Wall P, Buffart LM, Tang C, Hayne D, Galvão DA. Interventions for Improving Body Composition in Men with Prostate Cancer: A Systematic Review and Network Meta-analysis Med Sci Sports Exerc. 2021 Dec 21. doi: 10.1249/MSS.00000000002843. Online ahead of print.
- Kudiarasu C, Rohadhia W, Katsura Y, Koeda T, Singh F, Nosaka K. Eccentric-only versus concentric-only resistance training effects on biochemical and physiological parameters in patients with type 2 diabetes BMC Sports Sci Med Rehabil. 2021 Dec 20;13(1):162. doi: 10.1186/s13102-021-00384-z.
- Evans HEL, Galvão DA, Forbes CC, Girard D, Vandelanotte C, Newton RU, Vincent AD, Wittert G, Kichenadasse G, Chambers S, Brook N, Short CE. Acceptability and Preliminary Efficacy of a Web- and Telephone-Based Personalised Exercise Intervention for Individuals with Metastatic Prostate Cancer: The Exercise Guide Pilot Randomised Controlled Trial Cancers (Basel). 2021 Nov 25;13(23):5925. doi: 10.3390/cancers13235925.
- Wilson RL, Taaffe DR, Newton RU, Hart NH, Lyons-Wall P, Galvão DA. Obesity and prostate cancer: A narrative review Crit Rev Oncol Hematol. 2021 Nov 20;169:103543. doi: 10.1016/j.critrevonc.2021.103543. Online ahead of print.
- Green A, Winter N, DiGiacomo M, Oliffe JL, Ralph N, Dunn J, Chambers SK. Experiences of female partners of prostate cancer survivors: A systematic review and thematic synthesis Health Soc Care Community. 2021 Nov 10. doi: 10.1111/hsc.13644. Online ahead of print.
- Down MJA, Chivers P, Kirsch P, Picknoll D. Wellbeing and nature connectedness for emerging adult undergraduates after a short expedition: A small pilot study Health Promot J Austr. 2021 Nov 7. doi: 10.1002/hpja.555. Online ahead of print.
- 7. Wing C, Hart NH, Ma'ayah F, Nosaka K. Evaluating match running performance in elite Australian football: a narrative review BMC Sports Sci Med Rehabil. 2021 Oct 26;13(1):136. doi: 10.1186/s13102-021-00362-5.
- 8. Radaelli R, Taaffe DR, Newton RU, Galvão DA, Lopez P. Exercise effects on muscle quality in older adults: a systematic review and meta-analysis Sci Rep. 2021 Oct 26;11(1):21085. doi: 10.1038/s41598-021-00600-3.
- Seib C, Lazenby M, Dunn J, Chambers S. Considerations about risk of ongoing distress: what can we learn from repeat screening? Support Care Cancer. 2022 Feb;30(2):1011-1014. doi: 10.1007/s00520-021-06621y. Epub 2021 Oct 25.
- Zhang Y, Kim JS, Wang TZ, Newton RU, Galvão DA, Gardiner RA, Hill MM, Taaffe DR. Potential Role of Exercise Induced Extracellular Vesicles in Prostate Cancer Suppression Front Oncol. 2021 Sep 14;11:746040. doi: 10.3389/fonc.2021.746040. eCollection 2021.
- 11. Kim JS, Wilson RL, Taaffe DR, Galvão DA, Gray E, Newton RU. Myokine Expression and Tumor-suppressive Effect of Serum following 12 Weeks of Exercise in Prostate Cancer Patients on ADT Med Sci Sports Exerc. 2021 Sep 20. doi: 10.1249/MSS.00000000002783. Online ahead of print.
- 12. Kennedy MA, Bayes S, Newton RU, Zissiadis Y, Spry NA, Taaffe DR, Hart NH, Galvão DA. Implementation barriers to integrating exercise as medicine in oncology: an ecological scoping review J Cancer Surviv. 2021 Sep 12. doi: 10.1007/s11764-021-01080-0. Online ahead of print.
- 13. Stiller A, Goodwin BC, Crawford-Williams F, March S, Ireland M, Aitken JF, Dunn J, Chambers SK. The Supportive Care Needs of Regional and Remote Cancer Caregivers Curr Oncol. 2021 Aug 9;28(4):3041-3057. doi: 10.3390/curroncol28040266.
- 14. Thomas R, Kenfield SA, Yanagisawa Y, Newton RU. Why exercise has a crucial role in cancer prevention, risk reduction and improved outcomes Br Med Bull. 2021 Sep 10;139(1):100-119. doi: 10.1093/bmb/ldab019.
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