LA TROBE UNIVERSITY

Sport and Exercise Medicine Research Centre

LASEM ANNUAL REPORT 2020

La Trobe Sport and Exercise Medicine Research Centre

latrobe.edu.au/lasem

Contents

La Trobe University acknowledges that our campuses are located on the lands of many Traditional Custodians in Victoria and New South Wales. We recognise their ongoing connection to the land and value their unique contribution to the University and wider Australian society.

La Trobe University is committed to providing opportunities for Aboriginal and Torres Strait Islander people, both as individuals and communities, through teaching and learning, research and community partnerships across all our campuses.

The wedge-tailed eagle (Aquila audax) is one of the world's largest, and the Wurundjeri people – Traditional Owners of the land where our Melbourne campuses are located – know the wedge-tailed eagle as Bunjil, the creator spirit of the Kulin Nations.

There is a special synergy between Bunjil and the La Trobe University logo of an eagle. The symbolism and significance for both La Trobe and for Aboriginal people challenges us all to gamagoen yarrbat – to soar.

Cover image: The Australian Ballet's Principal Dancer Amber Scott participating in research using La Trobe's VICON 3-D motion capture cameras.

Published by La Trobe University, September 2021. La Trobe University is a registered provider under the Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS). CRICOS Provider 00115M.

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Overview

Our purpose is to lead, conduct and disseminate world class research to optimise an individual's chosen level of performance and participation in sport, exercise, physical activity, work, leisure, family and social life.

LASEM encompasses a unique collaboration between clinical and sports science, which has the capacity to make a real and positive difference to the health, wellbeing, performance and participation of individuals and communities.

Sport, exercise and physical activity play an important role in maintaining and improving physical, emotional and psychological health. La Trobe Sport and Exercise Medicine (LASEM) Research Centre's focus is to increase sport and exercise medicine knowledge through excellent collaborative research and translate knowledge to policy, practice, participation, health and wellbeing.

Optimising participation in active living is critical for health across the lifespan, and for those with health conditions. Equally important, is optimising performance in sport and exercise, which is vital to minimise the health cost burden and maximise an individual's potential performance in their chosen activity.

To improve performance and participation across the lifespan, and across the spectrum from chronic disease to elite sport, we need further education, training and rehabilitation interventions designed to improve performance and participation of Australians and to understand the short-term and long-term benefits of prevention.

Welcome Message from the Deputy Vice-Chancellor and Vice-President (Research and Industry Engagement)

The La Trobe Sport and Exercise Medicine (LASEM) Research Centre has an established record of high-quality research and academic publications. The Centre translates knowledge into the health sector, clinical practice, elite sport, and the community, where it has a transformational impact in injury prevention, non-surgical interventions, and quality of life. It is one of La Trobe's high profile research centres and links research excellence and impact with La Trobe Sport's impressive infrastructure.

LASEM's partnership with the Australian Football League (AFL), was extended in 2020, when La Trobe was awarded an NHMRC Partnership Grant. Other important partners include the Australian Physiotherapy Association, Medibank, AFL Victoria and the Australasian College of Sport and Exercise Medicine. This collaboration, led by La Trobe, will investigate whether supported implementation will enhance the uptake of Prep-to-Play in community women's football, and will therefore aim to reduce serious knee and head injuries in female players.

I am proud to share that GLA:D® Australia, an implementation program for Australians with hip and knee osteoarthritis, has now been rolled out to over 1,500 physiotherapists, and been delivered to more than 7,500 Australians with hip and knee osteoarthritis. To fulfil demand for GLA:D® during 140 days of lockdown, the team developed and delivered online GLA:D® training for 317 physiotherapists. Clinics and physiotherapists provided the GLA:D® program via telehealth to accommodate for physical distancing requirements.

As Director, Professor Kay Crossley has provided clear leadership for LASEM's team of researchers who produced an impressive volume of timely, real-world, and impactful research, disseminated globally. In 2020, the Centre produced 291 publications, supervised 55 HDR students and Centre members delivered presentations for 52 invited speaking engagements.

Within La Trobe University, LASEM staff received many awards in recognition of their successes, including:

- Professor Kay Crossley - Excellence in Graduate Research Supervision Award
- Dr Joanne Kemp - SHE College Early Career Research Excellence Award
- Professor Nick Taylor - SHE College Provost Research Excellence Award in HDR Supervision
- PhD graduates Dr Marg Perrot and Dr Denise Jones - the Nancy Millis Medal

LASEM researchers were also recognised through state, national and international awards:

- Professor Kay Crossley - Victoria Prize for Science, veski
- Dr Danilo de Oliveira Silva - Best PhD Thesis of Brazil, the Ministry of Education, Brazil
- Dr Sue Mayes - an Order of Australia (AM) for service to Physiotherapy

I hope that 2021 will bring us fewer restrictions and that LASEM continues to disseminate excellent research worldwide, creating impact and improving quality of life for communities and individuals.

Professor Susan Dodds

Welcome Message from the Director, LASEM

I always enjoy reflecting on the achievements and activities of the Centre. However, 2020 was a year like no other and COVID-19 restrictions resulted in major disruptions to our research activities (all clinical studies were put on hold), and many PhD candidatures.

As expected, 2020 was a difficult year for writing up research and writing grants. We also said farewell to Professors Anne Holland and Natasha Lannin, two very valuable, productive, and experienced members of our Centre, and we are happy that Tash, who has many ongoing projects with our team, will stay on as an Adjunct.

Our publications were down on 2019 totals, while international collaboration remained high (42%). Our external funding remained constant. In 2020 we secured a large NHMRC Partnership grant (Prep-to-Play $842,950 2021-2024 + $390,000 in industry funding), to explore the effects of a supported intervention (coach training) on the use of an injury prevention program for women's community football. And while many projects ground to a halt, we had a very successful launch of our TRAIL project, investigating the benefits and risks of running – one of the few activities that people could continue to do during lockdown!

LASEM comprises a collection of exceptional, enthusiastic, assiduous, and clever people, who work hard to support each other, and to achieve shared goals. Our greatest achievement in 2020 was our willingness and ability to help each other, and to do the best that we could, in such strange circumstances. We undertook many social activities to try and mitigate some of the negative impacts of working in isolation. Online initiatives such as daily Working From Home Activities (E.g., Yoga with Your 4-year-old) on LASEM's Facebook page were popular, and the Team LASEM Strava Challenge saw LASEM staff running, cycling, and walking the entire way around Australia (25,760km) as well as parts of Brazil and America (34,161 kilometres in total).

Online offerings to the greater clinical, public and student community were a success. We offered more virtual events and symposia than ever before, and high attendance was a huge win for the Centre.

I would personally like to congratulate the many LASEM staff and HDR candidates who won awards in 2020 (see pages 24-25 and 28). I would also like to thank Professor Peter Brukner and A/Prof Joanne Kemp for nominating me for the 2020 Victoria Prize and to veski and the Victorian government for honouring me with this prestigious award. I have never been more proud of the work that I do, and the people that I work alongside.

I hope that we start to see some light at the end of this very long tunnel soon, and I thank LASEM members for their dedication, friendship, and laughter.

Professor Kay Crossley

2020 LASEM facts

291
publications

$6.12m
funding

47
PhD students

48
active projects

52
invited speaking appointments

5
keynotes

145k
blog visitors

7583
Twitter followers +16%

3285
Facebook members +82%

67%
external funding to female lead investigators

2.7m
total media audience

8
PhD / Prof Doc Completions

LASEM **Advisory Committee**

The LASEM Advisory Committee provides strategic advice on the centre's research agenda

LASEM Executive	
Professor Kay Crossley (Chair)	Director, La Trobe Sport and Exercise Medicine Research Centre
Professor Peter Brukner	OAM, Professor, La Trobe Sport and Exercise Medicine (LASEM) Research Centre School of Allied Health, Human Services and Sport
Internal University Staff (Or nominee)	
Professor Rob Pike	Pro Vice-Chancellor, College of Science, Health and Engineering (SHE), La Trobe University
Professor Russell Hoye	Head of School, School of Allied Health, Human Services and Sport, La Trobe University
External Advisors	
Dr Darren Burgess	High Performance Manager – Melbourne Football Club, AFL
Professor Ewa Roos	Professor and Head of Research, Musculoskeletal Function and Physiotherapy and Center for Muscle and Joint Health, Department of Sports and Clinical Biomechanics, University of Southern Denmark
Professor Karim Khan	Professor and Clinician-Scientist, Department of Family Practice and the School of Kinesiology at the University of British Columbia
Professor Craig Purdam	Former Deputy Director of Athlete Services and the Head of Physical Therapies at the Australian Institute of Sport (35 years, until 2017)
Internal Advisors	
Professor Hylton Menz	Internal Advisor: Podiatry; LASEM Executive
Professor Paul Gastin	Internal Advisor: Sport and Exercise Science; LASEM Executive
A/Prof Jodie McClelland	Internal Advisor: Physiotherapy; LASEM Executive
Professor Kate Webster	Internal Advisor: SER RFA; LASEM Executive
Secretariat	
Marguerite Hawke	Senior Centre Administrator
Tara Amsterdam-Bagdas	Administration Officer

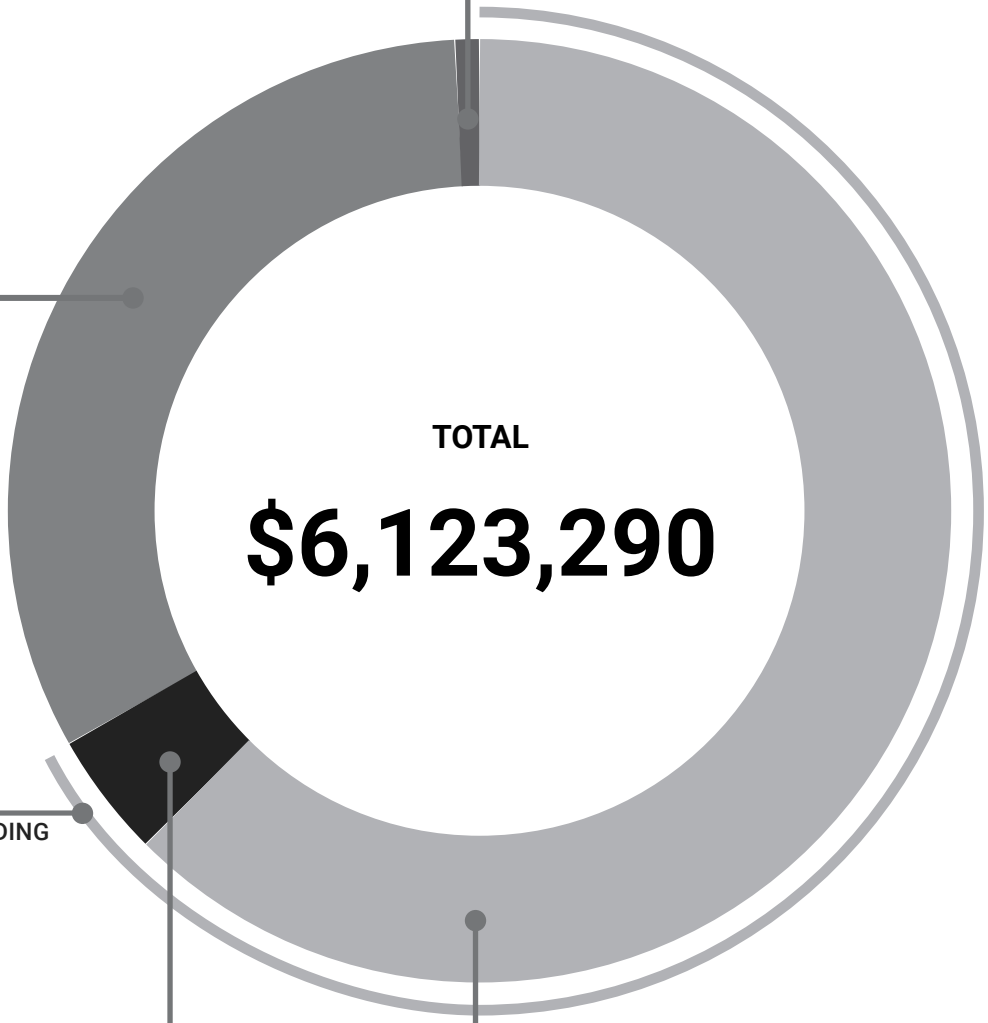
Terms of Reference

- The Advisory Committee will provide strategic advice, particularly from an expert and external perspective, on partnership and engagement opportunities with the aim to facilitate achievement of the Research Centre's strategic objectives
- The Advisory Committee has an advisory role and is not a decision-making body
- The Advisory Committee will be strictly bound to conduct itself according to the existing legislation, policies and procedures of the University
- These Terms of Reference outline the purpose, objectives and governance arrangements of a Research Centre Advisory Committee and provide a template for centres

Funding **summary**

1% $40,721

Internal RFA and Big Bids funding



33% $1,993,072

Internal University funding

67% $4,089,497

TOTAL EXTERNAL FUNDING

Comprising:

4% $262,401

Other external funding

63% $3,827,096

Externally funded research projects

Further detail available on page 34

LASEM **staff**

Lasem is led by an experienced team that understands the importance of scientific innovation and translatable research outcomes

Executive

Professor Kay Crossley, Director, LASEM Research Centre

Professor Jill Cook, LASEM Research Centre

Professor Peter Brukner, Adjunct Professor, LASEM Research Centre

Professor Paul Gastin, Head, Sport and Exercise Science

Professor Kate Webster, Director Sport Exercise and Rehabilitation Research Focus Area

Associate Professor Jodie McClelland, Head, Physiotherapy

Professor Hylton Menz, NHMRC Senior Research Fellow

Principal Research Fellow

Dr Anthony Schache, LASEM Research Centre

Senior Research Fellow

Dr Joanne Kemp, NHMRC ECR, LASEM Research Centre

Dr Christian Barton, MRFF TRIP Fellow, LASEM Research Centre

Dr Adam Culvenor, NHMRC ECR, LASEM Research Centre

Dr Ebonie Rio, NHMRC ECR, LASEM Research Centre

Research Fellow

Dr Clare Ardern, NHMRC ECR, LASEM Research Centre Adjunct

Dr Andrew Buldt, Research Fellow, LASEM Research Centre

Dr Sean Docking, Research Fellow, LASEM Research Centre

Dr Andrew Schaefer, Research Fellow, LASEM Research Centre

Dr Danilo de Oliveira Silva, Research Fellow, LASEM Research Centre

Dr Prasanna Sritharan, Research Fellow, LASEM Research Centre

Dr Richard Johnston, Research Fellow, LASEM Research Centre

Dr Andrea Mosler, NHMRC ECR, LASEM Research Centre

Dr Narelle Cox, NHMRC ECR, LASEM Research Centre Adjunct

Alesha Southby, Research Fellow, Physiotherapy

Dr Harvi Hart, Adjunct Research Fellow, SAHHSS

Dr Sue Slade, Research Fellow, SAHHSS

Dr Katia Ferrar, Research Fellow

Dr Matthew King, Research Fellow

Dr Allison Ezzat, Research Fellow

Dr Marcella Ferraz Pazzinatto, Research Fellow

Dr Eduardo Cofre Lizama, Research Fellow, Sport and Exercise Science

Dr Sallie Cowan, Research Fellow, LASEM Research Centre

Dr Haresh Suppiah, Research Fellow, Sport and Exercise Science

Research Officer

Christian Bonello, Research Officer, LASEM Research Centre

Karen Dundules, Research Officer, LASEM Research Centre

Matt Francis, Research Officer, LASEM Research Centre

Mick Girdwood, Research Officer, LASEM Research Centre

Mel Haberfield, Research Officer, LASEM Research Centre

Zuzana Machotka, Research Officer, LASEM Research Centre

Sally Coburn, Research Officer, LASEM Research Centre

Benjamin van Dorsselaer, Research Officer, Physiotherapy

Jamie Allan, Casual Academic, Podiatry

Alison Gibbs, Research Officer, LASEM Research Centre

Milly Bell, Research Officer, LASEM Research Centre

Eliza Roughead, Research Officer, LASEM Research Centre

Georgia Coburn, Research Officer, LASEM Research Centre

Tom West, Research Officer, LASEM Research Centre

Seb Evans, Research Officer, LASEM Research Centre

Matthew Wirdnam, Research Officer, LASEM Research Centre

Kylie Takarangi, Research Officer, LASEM Research Centre

David Thwaites, Research Officer, LASEM Research Centre

Namita Mehta, Research Officer, LASEM Research Centre

Administration

Marguerite Hawke, LASEM Senior Centre Administrator, EA to Director, Comms Editor

Tara Amsterdam-Bagdas, LASEM Administration Officer

Academic Affiliates

Professor

Professor Meg Morris, Clinical and Rehabilitation Practice, SAHHSS

Professor Nick Taylor, Physiotherapy

Professor Nora Shields, Physiotherapy

Professor Karl Landorf, Podiatry

Professor Dave Morley, Sport Coaching and Development

Associate Professor

Associate Professor Shannon Munteanu, Podiatry

Associate Professor Natasha Lannin, Adjunct Associate Professor, Occupational Therapy

Associate Professor Richard Newsham-West, Physiotherapy

Associate Professor Matt Driller, Sport and Exercise Science

Associate Professor Adam Semciw, Physiotherapy

Senior Lecturer

Dr Adrienne Forsyth, Senior Lecturer, Dietetics and Human Nutrition

Dr Clare MacMahon, Senior Lecturer, Sport and Exercise Science

Dr Sarah Anderson, Senior Lecturer, Prosthetics and Orthotics

Dr .Matthew Oates, Director of Learning and Teaching, SAHHSS and Senior Lecturer, Podiatry

Dr Andrew Hahne, Senior Lecturer, Physiotherapy

Dr Ben Mentiplay, Senior Lecturer, Sport and Exercise Science

Dr Daniel Bonanno, Senior Lecturer, Podiatry

Dr Casey Peiris, Senior Lecturer, Physiotherapy

Dr Matthew Varley, Senior Lecturer, Sport and Exercise Science

Lecturer

Deenika Benjamin, Lecturer, Physiotherapy

Dr Andrea Bruder, Lecturer, Physiotherapy

Dr David Carey, Lecturer, Sports Analytics

Dr Anthea Clarke, Lecturer, Sport and Exercise Science

Dr Andrew Govus, Lecturer, Sport and Exercise Science

Dr Lachlan James, Lecturer, Sport and Exercise Science

Sally Mastwyk, Lecturer, Physiotherapy

Dr Kane Middleton, Lecturer, Sport and Exercise Science

Dr Tania Pizzari, Lecturer, Physiotherapy

Dr Amy Dennett, Adjunct Lecturer, Physiotherapy

Dr Alex Roberts, Lecturer, Sport Coaching and Development

Dr Glen Whittaker, Lecturer, Podiatry

Dr Matthew Cotchett, Lecturer, Podiatry

Dr Joanne Wittwer, Lecturer, Physiotherapy

Dr Claire Willis, Lecturer, Sport and Exercise Science

Dr Karen Mickle, Lecturer, Sport and Exercise Science

Dr Minh Huynh, Lecturer, Sport and Exercise Science

Dr Carolyn Taylor, Lecturer, Physiotherapy, La Trobe Rural Health School

Alison Kuter, Lecturer, Physiotherapy

Jamon Couch, Lecturer, Physiotherapy

Jack Williams, Lecturer, Physiotherapy

Honorary

Adjunct Associate Professor Dr Ilana Ackerman, Associate Professor (Research), Clinical Epidemiology, Monash University

Adjunct Lecturer Dr Matthew Bourne, Research Fellow, Human Performance, Griffith University

Honorary Paul Coburn, Director, Mill Park Physiotherapy and Clinical Leader TAC and Worksafe

Honorary Adjunct Dr Natalie Collins, Chair of the Physiotherapy Research Foundation grant review committee, Lecturer in Physiotherapy, University of Queensland

Adjunct Associate Professor Dr David Connell, Medical Imaging and Radiation Sciences, Monash University

Honorary Adjunct Lecturer Randall Cooper, APA Specialist Sports and Exercise Physiotherapist, Olympic Park Sports Medicine Centre

Honorary Dr Eamonn Delahunt, Professor in the UCD School of Public Health, Physiotherapy and Sports Science, University College Dublin

Honorary Adjunct Professor Caroline Finch, Edith Cowan University

Adjunct Senior Lecturer Dr Lauren Fortington, Senior Research Fellow, injury epidemiology and injury prevention, Federation University

Adjunct Professor Karim Khan, Clinician-Scientist, Biology, Exercise and Health, Department of Family Practice, University of British Columbia

Honorary Adjunct Associate Professor Alex Kontouris, Lecturer, APA Sports Physiotherapist, Cricket Australia Sports Science and Sports Medicine Manager

Honorary Dr Laura Lallenec, Sport and Exercise Medicine Registrar, Olympic Park Sports Medicine Centre

Honorary Adjunct Associate Professor Dr Michael Makdissi, Sport and Exercise Physician, Olympic Park Sports Medicine Centre

Adjunct Research Fellow Dr Susan Mayes, Principal physiotherapist and medical team manager, The Australian Ballet

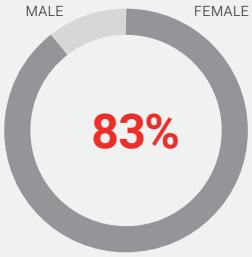
Adjunct Professor Ewa Roos, Associate Professor, Professor and Head of Research Musculoskeletal Function and Physiotherapy, Lund University, Sweden, University of Southern Denmark

Adjunct Professor Craig Purdam, Doctor of Science La Trobe University, Adjunct Professor University of Canberra

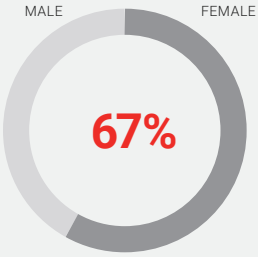
Adjunct Professor Julian Fellar, Melbourne orthopaedic surgeon, knee surgery, Orthosport Victoria, Epworth Hospital

Supporting women to excel in sport and exercise medicine research

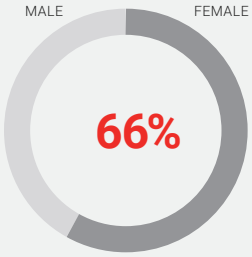
LASEM led by women



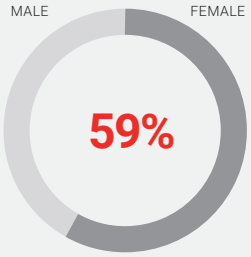
83% of domestic and international invited speaking appointments were by female researchers



67% of 2020 research projects have female Chief Investigators



66% of external funds (lifespan of project) secured by female Chief Investigators



59% of Higher Degree by Research (HDR) students supervised by LASEM members are female

PROJECT CASE STUDIES

Prep-to-Play

2600 women and girls playing community Australian Football

73% of Project Team are women (8/11)

GLA:D®

70% of 10,000 patients in registry are women

55% of GLA:D Australia staff are women (5/9)

Mental Fatigue in Professional Dancers study (TAB and La Trobe)

83% of the Academic Research Team are female

52% of dancers are female

50% of staff are female

Sport and **exercise science**

The start of 2020 saw the opening of the world class La Trobe Sports Stadium, the second stage of the La Trobe Sports Park development.

The Stadium includes our brand-new teaching and research laboratories (biomechanics, exercise physiology, performance analysis, strength and conditioning) and offices. The 6 indoor courts (fitted with player tracking technology), now complement the impressive outdoor facilities that include a FIFA-1 accredited synthetic football (soccer) pitch, AFL oval, and pavilion. The La Trobe Sports Park is also home to our partners La Trobe Sport, Softball Australia, the Northern Football Netball League, and ACHPER (Australian Council for Health, Physical Education and Recreation). We were very excited about the announcement in 2020 that La Trobe Sports Park will also become the home of the Australian Matildas, Football Federation Victoria and the State Rugby Centre in 2022.

Our Sport and Exercise Science researchers published >60 peer-reviewed manuscripts in 2020 - an impressive achievement given the tremendous challenge of transitioning to work from home and moving all teaching online in response to COVID-19. Our staff now encompasses 22 academics with a mix of teaching and research focusses. We were particularly excited to welcome Professor Dave Morley to head our Sport Coaching teaching and research programs, and A/Prof Matt Driller – a leading expert in sports physiology, sleep and recovery.

We are incredibly grateful for funding support during 2020 from our research partners which include the Australian Institute of Sport, Boston Red Sox,

Champion Data, Defence Science and Technology, Melbourne Rebels, Pressio, Vald Performance and Victoria Police.

Coinciding with increased staff and world class facilities, the number of HDR students has grown in Sport and Exercise Science, with 19 students now undertaking either a PhD or Masters by Research. This includes industry-funded PhDs and La Trobe University – Sheffield Hallam University Joint PhDs. Our staff continue to advertise opportunities for future HDR students and engage with new and existing partners to explore research projects. We were fortunate to have 8 Honours students in 2020, investigating topics ranging from the effects of cognitive fatigue on physical performance to exploring player movements in elite soccer, with 3 students going on to undertake a Masters in 2021. A further 5 students completed applied industry research projects as part of the Master of Sport Analytics. Representative of our vibrant research culture, a group of HDR students obtained funding from the Intellectual Climate Fund for graduate researchers for a 'paint your thesis' event.

The discipline has continued its outreach and development activities, including finalising our Research Capability Statement and Strategic Plan, the continuation of our successful fortnightly Sport and Exercise Science Research Seminars, and launching our Twitter account (@LaTrobe_SES).

The Women in Sport research group (Anthea Clarke, Clare MacMahon, Alex Roberts) surveyed 350 current students and graduates across all La Trobe degrees related to sport (e.g., Sport and Exercise Science, Physiotherapy, Sport Journalism) about their perceptions of readiness for entering the workforce. The findings indicated that students and graduates felt largely underprepared in the 'soft skills' required for the industry, particularly women. In 2021, the research team will start a career development and networking group for current women students in the Sport and Exercise Science course.

The discipline was able to secure a range of funding for projects in 2020. Some highlights included an industry-based PhD with performance apparel company Pressio Inc. (A/Prof. Matt Driller and Dr Lachlan James), funding for a post-doctoral researcher through Defence Science and Technology Group (Dr Clare MacMahon), and an Intellectual Climate Fund grant for graduate researchers (Danielle Vickery-Howe, Nick Busuttil, Luke Champion, Daniel Chalkley, Susanne Ellens and Todd Pickering).

Research team members:

Professor Paul Gastin
Dr Andrew Govus
Dr Benjamin Mentiplay
Dr Kane Middleton
Dr Lachlan James
Dr Clare MacMahon
Dr Anthea Clarke
Dr Matthew Varley
Alex Roberts
David Carey

Prep-To-Play

About 20,000 (up to 5%) of the >500,000 women who play Australian Football nationally are likely to sustain an anterior cruciate ligament (ACL) injury each year, with unacceptable personal costs and long-term burden on the healthcare system (estimated at >$380 million every year).

ACL-injured women have 4–6 times greater risk of knee joint osteoarthritis, more than twice the risk of requiring a knee joint replacement and 1.5 times the risk of chronic cardiovascular disease. Because ACL injuries occur at a young age (~20 years), the high burden of early-onset osteoarthritis often coincides with high occupational and parental responsibilities. Distressingly, women experience ACL injuries at more than twice the rate of men.

Despite strong evidence that Injury Prevention (IP) programs can reduce knee injury rates by ~50%, sustained high-fidelity program implementation is difficult. We aim to reduce known barriers to implementing evidence-based IP programs with our Prep-to-Play program: a co-designed program (with the Australian Football League (AFL), coaches and players) with innovative delivery methods to enhance uptake and post-research sustainability.

In partnership with the AFL, AFL Victoria, Medibank, the Australian Physiotherapy Association (APA), the Australasian College of Sport and Exercise Physicians (ACSEP), and Sports Medicine Australia (SMA), we will use a stepped-wedge, cluster randomised controlled trial to evaluate the implementation of Prep-to-Play in 2,500 female football players across two community football seasons. We will also determine the effectiveness of Prep-to-Play in reducing injuries, and its value for money (cost-effectiveness). A process evaluation will determine barriers and enablers to national implementation and sustainability.

Partnerships

The following organisations have provided valuable financial and in-kind support for the Prep-to-Play Project:

In 2017, **The Australian Football League** (AFL) established the inaugural Australian Football League Women's (AFLW) competition enabling women to compete in elite Australian football for the first time. The popularity of AFLW created unprecedented participation growth across all levels of women's football, such that 530,000 women and girls played in 2018 (> 40% growth). This research project represents a major commitment from the AFL to attempt to reduce the increased injury risk of female Australian footballers, and provides a blueprint for other National Sporting Organisations to follow suit. The proposed implementation strategies will translate into a sustainable product that will continue following the completion of this project.

AFL Victoria (formerly Football Victoria) is the state-level sport governing body for Australian Football in the state of Victoria, Australia. It oversees developmental, coaching, and umpiring bodies; 115 leagues, including the Victorian Football League, the Victorian Amateur Football Association, the

Victorian Country Football League, and all local metropolitan and country leagues; and 1,942 clubs, (not including the state's ten national-level clubs of the AFL).

Medibank Health oversees Medibank, Australia's largest health insurance provider with ~3.7 million members. This project aligns with Medibank's driving purpose: Better Health for Better Lives. Medibank Private is committed to helping Australians achieve a better quality of life. This project is highly responsive to the urgent need for our Australian Health Care system to reduce the burden of knee osteoarthritis and to increase physical activity levels by immediately reducing knee injury rates in women's football.

The Australian Physiotherapy Association (APA) represents the interests of Australian physiotherapists and their patients. With over 27,000 members, The APA is committed to professional excellence and career success for members, which translates into better patient outcomes and improved health conditions for all Australians. The APA has a respected and active voice in health policy, and their central strategic theme Choose Physio asks the community to recognise the benefit of choosing physio to optimise their health and well-being. Physiotherapists play an integral part in our train–the-trainer approach within Prep-to-Play.

The Australasian College of Sport and Exercise Physicians (ACSEP) is the pre-eminent professional body representing Sport and Exercise Physicians and Sport and Exercise Medicine in Australasia. Sport and Exercise Physicians are committed to excellence in the practice of sports medicine in all aspects of physical activity. Safe and effective sporting performance at all levels and the increasing recognition of the importance of exercise in the prevention and treatment of conditions such as arthritis, heart disease, diabetes and many cancers are central to ACSEP's vision. Prep-to-Play aligns seamlessly with ACSEP's purpose and values.

Sports Medicine Australia (SMA) provides leadership in sports exercise, sports medicine, sports science, sports injury, physical activity and the healthy performance and participation of Australians in physical activity and sport. SMA is acknowledged internationally as a leading multi-disciplinary sports medicine member organisation. SMA plays an active role in educating professionals and community members about safe participation in sport, recreation, and physical activity. Their Safer Sport Program provides parents, officials, coaches, trainers, teachers and participants with essential training and educational resources and Prep-to-Play aligns with the SMA's vision to encourage healthy participation and performance in sport and physical activity.

Find out more about the team's work:

https://coach.afl/female-football

NHMRC Partnership Grant APP1193733

Making football safe for women: implementing an IP program (2021-2024)

Chief Investigators: Prof Kay Crossley, Dr Christian Barton, Prof Natasha Lannin, A/Prof Ilana Ackerman, Prof Steven McPhail, A/Prof Michelle Dowsey, Prof Martin Hägglund, Dr Alex Donaldson, Prof Karla Hemming, Dr Michael Makdissi

Research Team Members

Brooke Patterson, Sallie Cowan, Matt King, Eliza Roughead. Sarah Lampard, Karina Chilman, Libby Birch, Melissa Haberfield, Christian Bonello, Josh Heerey, Sam Pietsch, Andrea Mosler, Andrea Bruder

Hip and groin pain **in footballers**

Hip and groin pain is common in the Australian Football League (AFL). Close to one fifth of drafted AFL players will have experienced a prior episode of hip and groin pain.

This is similar to findings in professional soccer, where groin injuries account for one in five time-loss injuries. Importantly, if hip and groin injuries are sustained during adolescence the player is at increased risk of future injury. Hip and groin injuries are burdensome, with up to 12 games lost per club during a competitive football season.

Hip and groin pain often represents a diagnostic challenge. Over the past decade, there has been increased focus on the hip joint as a cause of hip and groin pain. Imaging of the hip often reveals changes in the shape of the bone, such as cam morphology and/or intra-articular hip joint conditions such as labral tears. In recent years, a trend has emerged for surgical correction of bone shape and other intra-articular findings, sometimes in the absence of symptoms. This has occurred despite literature showing little relationship between bone shape, other intra-articular findings and the development of symptoms and/or early osteoarthritic changes.

Current Research

There is a need to investigate the ability of clinical screening and/or MRI findings to predict future development of hip and groin injuries in football players.

By tracking hip and groin symptoms in AFL draftee players over two years, we are investigating whether bone shape and other findings seen on MRI can predict pain. The information obtained from this study will help improve the management of young Australian football players with hip and groin pain, particularly related to rationalising the cost of imaging and minimising the requirement for surgery. Our specific aims are to:

- Describe the prevalence of imaging findings (e.g., bone shape, intra-articular conditions)
- Describe the association between imaging findings with clinical findings (e.g. strength and movement) and pain distribution in AFL draftees
- Describe the natural history of imaging and clinical findings over the following two years and explore the relationship between these findings at baseline, and development of hip and groin pain over subsequent years.

Recruitment

For the past 2 seasons, we have recruited and tested all AFL draftee players from nine of the Victorian Men's AFL Clubs (total approximately 70 players). Prior to the beginning of the season, each player has undergone MRI scans to establish hip bone shape and intra-articular findings, and completed questionnaires examining their past and present history of pain and training loads. We have also conducted a physical examination testing range of motion, muscle strength and a number of performance measures. We then monitor the player through the subsequent seasons for occurrence of hip and groin pain or injury, missed games and treatment required for this. We are now finalising data collection and anticipate the publication of results in 2022.

This project has been conducted in collaboration with the medical and physiotherapy staff of the Richmond, Hawthorn, Geelong, St Kilda, Carlton, Melbourne, Collingwood, Essendon and North Melbourne Men's AFL football clubs; Victoria House Radiology Clinic; and the AFL Doctors Association.

Research team members:

Professor Kay Crossley
Dr Anik Shawdon
Dr Michael Makdissi
A/Prof Joanne Kemp
Joshua Heerey
Mark Scholes
Mick Girdwood
Michael O'Brien
Dr Andrew Rotstein
Dr Jouren Li
Dr Shu Su
Dr Justin Roebert

Find out more about the team's work:

http://semrc.blogs.latrobe.edu.au/hip-pain/

GLA:D®

The success of our implementation program for Australians with hip and knee osteoarthritis continues to grow.

Led by A/Prof Christian Barton, A/Prof Joanne Kemp and Professor Kay Crossley, more than 1,500 physiotherapists have now been trained to deliver education and exercise therapy to people with hip and knee osteoarthritis.

When restrictions were placed on travel as part of the COVID-19 containment strategy, there was a strong impetus to be able to continue to provide high-quality, engaging, evidence-based training, so we moved our training online.

The GLA:D® Australia program has now been delivered to more than 7,500 Australians. In 2020, the clinics started offering the GLA:D® program via telehealth due to COVID-19 restrictions. 8 in 10 Australians who attended the GLA:D® program online considered themselves recovered and were satisfied with the program. Preliminary analysis of the data shows that participants completing GLA:D® via telehealth achieve similar outcomes to those who complete GLA:D® face-to-face.

In 2020, the GLA:D® Australia team delivered 4 online courses, training more than 300 physiotherapists with 97% of them being satisfied with the course. GLA:D® Australia is now offered in all states and territories, at 437 public and private physiotherapy settings.

Further details can be found in the GLA:D® Australia Annual Report 2020. https://gladaustralia.com.au/annual-reports/

Research team members:

Professor Kay Crossley
A/Prof Christian Barton
A/Prof Joanne Kemp
Dr Danilo de Oliveira Silva
Dr Marcella Ferraz Pazzinatto
Dr Joshua Heerey
Dr Allison Ezzat
Karen Dundules
Matt Francis

Find out more about the team's work:

https://gladaustralia.com.au/

Selected publications:

Wallis J, Ackerman I, Brusco N, Kemp J, Sherwood J, Young K, Jennings S, Trivett A & Barton C. Barriers and enablers to uptake of a contemporary guideline-based management program for hip and knee osteoarthritis: A qualitative study. Osteoarthritis and Cartilage Open, 2:2020. Doi: 10.1016/j.ocarto.2020.100095

Ackerman I, Skou S, Roos E, Barton C, Kemp J, Crossley K, Liew D & Ademi Z. Implementing a national first-line management program for moderate-severe knee osteoarthritis in Australia: A budget impact analysis focusing on knee replacement avoidance. Osteoarthritis and Cartilage Open, 2:2020. Doi: 10.1016/j.ocarto.2020.100070

Participation, physical **activity and chronic disease**

Participation

Feasibility of scaling-up a community-based exercise program (FitSkills) for young people with disability

FitSkills is a community exercise program designed to meet the physical activity needs of young people with disability, by matching them with a volunteer mentor to exercise together at their local community gym (twice a week for 12 weeks). The mentors are university students studying exercise science, physiotherapy, and occupational therapy.

We wanted to test if the FitSkills program would work for a bigger number of young people, with a bigger range of abilities and complexities, with mentors who had different skills and experience.

163 young people with disability, aged 13 to 30 years old, including 59 young people with cerebral palsy, took part in the study. 123 young people completed the whole FitSkills program, with most attending 19 of 24 exercise sessions. Changes to support participation included extra pre-exercise screening and risk assessments, extra mentor support, and in-person gym consultations with a health professional.

What the participants liked most about FitSkills was having someone to exercise with, having a regular exercise routine, and doing exercises set specifically for them by a health professional. Partners included Sport and Recreation Victoria, Cerebral Palsy Support Network, Down Syndrome Victoria, YMCA Victoria, Disability Sport and Recreation, Joanne Tubb Foundation and City of Boroondara.

http://doi.org/10.1080/09638288.2021.1903103

Selected publications:

Dennett AM, Peiris CL, Shields N, Taylor NF. 2020. From cancer rehabilitation to recreation: A coordinated approach to increasing physical activity. Physical Therapy 100: 2049-2059

Harrison AL, Taylor NF, Frawley HC, Shields N. 2020. A consumer co-created infographic improves short-term knowledge and self-efficacy of physical activity for women with gestational diabetes mellitus: a randomised trial. Journal of Physiotherapy 66:243-248

Harding KE, Snowdon DA, Prendergast L, Lewis AK, Kent B, Leggat SG, Taylor NF. 2020. Sustainable waiting time reductions after introducing the STAT model for access and triage: 12-month follow up of a stepped wedge cluster randomised controlled trial BMC Health Services Research 20:968

Shields N, Bennell KL, Radcliffe J, Taylor NF. 2020. Is strength training feasible for young people with Prader Willi syndrome? A phase I randomised controlled trial. Physiotherapy 106:136-144,

Eastern Health

My Therapy: New trial commencing at Eastern Health

My therapy is a self-management program that aims to increase the amount of occupational and physiotherapy that patients undertake by encouraging independent practice of exercises and activities. It is a stepped wedge randomised controlled trial, funded by a National Health and Medical Research Council partnerships grant. In 2021 and 2022, researchers from La Trobe and Monash Universities will evaluate the program across four health services: Eastern, Cabrini, Alfred Health, and Healthscope.

The program focuses on achieving goals in rehabilitation which are meaningful to patients, such as walking the dog, spending time with family, or getting back to playing sport. The program is anticipated to directly influence health service models of rehabilitation care, by improving patient function and quality of life, and the ability to self-manage health. Potential benefits include reduced hospital length of stay, improved access to rehabilitation and reduced health service costs.

Amy Dennett wins Victorian Cancer Association Research Fellowship

Dr Amy Dennett was awarded a highly competitive Victorian Cancer Agency Research Fellowship to continue her research into rehabilitation to improve outcomes for people with cancer.

Exercise is essential for optimising the health and wellbeing of cancer survivors and is promoted in national and international guidelines as best practice, yet only about 4% of Australian hospitals offering tailored cancer exercise programs.

Amy's research program aims to reshape perception of cancer rehabilitation and trial new ways of delivering of exercise-rehabilitation services through telehealth.

Tele-rehabilitation and traditional face-to-face rehabilitation will be compared within a health service setting and undertake a mixed-methods approach that considers the needs of consumers and health services in the development and evaluation of a comprehensive, sustainable tele-rehabilitation model that has the potential to vastly improve access to cancer rehabilitation services.

Research team members:

Professor Nicholas Taylor (Rehabilitation stream lead)
Professor Nora Shields (Disability stream lead)
Professor Luke Prendergast
Professor Judi Porter
Professor Jenny Watts
Dr Casey Peiris
Dr Katherine Harding
Dr Amy Dennett
Dr Paul O'Halloran
Dr Stacey Cleary
Dr Rachel Kennedy
Dr David Snowdon
Dr Kylee Lockwood
Alesha Southby

Project **FORCE**

Footballers often develop a condition in the hip joint known as femoroacetabular impingement or FAI.

FAI is caused by abnormal bone formation within the hip joint. This condition is known to play a role in the development of hip and groin pain and cause early hip arthritis. Findings from this study may help to develop targeted intervention strategies for managing this condition in the future.

Study Aims:

(i) evaluate changes in hip joint structure over 2 years; and

(ii) determine if factors such as hip joint force, hip muscle strength and hip joint range predict worsening of hip structure over 2 years in people with FAI.

Inclusion criteria:

- Male or female aged between 18-50 years
- Currently playing AFL or soccer at any level within Victoria
- Have had groin or hip pain for at least six months

Find out more about the team's work:

http://semrc.blogs.latrobe.edu.au/volunteer-for-research/force-trial/

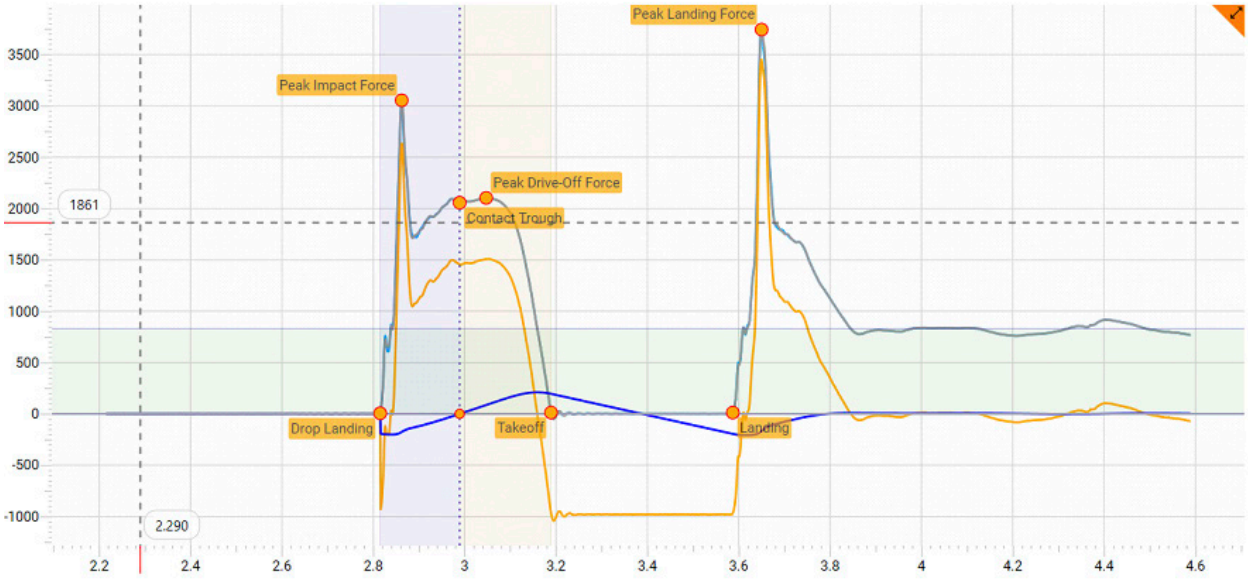
2020 Update

We extended the FORCe prospective cohort study to >5-year follow-up and our first 5-year participants passed their anniversary mid-2020.

2020 was a challenging year for FORCe project data collection. 44 participants, due for their two-year follow-up imaging, were delayed until 3-years, due to the COVID-19 pandemic. After a ~8-month delay, our 5-year participants will be followed up early in 2021, when data collection resumes following COVID-19 lockdown.

In good news, our annual questionnaire data collection procedures are all online, and proceeded as expected, with >70% retention of the cohort.

2020 started off well for the FORCe project with Matt King and Denise Jones submitting their PhD theses with their degrees conferred and officially becoming Doctors in May and August 2020 respectively!



Project FORCe

FORCe PhDs

A new NHMRC PhD scholarship recipient, Zuzana Perraton, commenced her project on *muscle size and quality in people with hip and groin pain.* Zuzana was also successful in receiving a Sports Medicine Australia grant and was awarded the Dr Brian Sando Award for her project submission.

Josh Heerey made the final touches to his PhD thesis *the relationship between hip-related pain, hip morphology and intra-articular findings in football players*, with submission due in February 2021.

Mark Scholes' rapidly progressed through his PhD project *running biomechanics and hip joint structure and symptoms in football players with hip-related pain*.

Chris Stewart continued to progress his Masters by Research project. Chris has particularly been involved in the machine learning process for defining Muscle morphology under the supervision of Dr Adam Semciw.

Research team members:

Professor Kay Crossley
A/Prof Joanne Kemp
A/Prof Adam Semciw
A/Prof Anthony Schache
Dr Andrea Mosler
Dr Ben Mentiplay
Dr Danilo De Oliveira Silva
Dr Peter Lawrenson
Dr Matthew King
Dr Denise Jones
Mark Scholes
Zuzana Perraton
Chris Stewart
Christian Bonello
Mick Girdwood

FORCe research outputs

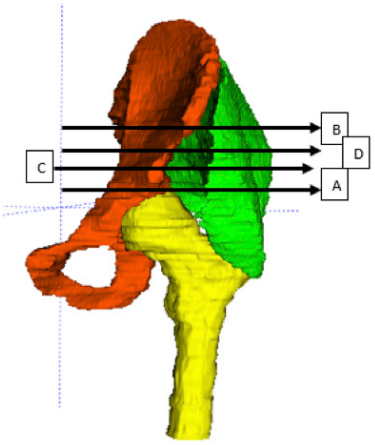
Five studies of the FORCe cohort were published in 2020.

Dr Matthew King investigated if lower limb biomechanics differ in football players with and without hip/groin pain. Overall, few differences were observed in lower limb biomechanics between football players with and without pain, irrespective of the task.

In a second study by Dr King, he compared the absolute and relative work variables in the lower limb in different movement tasks and evaluated the relationship between work done at the hip, knee, and ankle during the same tasks and the burden (severity) of pain. The team found that women with pain demonstrated a smaller relative contribution from the knee to total negative lower limb work done during a single leg jumping task and those players with greater pain, completed the SLDJ with less work at the hip, independent of sex.

Dr Peter Lawrenson compared anterior pericapsular muscle activity between individuals with and without femoroacetabular impingement syndrome during dynamic tasks. The activation of iliocapsularis was similar during active and assisted hip flexion, despite reduced flexion torque demand in the latter, suggesting a role in capsular retraction or enhanced hip joint protection.

Mr Joshua Heerey undertook two studies that investigated the relationship between hip joint imaging findings and pain. A high prevalence of bony hip morphology was observed on radiographs in football players with and without hip/groin pain. Further, using MRI, Mr Heerey found that the prevalence of cartilage defects and labral tears did not differ in football players with and without pain.



Selected publications:

King MG, Semciw AI, Schache A, Middleton K, Heerey JJ, Sritharan P, Scholes M, Mentiplay B, Crossley K. Lower-limb biomechanics in football players with and without hip-related pain. Med Sci Sports Exerc 2020;52(8):1776-1784.

King MG, Schache A, Semciw AI, Middleton K, Heerey JJ, Kemp JL, Sritharan P, Scholes M, Mentiplay B, Crossley KM. Lower-limb work during high- and low-impact activities in hip-related pain: associations with sex and symptom severity. Gait Posture 2020;83:1-8.

Lawrenson PR, Vicenzino BT, Hodges PW, Crossley KM, Heerey JJ, Semciw AI. Pericapsular hip muscle activity in people with and without femoroacetabular impingement. A comparison in dynamic tasks. Phys Ther Sport 2020;45:135-144.

Heerey JJ, Agricola R, Smith A, Kemp JL, Pizzari T, King MG, Lawrenson PL, Scholes MJ, Crossley KM. The size and prevalence of bony hip morphology does not differ between football players with and without hip and/or groin pain: Findings from the FORCe cohort. J Orthop Sports Phys Ther. In press 2020.

Heerey JJ, Srinivasan R, Agricola R, Smith A, Kemp JL, Pizzari T, King MG, Lawrenson PL, Scholes MJ, Souza RB, Link T, Majumdar S, Crossley KM. Prevalence of early hip OA features in high-impact athletes. The femoroacetabular impingement and hip osteoarthritis cohort (FORCe) study. Osteoarthritis Cartilage. In press 2020.

Study **trail running**

The TRAIL running study was launched in August 2020 and hit the ground running by successfully recruiting over 200 participants within 30 days.

The TRAIL study is internally funded by La Trobe Sport and Exercise Medicine (LASEM) Research Centre and utilises wearable technology, an electronic athlete monitoring system, 3D motion analysis, and a comprehensive physical function assessment, to explore the impact of running on knee joint health in people with and without a history of knee surgery.

Running is one of the most popular recreational activities worldwide with participation growing 58% in the past decade. Although running leads to many positive health effects, it is also accompanied by an increased risk of lower-limb overuse injuries. By using high-tech equipment and a thorough running assessment, the TRAIL team aims to monitor the trajectory of runners' knee joint health and overall clinical condition over a 2-year period.

Currently the TRAIL study has captured 6 months of training load data.

Running community Engagement

The TRAIL study currently utilises monthly podcasts, infographics, and social media to engage the community and shares knowledge via running and injury education.

Find out more about the team's work:

https://trail.latrobe.edu.au

TRAIL 6 months data collection

106

Runners who have had knee surgery

116

Uninjured Runners

Research team members:

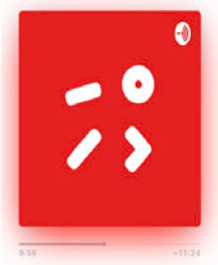
Professor Kay Crossley (Chief Investigator)
Dr Richard Johnston
Dr Adam Culvenor
Dr Danilo de Oliveira Silva
Dr Benjamin Mentiplay
Dr David Carey
Dr Christian Barton
Melissa Haberfield
A/Prof Adam Semciw
Dr Anthony Schache
Professor Stuart Warden
Dr Andrea Bruder
Dr Prasanna Sritharan
Christian Bonello
Dr Matt King

Students

Paula Pappalardo
James L. Alexander
Tom West
Michael Hedger

TRAIL running ambassadors

Ellie Pashley
Tyler Scarce



Partnership with **The Australian Ballet**

Despite dancers training in their lounge rooms for most of the year, 2020 was a productive year for the La Trobe University and The Australian Ballet Partnership.

Partnership highlights included:

- 96 dancers and staff signed up to La Trobe's LinkedIn Learning initiative
- 16 dancers completed La Trobe's bespoke 'Beyond the Barre' Career Ready workshops
- 6 dancers enrolled in La Trobe Elite Athlete Program (LEAP)
- Audience of approximately 358,000 for The Australian Ballet's Online broadcast of Cinderella and Spartacus, with La Trobe as Presenting Partner

Professor Jill Cook, Dr Sue Mayes (The Australian Ballet) and Professor Kay Crossley presented *A Joint Effort: Understanding what's good for your joints*. This live online broadcast brought together the leading experts from LASEM, La Trobe University and The Australian Ballet to share valuable insights into traditional and emerging options for treating and protecting joints. The researchers were joined by The Australian Ballet's Principal Dancer, Amber Scott, who provided insight into the impact of the research, from a dancer's point of view.

The discussion was recorded and can be viewed at https://www.latrobe.edu.au/industry-and-community/industry-partner-of-choice/ballet/a-joint-effort *(see pg 27 for image).*

We are grateful to The Australian Ballet Ambassador Program for providing funding in support of research initiatives and the appointment of Post Doctoral Researcher, Dr Katia Ferrar.

Find out more about the team's work:

http://latrobe.edu.au/ballet

Achievements

- The inaugural Bronwyn Schlotterlein PhD Scholarship was awarded to an international candidate (Ana Azevedo, commencing July 2021). The project *Foot and ankle pain in dance, sporting and clinical populations: the role of intrinsic foot muscles* will explore the role of intrinsic foot muscles in a clinical heel pain population and use MRI and ultrasound in dancing and sporting populations, to explore the relationship between intrinsic foot muscle morphology and clinical and performance measures
- Dr Katia Ferrar, La Trobe University & The Australian Ballet Research Fellow, was appointed a member of the International Association for Dance Medicine & Science (IADMS) Research Committee 2020-2022

Project updates

- Data analysis finalised for HDR student (C Harrison) project: Wellbeing in Dancers [1]
- Data analysis complete (including tracing of MRI muscle size) and manuscript under development for HDR candidate (R Cowan) study *comparing gluteal muscle size and quality in professional ballet dancers with non-dancing controls*
- Data analysis was finalised for HDR student (P Baillie) project: *Posterior Ankle Impingement in Dancers*
- *Direct effects of pointe shoes on ballet dancers' biomechanics, muscle activity, movement and symptoms: A scoping review* was completed in late 2020. (K Madden, S Mayes, J Cook and K Ferrar_
- A systematic review titled *Performance quality tests used in modern and classical dance: a systematic review* was commenced. (C Bonello, M Wirdnam, S Mayes, J Cook and K Ferrar)

Research team members:

Dr Sue Mayes AM

Prof Jill Cook

Dr Katia Ferrar

Dr Ebonie Rio

Professor Russ Hoye*

Dr Clare MacMahon, Sport and Exercise Science - Motor Learning and Skilled Performance

A/Prof Adam Semciw

Dr Karen Mickle

A/Prof Jodie McClelland

Dr Matt King

Dr Pam Kappelides*

Matthew Wirdnam

Christian Bonello

Kate Madden

Jason Brown, Employability & WIL

Dr Scott Ruddock, School of Psychology and Public Health

Dr Paul O'Halloran, School of Psychology and Public Health

Dr Mandy Ruddock-Hudson, School of Psychology and Public Health

Dr Jason Lam, The Australian Ballet

Dr Peter Smith

Debbie Stuart

Sophie Emery

A/Prof Helen Frawley (University of Melbourne)

HDR Candidates: P Baillie, R Cowan, C Harrison

*funded by TAB Education and Outreach evaluation project

1. Harrison, C., Ruddock-Hudson, M., Ruddock, S., Mayes, S., Cook, J., O'Halloran, P., and Ferrar, K. (2020b).Self- reported wellness in training and performance: a comparison of professional ballet dancers and professional athletes. Medical Problems of Performing Artists., 35 (4), 196-201. https://doi.org/10.21091/mppa.2020.4028

Awards

Victoria Prize for Science - Professor Kay Crossley

The highlight of the year for all of us at LASEM was the announcement in November that our amazing leader Professor Kay Crossley had been awarded Victoria's highest scientific honour, the Victoria Prize for Science and Innovation, in the Life Sciences category.

Kay is the first physiotherapist to win the award and only the fourth woman. All of us at LASEM are so proud of Kay's achievement, which not only recognises her own fabulous contribution, but is also a great credit to LASEM and all of her colleagues.

From the Office of the Premier of Victoria

The Victoria Prize acknowledges exceptional professional achievement, supporting innovators to continue their important work – forging new frontiers and developing the technologies and treatments that improve quality of life for people around the world.

Professor Kay Crossley of La Trobe University received the $50,000 Victoria Prize for Science and Innovation in the Life Sciences for an eminent career that includes the development of exercise-based treatments for hip and knee pain and osteoarthritis, revolutionising the prevention and management of hip and knee pain and early onset osteoarthritis.

Under her leadership, the La Trobe Sport and Exercise Medicine Research Centre has come to be regarded as a world-leading institution.

From the Office of the Vice Chancellor, La Trobe University

"Being amongst the top scientists in Victoria takes an enormous amount of hard work, passion, talent and determination," Professor Dewar said.

"Professor Crossley is not just an outstanding leader, she is a true pioneer of cutting-edge physiotherapy research. As a University that aims to ensure a healthy, safe and equitable life course for everyone, La Trobe is extremely proud of Professor Crossley, and the global impact her work continues to have."

From the La Trobe Media Team

Congratulations to world-renowned physiotherapist and La Trobe University Professor, Kay Crossley, who was awarded Victoria's highest scientific honour this week.

Her research has led to optimised identification, treatment and prevention of musculoskeletal conditions and could prevent patients from spending millions of dollars on unnecessary and risky procedures.

Professor Crossley, whose 35-year career began as a sports physiotherapist at the Olympic Park Sports Medicine Centre, said she felt proud and excited that her work had been acknowledged with the Victoria Prize.

"I am committed to reducing the burden of hip and knee injuries, pain and osteoarthritis in younger and older Victorians, and to training and mentoring the next generation of researchers," Professor Crossley said.

"There is no higher honour for scientists in Victoria and I am humbled to join the list of wonderful Victoria Prize recipients. I hope to use this award to promote women scientists in Victoria and support them to achieve their potential."

Awards and **achievements**

Staff Awards

Order of Australia

Dr Sue Mayes was awarded an Order of Australia (AM) for service to Physiotherapy

Early Career Research Excellence Award, Vice Chancellor's Staff Awards, December 2020

Dr Joanne Kemp (SAHHSS)

For outstanding research focussed on hip pain and osteoarthritis across the lifespan. Dr Kemp leads a research program to determine the best non-surgical and surgical treatments for adults of all ages suffering from hip pain.

Excellence in Graduate Research Supervision Award, Vice Chancellor's Awards

Professor Kay Crossley

In recognition of Professor Crossley's leadership through establishing the Knowledge Translation Accelerator Program that has created an environment for research training which develops her candidates' skills in research translation, communication and community engagement, along with an inclusive culture through flexible working, family support for research travel, mentorship and ensuring gender balance in supervisory teams. Her candidates have been hugely successful in undertaking impactful research in their own research careers.

Research Excellence Award in HDR supervision, SHE College Provost Awards, August 2020

Professor Nick Taylor (SAHHSS)

For outstanding research supervision. Of Professor Taylor's 30 students, eight have won the highest award for PhD theses at La Trobe University. Professor Taylor instils a value for rigorous and relevant research that has led to successful academic careers for almost all of his students.

Teaching Awards, SHE College Provost Awards

Dr Adrienne Forsyth

For using best practice online educational design to extend access to an introductory nutrition subject for a diverse range of learners.

Staff Achievements

In March alone, 4 papers from LASEM authors were published in BJSM and in November, LASEM ran its first online symposium (the Return to Sport Symposium), complete with virtual workshops attended by 112 participants. Meanwhile, Dr Katia Ferrar was appointed a member of the International Association for Dance Medicine & Science (IADMS) Research Committee for 2020-2022.

Dr Joanne Kemp appointed:

- Editor BJSM
- Chair Australian College of Physiotherapists Portfolio Pathway working party
- Scientific Committee, Oxford University Young Adult Hip Consensus

Dr Andrea Mosler appointed:

- Associate Editor BJSM
- IPHP Associate Editor of BJSM
- Associate Editor JSAMS
- Scientific Committee Oxford University Young Adult Hip Consensus

Virtual teaching **and seminars**

2020 was a challenging year for professional development, as face-to-face contact disappeared, and was replaced by the all-too-familiar zoom.

Living rooms were transformed into lecture theatres, as experts shared their knowledge from suburban kitchens and coastal hideaways.

One unexpected benefit of moving online was that it reduced barriers to attendance and created new opportunities for colleagues to connect across the globe.

HDR Student Showcase

Our team partnered with IFSPT, BJSM and JOSPT in late October to bring this online event to life. The event was a stage for upcoming sports medicine researchers to engage with the broader sports-medicine research community.

The event was bookended by 7 international professorial keynote speakers and gave HDR students from around the world the opportunity to present. Over the two-day showcase, more than 400 twitter posts were created, reaching almost 450,000 twitter users and making 1,673,790 impressions.

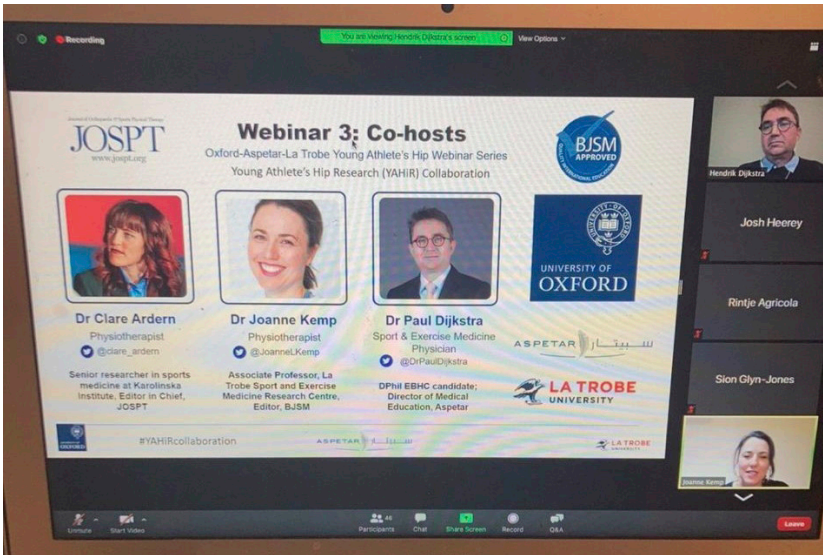
The audience voted on the People's Choice Award at the end of each session, and these were won by HDR students from Denmark, Canada and Qatar. It was a wonderful opportunity to allow our HDR students to connect with and hear about the work of their international colleagues during the pandemic, when visits that normally facilitate international collaboration are not possible. Sessions were structured so there was a time to suit everyone, making it a truly global event.

Keynote speakers included Professors Kay Crossley, Jill Cook, Inger Mechlenburg, Kristian Thorborg, Karim Kahn and Karin Silbernagel

Of the 98 attendees surveyed 92% agreed that the content was engaging, high quality and clinically relevant.

98% said they would trust LASEM as a source of current knowledge about clinical sports medicine and rehabilitation.

100% said they would register again.



'A Joint Effort' with The Australian Ballet

Professor Jill Cook, Dr Sue Mayes (The Australian Ballet) and Professor Kay Crossley presented *A Joint Effort: Understanding what's good for your joints.* Over 737 watched the live broadcast and social media reach was estimated at 283,000. Attendees included members of the general public, allied and medical health professionals, allied health students, dance teachers and dancers.

The discussion was recorded and can be viewed at https://www.latrobe.edu.au/industry-and-community/industry-partner-of-choice/ballet/a-joint-effort

Live Q & A

In 2020, the professional development team swiftly pivoted to running all events online.

Starting with a bang, Dr Sean Docking hosted a LASEM Expert Q & A Series. Six Live Q & A Session were hosted in 2020. Thirteen guests contributed to the sessions, from Professors to PhD and master's by research students.

Guests included: Professor Jill Cook, Professor Hylton Menz, Dr Ebonie Rio, Dr Christian Barton, Dr Tania Pizzarri, Dr Andrea Mosler, Brooke Patterson, Dr Adam Culvenor, and Merridy Lithgow, James Alexander, Myles Murphy.

Attendees hailed from 43 countries in total, the majority of which were located in Oceania (50%), closely followed by Europe and North America. Each session was attended by more than 150 participants (and in some cases up to 500!). All up the series had 3708 views.

Return to Sport Symposium

Held over two evenings in November (19th and 20th), the RTS symposium was our first attempt at providing a paid symposium online. Participants were treated to separate presentations by experts in the field during the first session.

Next, interactive sessions included workshops, each lasting more than 45 minutes, with Professor Jill Cook, Associate Professor Kate Webster, Dr Michael Makdissi, Dr Lachlan James, Paula Peralta, Denis Jones and Brady Green.

Externally run events

Researchers from the Centre also contributed to:

- Oxford-La Trobe-Aspetar Hip Webinar Series
- BJSM Podcasts (Dr Andrea Mosler, Dr Ben Mentiplay and Dr Brooke Patterson)
- JOSPT Asks (Dr Joanne Kemp)
- APA Webinars
- SMA (Dr Ebonie Rio)

La Trobe Sport's High Performance Seminar Series.

Several staff presented as part of La Trobe Sport's *High Performance Seminar Series.* Topics included:

- Sleep and recovery (A/Prof. Matt Driller)
- Female athletes and elite performance (Dr Anthea Clarke & Dr Brooke Devlin (Dietetics and Human Nutrition))
- Being a coachable athlete (Prof. Dave Morley)

Higher degrees **by research**

Awards

- Marg Perrot and Denise Jones were both awarded the Nancy Millis Medal in recognition of the exceptional quality of their PhD theses. This medal is only awarded to the top 5% of PhD graduands.
- Danilo De Oliveira Silva was awarded Best PhD Thesis of Brazil, by the Ministry of Education and won Best Elevator Pitch for Innovative Theses at Sao Paulo State University.
- Leanne Rees won the The Spinal Research Institute, 2020 SCI Research Writing Prize – Judge's Choice Award for her submission Reading Between The Lines: Media Portrayal of Spinal Cord Injury.
- Zuzana Perraton received a Sports Medicine Australia grant and was awarded the Dr Brian Sando Award for her project submission.
- Leanne Rees won the 2020 SAHHSS 3MT People's Choice Award.
- Brodwen McBain was the 3MT Allied Health runner up for 2020.
- Matt King was awarded the SAHHSS Writing Up Award for writing up his thesis.

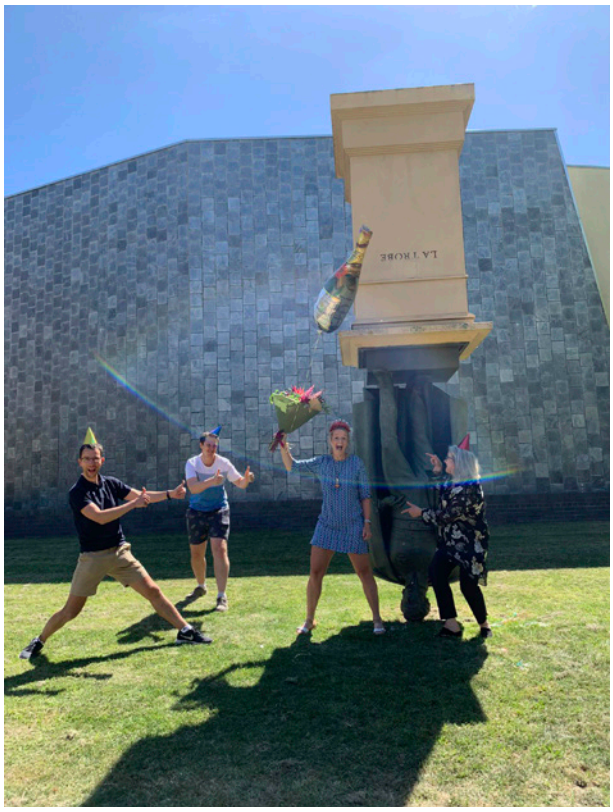
Student Grants

Milly Bell received a grant from Cabrini Hospital for $30,000 to investigate using a supported motivational intervention (SUMIT} to improve physical activity in people with knee osteoarthritis.

Mark Scholes received a grant from the Physiotherapy Research Foundation for $9,982 to investigate the immediate effect of running retraining on hip joint pain and biomechanics in people with hip-related pain.

2020 Completions

Candidate	*Supervisors*	*Subject*	
David Carey	Meg Morris, Kay Crossley, Kok-Leong On	Modelling training loads and injury in Australian Football	PhD
Denise Jones	Joanne Kemp, Kay Crossley, Ilana Ackerman, Harvi F.Hart	Physical activity and return to sport following arthroscopy for hip related pain	PhD
Jade Tan	Hylton Menz, Kay Crossley, Shannon Munteanu, Natalie Collins	The effect of foot orthoses in individuals with patellofemoral osteoarthritis	PhD
Marg Perrott	Jill Cook, Tania Pizzari	The influence of lumbo-pelvic stability on injury in athletes	PhD
Margie Schache	Kate Webster, Jodie McClelland	Effectiveness of hip abductor strength training in people following total knee arthroplasty	PhD
Matthew King	Kay Crossely, Adam Semciw, Anthony Schache, Kane Middleton	Biomechanics of hip related pain and implications for rehabilitation	PhD
Sarah Gilmore	Jodie McClelland, Andrew Hahne, Megan Davidson	Physiotherapy management of patients before and immediately after lumbar spinal surgery	PhD
Justin Crow	Tania Pizzari, Adam Semciw	The use of therapeutic exercise to target the temporal characteristics of muscle activation following hamstring muscle strain injury in elite professional Australian rules football players.	Prof Doc



2020 LASEM Higher Degree by Research (HDR) students

PhDs

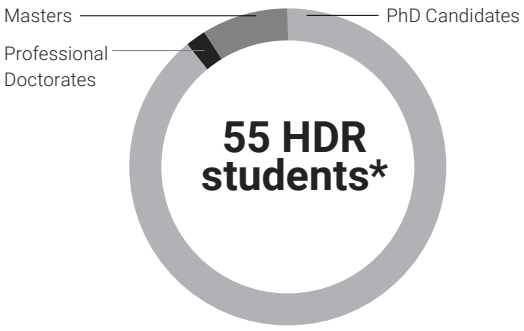
Alison Gibbs
Andrea Lewis
Anne Harrison
Anthony Goff
Anthony Nasser
Bradley Thoseby
Brady Green
Brodwen McBain
Brooke Patterson
Cara Schofield
Carly Harrison
Chantel Rabusin
Deenika Benjamin
Emma Schneider
Georgia McKenzie
Hazel Heng
Helen Kugler
James Gerrard
Jemma Coleman
John Osborne
Joshua Heerey
Karl Espernberger
Kellie Emmerson
Kim Jennings
Leanne Rees
Lyndon Hawke
Made Rimayanti
Madeline Hannington
Mark Scholes
Marlena Calo
Melissa Mazzarino
Merridy Lithgow
Michael Girdwood
Michael O'Brien
Milly Bell
Nirmeen Hassan
Rachael Cowan
Rachael McMillan
Rebecca Peek
Rita Kinsella
Sally Coburn
Samuel Pietsch
Sarah Grimshaw
Sirawee Chaovalit
Thomas West
Yeshna Bhowon
Zuzana Perraton

Masters

Daniel Verdon
David Thwaites
James Alexander
Joel Smith
Christopher Stewart
Peta Baillie
Sally Mastwyk

Professional Doctorates

Paul Joseph Visentini



* 55 Higher Degree by Research (HDR) students supervised by LASEM members, including 47 PhDs, 7 Masters by Research and 1 Professional Doctorates

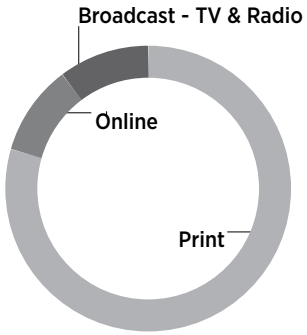
Media and **knowledge translation**

As always, women's health and women in sport were popular topics covered by LASEM in the media.

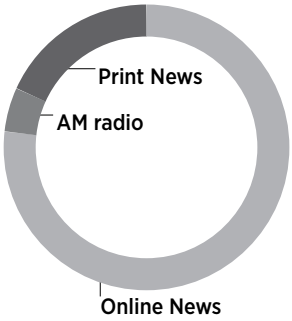
Kay Crossley's coverage on **ACL injury risk and prevention** for female footballers and the potential link between **menstruation and injury** attracted an audience of 147,000, with her radio interviews attracting 106,000 listeners.

The topic of **concussion** also attracted media attention is 2020, with **Peter Brukner's** interviews on the topic being published 26 times (691,000 total concussion newspaper and online audience) **COVID-19** themes (working from home, returning to sport etc.) were also popular, with **Christian Barton's** newspaper interview in *Is Your Home Office Messing with Your Health?* attracting an audience of 1.2m alone, and **Ebonie Rio and Melissa Haberfield's** story *Physiotherapists on the Functional Exercises Everyone Should Do From Home (and They Do Themselves)* attracting significant attention. **Brooke Patterson's** coverage around *Injuries associated with return to sport after lockdown* was syndicated more than 17 times and her radio interview attracted 16,000 listeners across the nation.

Audience breakdown



Media breakdown



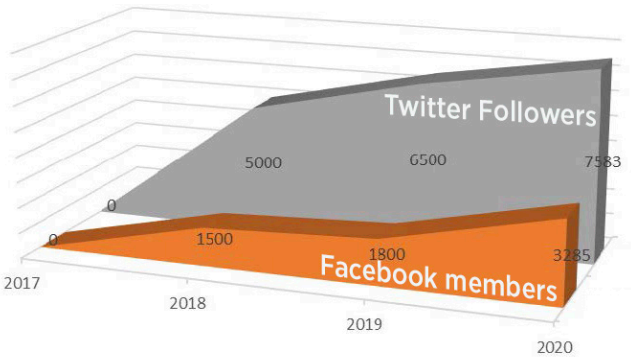
Audience

2.7m

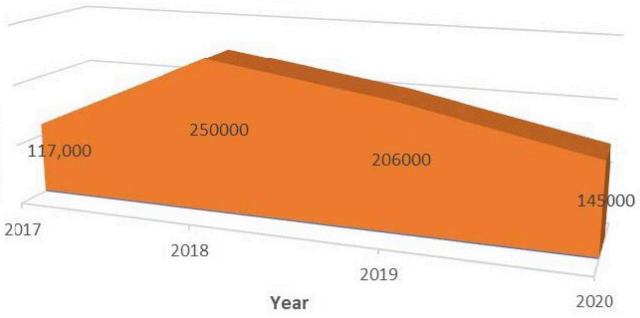
LASEM's social media following saw a significant upswing during 2020, potentially due to life becoming virtually focussed during state-wide lockdown.

However, due to staff resourcing issues there was no oversight on the blog, and therefore a significant reduction in story upload (i.e. less available content for consumption of followers), resulting in less views.

Facebook & Twitter



Blog readership



Dissemination

At LASEM we are passionate about translating our research for the community, including health professionals and the broader public.

In 2020, several conferences were cancelled due to the COVID-19 global pandemic, resulting in dramatically reduced invited speaking appointments.

However, there was an increase in our virtual presence with 'conference attendence' converted into webinars, virtual symposia and podcasts.

In 2020, lasem members undertook 52 invited speaking appointments (32 domestic/20 international), including 5 keynotes

HIGHLIGHTS

LASEM members were invited to deliver lectures in the **Oxford University Young Adult Hip Webinar series** (11 webinars, November 2020 – September 2021). 2020 contributions included: *What is primary cam morphology? Taxonomy, terminology and definitions* (Clare Ardern, Paul Dijkstra, Siôn Glyn-Jones, Karim Khan), 20 November, 2020 and *Imaging strategies for primary cam morphology and FAI syndrome* (Paul Dijkstra, Ara Kassarjian, Joanne Kemp, Andrea Mosler, Eugene McNally, Antony Palmer with Bruce Forster and Scott Fernquest), 11 December 2020.

Professor Jill Cook was invited to present *what is the pathophysiology and pathoaetiology of a tendon injury?* at the **BARÇA Innovation Hub - Sports Tomorrow. Online. 2020** Dr Ebonie Rio also delivered 5 invited presentations at the conference: *the tendon injuries landscape (epidemiology of tendon injuries in football) and risk factors, FCBarcelona way - epidemiology studies, what is the pathophysiology and pathoaetiology of a tendon injury?, introduction overview of tendon guide* and *how does a tendon injury manifest clinically*?

In February 2020, Dr Tania Pizzari was invited to present on *pre-operative assessment and management and the challenges of post-discharge recovery* at the **1st Qatar Arthroscopy Conference** (7-9 February, 2020 - Doha, Qatar).

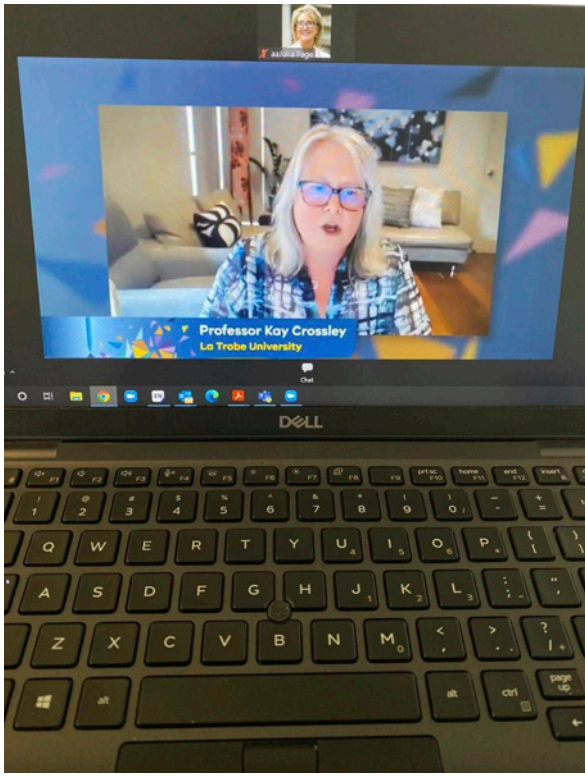
PhD Candidate Jemma Coleman was invited to present at the **5th International Conference on Soldiers' Physical Performance** on *The Soldier Behind the Weapon: Context Driven Tactical Marksmanship*, (February 11-14, 2020 - Québec City, Canada) on her and Dr Kane Middleton's paper *the effects of mass and mass location on shot time.*

PhD Candidate Brodwen McBain was an invited speaker at **12APFSSH/8APFSHT 2020 Congress** (the 12th Asian Pacific Federation of Societies for Surgery of the Hand (APFSSH) in collab with the 8th Asian Pacific Federation of Societies of Hand Therapists (APFSHT) triennial meeting. (March, 2020 - Melbourne).

Professor Hylton Menz and Dr Ebonie Rio were invited to speak at the **Australian Podiatry Association (APodA) Virtual Symposium**: Older & Stronger - Progress at any Age (7 November, 2020).

Professor Meg Morris delivered a keynote address at **Insight - Parkinson's Future Fronteirs International Conference** (31 March - 2 April, 2020 - Melbourne) on *exercise for brain plasticity in Parkinson's.*

Dissemination **podcasts**



PROFESSOR JILL COOK

The Prehab Guys, May 2020, Episode 26, Talking Tendons With Jill Cook

https://www.youtube.com/channel/UCZOrpZTHi21RZpnxXdlJbgQ

SmartEducationPodcast, May 2020, Lower Limb Tendinopathy https://www.spreaker.com/user/smarteducation/smart-education-jill-cook

Physiotutors Podcast, Episode 020, Jill Cook – Tendinopathy Rehab 101 https://www.youtube.com/watch?v=ijJLSzBy6mM

Jacked Athlete Podcast #23, July 2020, Patellar Tendinopathy vs. Patellofemoral Pain with Jill Cook

https://jackedathlete.com/podcast-23-patellar-tendinopathy-vs-patellofemoral-pain-with-jill-cook/

The Young Athlete Podcast: Tendon Injuries in Young Athletes https://www.youngathletepodcast.com/episode-8.html#/

DR EBONIE RIO

Physiopedia, March 2020, Ebonie Rio - Managing Tendinopathy During COVID19 Lockdown

https://www.youtube.com/watch?v=Xd_9ME5iH8Q

Inform Performance Episode #19, May 2020, Dr Ebonie Rio (Lower Extremity Tendon Management)

https://www.youtube.com/watch?v=bCheOPMSHPU

The Brick Session Podcast with Mark Livesey, August 2020, Tendon Injury, Rehabilitation and understanding pain

https://podcasts.apple.com/gb/podcast/the-triathlon-brick-session/id1196334770

The Physical Performance Show, Episode #222, The difference between tendinopathy and tendonitis and why terminology matters

https://www.pogophysio.com.au/blog/ebonie-rio/

Physio Explained by Physio Network, Episode #1, September 2020, Talking tendinopathy with Dr Ebonie Rio

https://www.physio-network.com/free-resources/physio-explained-by-physio-network/

Jacked Athlete Podcast Episode #27, October 2020, Individualizing Patellar Tendon Rehab with Dr Ebonie Rio

https://jackedathlete.com/podcast-27-patellar-tendinopathy-with-dr-ebonie-rio/

Purpose2Perform Podcast Episode #14, December 2020, Tendon related pain and performance

https://anchor.fm/purpose2perform/episodes/Dr-Ebonie-Rio---Tendon-Pain-Expert-ep2tk7

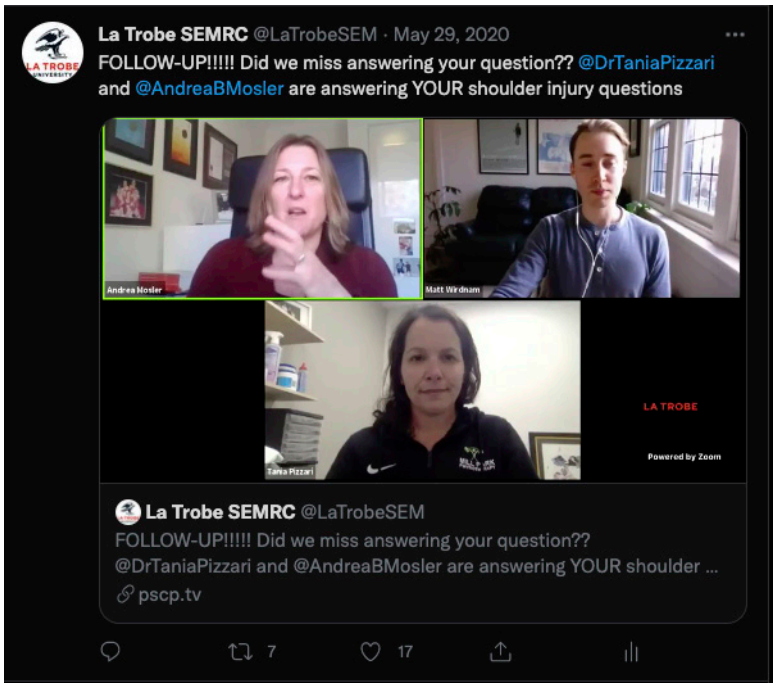
Myotherapy Association Australia, Myo Matters Podcast, Episode #1, December 2020, Tendon Pain - research pathways and VR for pain management

https://www.myotherapy.org.au/DataFilter?Action=View&DataFilter_id=99

DR JOANNE KEMP

Physio Explained by Physio Network, Episode #2, Managing FAI syndrome with Dr Jo Kemp

https://www.physio-network.com/free-resources/physio-explained-by-physio-network/



BROOKE PATTERSON

Outer Sanctum, March 2020, International Women's Day Eve https://www.abc.net.au/radio/programs/outer-sanctum/sticky-mackay/12036142

Tim Trevail Podcast: The Understanding Sports & Exercise Medicine Show, Brooke Patterson on functional ACL outcomes and early osteoarthritis risk after ACL reconstruction

https://www.timtrevail.com/podcast/episode/bd1bc928/brooke-patterson-or-functional-acl-outcomes-and-early-oa-risk

BROOKE PATTERSON & DR BEN MENTIPLAY

BJSM talk medicine Episode #445, September 2020, Making football safer for women with Brooke Patterson and Dr Ben Mentiplay https://soundcloud.com/bmjpodcasts/making-football-safer-for-women-with-brooke-patterson-and-dr-ben-mentiplay-episode-445

DR ANDREA MOSLER

BJSM talk medicine Episode #437, July 2020, What actually works in the hip and groin?

https://soundcloud.com/bmjpodcasts/what-actually-works-hip-and-groin-masterclass-with-dr-andrea-mosler-episode-437

The Young Athlete Podcast Episode #6: Injury Prevention - 3 Perspectives in 1 https://www.youngathletepodcast.com/episode-6.html#/

DR RICHARD JOHNSTON

TRAIL Podcast Episode #10: Richard Johnston, December 2020, Lead investigator of the TRAIL Study Dr Richard Johnston

https://trail.latrobe.edu.au/trail-podcast-e10-richard-johnston/

DR CHRISTIAN BARTON

TRAIL Podcast Episode #5: Dr Christian Barton, September 2020, Management of persistent knee pain and osteoarthritis and running-related injury

https://trail.latrobe.edu.au/trail-podcast-e05-dr-christian-barton/

DR DANIEL BONANNO

TRAIL Podcast Episode #7: Dr Daniel Bonanno, October 2020, All things running and a recent paper and infographic on foot strike pattern published with other members of the TRAIL research team

https://trail.latrobe.edu.au/trail-podcast-e07-dr-daniel-bonanno/

DR PETER BRUKNER

TRAIL Podcast Episode #3 and Episode #4: Dr Peter Brukner, August 2020, Dr Brukner is a stalwart of the sports media, specialising in injuries and overall wellness and was one of the founding members of the Australian College of Sports Physicians, receiving an Order of Australia Medal for his efforts

https://trail.latrobe.edu.au/trail-podcast-e03-and-e04-peter-brukner/

Funding **detail**

Project	Total 2020
Category 1 Australian Competitive Grants - NHMRC	
Can shoe inserts reduce the burden of kneecap osteoarthritis?	65,828.66
Femoroacetabular impingement and early arthritis	8,659.17
The Femoroacetabular Impingement Rehabilitation STudy (FIRST): A double-blind randomised controlled trial of physiotherapy for hip impingement	67,233.03
Chronic knee pain: neuroscience meets exercise for pain relief	75,637.45
Implementing appropriate exercise therapy and education for Australians with knee osteoarthritis	92,593.09
Quality of life burden in active young adults living with hip-related pain: a 4-year prospective study	67,233.02
Optimising quality of life and participation in physical and sporting activity in young adults with hip pain	38,461.53
SUPER rehabilitation for young people with old knees	265,030.40
Muscle size and quality in people with hip-related pain	35,443.67
Reducing inappropriate knee joint replacement surgery and hospital burden	946,240.00
Changes in the brain after injury: measuring corticomotor control of muscle and neuroplasticity after acute knee injury	9,615.33
Making football safe for women: implementing an injury prevention program	14,376.25
Back in the game: helping people successfully transition back to sport and active recreation after injury	56,027.71
Identifying strategies to reduce the risk of kneecap arthritis after knee reconstruction	84,041.29
Improving outcomes for older people with musculoskeletal foot disorders	162,644.95
Physical activity coaching for adults with physical disabilities: a pragmatic randomised controlled trial	10,000.00
A Public-Private Partnership to Reduce Falls in Australian Hospitals	193,719.41
Motivational Interviewing to increase walking in community-dwelling older adults	239,692.92
Improving muscle strength in young people with Prader-Willi syndrome	108,726.52
Automated discovery and human-centred insight for time-critical decision-making	44,929.00
	2,586,133

Category 2 - Other public sector research funding	
Health and Performance in Female athletes: A Scoping Review	45,048.26
A Public-Private Partnership to Reduce Falls in Australian Hospitals	50,000.00
HPRNet: Functional movement variability during military load carriage	150,628.00
Relationship: countermovement jump force-time variables & sports performance	25,000.00
Male coaches and the female menstrual cycle: exploring the knowledge and confidence of coaches to support female athletes	11,983.99
Conjoint Appointment Agreement - Adam Semciw	33,722.30
Carlton FC Honours Scholarship	2,500.00
	318,882

Project	Total 2020
Category 3 - Industry and other Research Funding	
Imaging and clinical factors associated with hip and groin pain in AFL players	4,960.00
Relationship Agreement with The Australian Ballet	120,000.00
Does I-factor improve outcomes and is it safe for use in peri-acetabular osteotomy for hip dysplasia?	15,000.00
The immediate effect of running retraining on hip joint pain and biomechanics in people with hip-related pain. A randomised, controlled crossover trial.	9,982.00
IOC Research Centre	108,079.14
Clinical and sonographic characteristics of de Quervain's syndrome: a cross sectional study	4,630.00
Compression garments and physiological, biomechanical and performance measures	22,000.00
Making football safe for women: implementing an injury prevention program	30,000.00
Efficacy of medicinal cannabis for chronic pain as a result of injury	5,940.00
Funding for Research Positions and other Matters	144,964.39
Novel methods of training load monitoring in elite Rugby Union	9,600.00
A Public-Private Partnership to Reduce Falls in Australian Hospitals	60,000.00
OrthoSport Victoria Industry Collaboration	173,900.00
Physiological and biomechanical analysis of task constraints during load carriage	15,000.00
Improving the physiotherapy management of low back pain: Low back research team	60,000.00
Experiences for people with limb loss participating in mobility clinics and the effect on mobility and quality of life	16,818.00
Increasing participation in physical activity for children with cancer during acute cancer treatment: a pilot study	20,000.00
Video tools for decision making in NRL officiating	10,998.00
Police Victoria Equipment Carriage Review	19,863.64
Effects of a novel netball shoe midsole on biomechanics, performance and injury	10,800.00
	922,080
Total Externally Funded Research Grants	**3,827,096**
Other external funding	**262,401**
Internal University Funding	**2,033,793**
	6,123,290

2020 **Publications**

Ackerman IN, Bohensky MA, Kemp JL, de Steiger R, (2020) Quantifying the likelihood and costs of hip replacement surgery after sports injury: A population-level analysis. Physical Therapy in Sport, 41. 9-15. http://doi.org/10.1080/1612197X.2019.1611900

Ackerman IN, Skou ST, Roos EM, Barton CJ, Kemp JL, Crossley KM, Liew D, Ademi Z, (2020) Implementing a national first-line management program for moderate-severe knee osteoarthritis in Australia: A budget impact analysis focusing on knee replacement avoidance. Osteoarthritis and Cartilage Open, 2(3). 1-8. http://doi.org/10.1080/17461391.2019.1691269

Aily JB, Barton C, Mattiello SM, De Oliveira Silva D, De Noronha M, (2020) Telerehabilitation for knee osteoarthritis in Brazil: a feasibility study. International Journal of Telerehabilitation, 12(2). 137-148. http://doi.org/10.1016/j.jsams.2019.12.025

Alakhdar Mohmara Y, Cook J, Benítez-Martínez JC, McPeek ER, Aguilar AA, Olivas ES, Hernandez-Sanchez S, (2020) Influence of genetic factors in elbow tendon pathology: a case-control study. Scientific Reports, 10(1). http://doi.org/10.1136/bmjsem-2019-000670

Allan J, McClelland J, Munteanu S, Buldt A, Landorf K, Roddy E, Auhl M, Menz H, (2020) First metatarsophalangeal joint range of motion is associated with lower limb kinematics in individuals with first metatarsophalangeal joint osteoarthritis. Journal of Foot and Ankle Research, 13. 1-8. http://doi.org/10.1016/j.jor.2020.03.039

Anderson S, Ridgewell E, Dillon M, (2020) The effect of participation in a mobility clinic on self-reported mobility and quality of life in people with lower limb amputation: a pilot study. Prosthetics and Orthotics International, 44(4). 202-207. http://doi.org/10.1016/j.jsams.2020.10.005

Andrew NE, Kilkenny MF, Sundararajan V, Kim J, Faux SG, Thrift AG, Johnston T, Grimley R, Gattellari M, Katzenellenbogen JM, Dewey HM, Lannin NA, Anderson CS, Cadilhac DA, (2020) Hospital presentations in long-term survivors of stroke: Causes and associated factors in a linked data study.. Stroke, 51(12). 3673-3680. http://doi.org/10.1080/02640414.2020.1724044

Andrews K, Smith M, Cox NS, (2020) Physiotherapy: At what cost? Parents experience of performing chest physiotherapy for infants with cystic fibrosis. Journal of Child Health Care. http://doi.org/10.1136/bmjsem-2019-000670

Ardern CL, Kvist J, Fältström A, Stålman A, O'Halloran P, Webster K, Taylor N, (2020) BAck in the game (BANG) - a smartphone application to help athletes return to sport following anterior cruciate ligament reconstruction: protocol for a multi-centre, randomised controlled trial. BMC Musculoskeletal Disorders, 21(1). 1-16. http://doi.org/10.1016/j.jsams.2020.04.023

Atkins R, Lam W-K, Scanlan AT, Beaven CM, Driller M, (2020) Lower-body compression garments worn following exercise improves perceived recovery but not subsequent performance in basketball athletes. Journal of Sports Sciences, 38(9). 961-969. http://doi.org/10.1136/bjsports-2018-100164

Barrett S, Varley MC, Hills SP, Russell M, Reeves M, Hearn A, Towlson C, (2020) Understanding the influence of the head coach on soccer training drills—an 8 season analysis. Applied Sciences (Switzerland), 10(22). 1-13. http://doi.org/10.1016/j.aucc.2019.01.007

Bartlett DM, Dominguez D JF, Lazar AS, Kordsachia CC, Rankin TJ, Lo J, Govus AD, Power BD, Lampit A, Eastwood PR, Ziman MR, Cruickshank TM, (2020) Multidisciplinary rehabilitation reduces hypothalamic grey matter volume loss in individuals with preclinical Huntington's disease: A nine-month pilot study. Journal of Neurological Sciences, 408. 1-9. http://doi.org/10.1016/j.jsams.2020.08.011

Bartlett DM, Govus A, Rankin T, Lampit A, Feindel K, Poudel G, Teo WP, Lo J, Georgiou-Karistianis N, Ziman MR, Cruickshank TM, (2020) The effects of multidisciplinary rehabilitation on neuroimaging, biological, cognitive and motor outcomes in individuals with premanifest Huntington's disease. Journal of the Neurological Sciences, 416. http://doi.org/10.1002/jpen.1822

Batty LM, Feller JA, Damasena I, Behrens G, Devitt BM, Hartwig T, McClelland JA, Webster KE, (2020) Single-leg squat after anterior cruciate ligament reconstruction: an analysis of the knee valgus angle at 6 and 12 months. Orthopaedic Journal of Sports Medicine, 8(8). 1-6. http://doi.org/10.1080/24733938.2020.1752929

Batty LM, Murgier J, Feller JA, O'Sullivan R, Webster KE, Devitt BM, (2020) Radiological identification of injury to the kaplan fibers of the iliotibial band in association with anterior cruciate ligament injury. American Journal of Sports Medicine, 48(9). 2213-2220. http://doi.org/10.1016/j.nutres.2020.05.003

Benjamin DR, Frawley HC, Shields N, Georgiou C, Taylor NF, (2020) Establishing measurement properties in the assessment of inter-recti distance of the abdominal muscles in a postnatal women. Musculoskeletal Science and Practice, 49. 1-9.

Bonello, C, Girdwood, M, De Souza, K, Trinder, N K, Lewis, J, Lazarczuk, SL, Gaida, JE, Docking, SI, and Rio, EK. Does Isometric Exercise Result in Exercise Induced Hypoalgesia in People with Local Musculoskeletal Pain? A Systematic Review. Physical Therapy in Sport. (2020): Physical Therapy in Sport., 2020. Web.

Boyer S, MacMahon C, Récopé M, Rix-Lièvre G, (2020) The assistant referees' activity in refereeing elite football: Preoccupations when not judging offside. Psychology of Sport and Exercise, 48. http://doi.org/10.1017/S1368980020005248

Brooks K, Orchard JW, Saw AE, Kountouris A, (2020) Hand Fractures and Return to Play in Elite Australian Cricketers. Journal of Orthopaedics, 22. 100-103. http://doi.org/10.1080/02688697.2020.1742288

Brown L, Rando AA, Eichel K, Van Dam NT, Celano CM, Huffman JC, Morris ME, (2020) The effects of mindfulness and meditation on vagally-mediated heart rate variability: a meta-analysis. Psychosomatic Medicine, [0-9]-42. http://doi.org/10.1177/0363546520931854

Buldt AK, Munteanu SE, Allan JJ, Tan JM, Auhl M, Landorf KB, Roddy E, Menz HB, (2020) Structural characteristics associated with radiographic severity of first metatarsophalangeal joint osteoarthritis. Arthritis Care & Research, [0-9]-26. http://doi.org/10.1186/s12891-020-03590-x

Busuttil NA, Reid M, Connolly M, Dascombe BJ, Middleton KJ, (2020) A Kinematic Analysis of the Upper Limb During the Topspin Double-Handed Backhand Stroke in Tennis. Sports Biomechanics, [0-9]-19. http://doi.org/10.1016/j.msksp.2020.102276

Büttner F, Howell DR, Ardern CL, Doherty C, Blake C, Ryan J, Catena R, Chou L-S, Fino P, Rochefort C, Sveistrup H, Parker T, Delahunt E, (2020) Concussed athletes walk slower than non-concussed athletes during cognitive-motor dual-task assessments but not during single-task assessments 2 months after sports concussion: a systematic review and meta-analysis using individual participant data. British Journal of Sports Medicine, 54(2). 94-101. http://doi.org/10.1093/ptj/pzaa057

Cadilhac DA, Andrew NE, Busingye D, Cameron J, Thrift AG, Purvis T, Li JC, Kneebone I, Thijs V, Hackett ML, Lannin NA, Kilkenny MF, (2020) Pilot randomised clinical trial of an eHealth, self-management support intervention (iVERVE) for stroke: feasibility assessment in survivors 12–24 months post-event. Pilot and Feasibility Studies, 6(1). 1-13. http://doi.org/10.1002/pri.1813

Cahill LS, Carey LM, Lannin NA, Turville M, Neilson CL, Lynch EA, McKinstry CE, Han JX, O'Connor D, (2020) Implementation interventions to promote the uptake of evidence-based practices in stroke rehabilitation. The Cochrane database of systematic reviews, 10. i-154. http://doi.org/10.1016/j.ptsp.2020.02.004

Carragher M, Steel G, O'Halloran R, Torabi T, Johnson H, Taylor N, Rose M, (2020) Aphasia disrupts usual care: The stroke team's perceptions of delivering healthcare to patients with aphasia. Disability and Rehabilitation. http://doi.org/10.1080/17461391.2020.1775894

Carroll LM, Morris ME, O'Connor WT, Clifford AM, (2020) Is aquatic therapy optimally prescribed for Parkinson's disease? A systematic review and meta-analysis. Journal of Parkinson's Disease, 10(1). 59-76. http://doi.org/10.1016/j.ptsp.2020.04.032

Carter HM, Littlewood C, Webster KE, Smith BE, (2020) The effectiveness of preoperative rehabilitation programmes on postoperative outcomes following anterior cruciate ligament (ACL) reconstruction: A systematic review. BMC Musculoskeletal Disorders, 21(1). 1-13. http://doi.org/10.1136/bjsports-2019-100956

Cheung AS, Gray HA, Schache AG, Hoermann R, Bicknell J, Joon DL, Zajac JD, Pandy MG, Grossmann M, Newman A, (2020) Biomechanical leg muscle function during stair ambulation in men receiving androgen deprivation therapy. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 75(9). 1715-1722. http://doi.org/10.3390/ijerph17051536

Chew Jin Lin N, Hayward KS, D'Cruz K, Thompson E, Li X, Lannin NA, (2020) Validity and reliability of a smartphone inclinometer app for measuring passive upper limb range of motion in a stroke population. Disability and Rehabilitation, 42(22). 3243-3249. http://doi.org/10.1177/0363546520939897

Chia L, De Oliveira Silva D, McKay MJ, Sullivan J, Micolis de Azevedo F, Pappas E, (2020) Limited support for trunk and hip deficits as risk factors for athletic knee injuries: a systematic review with meta-analysis and best-evidence synthesis. Journal of Orthopaedic and Sports Physical Therapy, 50(9). 476-489. http://doi.org/10.1186/s12891-020-03508-7

Chilvers M, Johnston K, Ferrar K, Williams MT, (2020) Dyspnoea assessment in adults with end-stage kidney disease: A systematic review. Journal of Renal Care, 46(3). 137-150. http://doi.org/10.1136/bjsports-2020-102537

Clark MI, Driller M, (2020) University student's perceptions of self-tracking devices, data privacy, and sharing digital data for research purposes. Journal for the Measurement of Physical Behaviour, 3(2). 128-134. http://doi.org/10.1136/bjsports-2020-102723

Clarke GR, Thomas MJ, Rathod-Mistry T, Marshall M, Menz HB, Peat G, Roddy E, (2020) Hallux valgus severity, great toe pain, and plantar pressures during gait: a cross-sectional study of community-dwelling adults. Musculoskeletal Care, 18(3). 383-390. http://doi.org/10.1002/msc.1457

Clarsen B, Bahr R, Myklebust G, Andersson SH, Docking SI, Drew M, Finch CF, Fortington LV, Harøy J, Khan KM, Moreau B, Moore IS, Møller M, Nabhan D, Nielsen RO, Pasanen K, Schwellnus M, Soligard T, Verhagen E, (2020) Improved reporting of overuse injuries and health problems in sport: an update of the Oslo Sport Trauma Research Center questionnaires. British Journal of Sports Medicine, 54(7). 390-396. http://doi.org/10.1186/s13047-020-0382-6

Coleman JL, Morelli F, McClelland J, Middleton KJ, (2020) Can target effects or discomfort ratings discriminate between small-arms weapon configurations?. Ergonomics, [0-9]-10. http://doi.org/10.1002/msc.1472

Cotchett M, Rathleff MS, Dilnot M, Landorf KB, Morrissey D, Barton C, (2020) Lived experience and attitudes of people with plantar heel pain: a qualitative exploration. Journal of Foot and Ankle Research, 13(1). http://doi.org/10.1097/BRS.0000000000003277

Cranston A, Driller M, (2020) Investigating the Use of an Intermittent Sequential Pneumatic Compression Arm Sleeve for Recovery After Upper-Body Exercise. Journal of Strength and Conditioning Research, [0-9]-6. http://doi.org/10.1038/s41598-020-63030-7

Crossley KM, Patterson BE, Culvenor AG, Bruder AM, Mosler AB, Mentiplay BF, (2020) Making football safer for women: A systematic review and meta-analysis of injury prevention programmes in 11 773 female football (soccer) players. British Journal of Sports Medicine, 54(18). 1089-1098. http://doi.org/10.1186/s13047-020-00388-x

Crow J, Semciw A, Couch J, Pizzari T, (2020) Does a recent hamstring muscle injury affect the timing of muscle activation during high speed overground running in professional Australian Football players?. Physical Therapy in Sport, 43. 188-194. http://doi.org/10.1177/0363546519887952

Crowther RH, Gorman AD, Spratford WA, Sayers MG, Kountouris A, (2020) Examining environmental constraints in sport: Spin characteristics of two cricket pitches with contrasting soil properties. European Journal of Sport Science, 20(8). 1005-1012. http://doi.org/10.1007/s00167-020-05849-1

Cruickshank T, Bartlett D, Govus A, Hannan A, Teo WP, Mason S, Lo J, Ziman M, (2020) The relationship between lifestyle and serum neurofilament light protein in Huntington's disease. Brain and Behavior, 10(5). http://doi.org/10.1177/2325967120930829

De Jong LMS, Gastin PB, Angelova M, Bruce L, Dwyer DB, (2020) Technical determinants of success in professional women's soccer: A wider range of variables reveals new insights. PLoS One, 15(10). 1-12. http://doi.org/10.1007/s00167-020-06157-4

De Oliveira Silva D, Ferraz Pazzinatto M, Crossley KM, Azevedo FM, Barton CJ, (2020) Novel Stepped Care Approach to Provide Education and Exercise Therapy for Patellofemoral Pain: Feasibility Study. Journal of Medical Internet Research, 22(7). 1-13. http://doi.org/10.1177/2325967120934751

De Oliveira Silva D, Ferraz Pazzinatto M, Rathleff MS, Holden S, Bell E, Azevedo F, Barton C, (2020) Patient education for patellofemoral pain: a systematic review. Journal of Orthopaedic & Sports Physical Therapy, 50(7). 338-396. http://doi.org/10.1123/JSR.2019-0291

De Oliveira Silva D, Rathleff MS, Holden S, Bell E, Azevedo F, Ferraz Pazzinatto M, Barton C, (2020) Patients and clinicians managing patellofemoral pain should not rely on general web-based information. Physical Therapy in Sport, 45. 176-180. http://doi.org/10.1016/j.ptsp.2020.08.003

De Oliveira Silva D, Willy RW, Barton CJ, Christensen K, Ferraz Pazzinatto M, Azevedo FM, (2020) Pain and disability in women with patellofemoral pain relate to kinesiophobia, but not to patellofemoral joint loading variables. Scandinavian Journal of Medicine and Science in Sports, 30(11). 2215-2221. http://doi.org/10.1186/s12891-020-03676-6

Dennett AM, Cauchi T, Harding KE, Kelly P, Ashby G, Taylor NF, (2020) Research interest, experience and confidence of allied health professionals working in medical imaging: a cross-sectional survey. Journal of Medical Radiation Sciences, [0-9]-10. http://doi.org/10.1007/s00167-020-06311-y

Dennett AM, Harding KE, Reed MS, (2020) The challenge of timing: a qualitative study on clinician and patient perspectives about implementing exercise-based rehabilitation in an acute cancer treatment setting. Supportive Care in Cancer, 28(12). 6035-6043. http://doi.org/10.1177/2325967120969425

Dennett AM, Peiris CL, Shields N, Taylor NF, (2020) From cancer rehabilitation to recreation: a coordinated approach to increasing physical activity. Physical Therapy, 100(11). 2049-2059. http://doi.org/10.1186/s13047-020-0377-3

Dillon M, Quigley M, Stevens P, Balasanov Y, Anderson S, (2020) Factors associated with healthy-related quality of life in people living with partial foot or transtibial amputation. Archives of Physical Medicine and Rehabilitation, 101(10). 1711-1719. http://doi.org/10.1080/00140139.2020.1834625

Dingenen B, Staes F, Vanelderen R, Ceyssens L, Malliaras P, Barton CJ, Deschamps K, (2020) Subclassification of recreational runners with a running-related injury based on running kinematics evaluated with marker-based two-dimensional video analysis. Physical Therapy in Sport, 44. 99-106. http://doi.org/10.3233/JPD-191784

Dooley FL, Kaster T, Fitzgerald JS, Walch TJ, Annandale M, Ferrar K, Lang JJ, Smith JJ, Tomkinson GR, (2020) A systematic analysis of temporal trends in the handgrip strength of 2, [0-9]16, [0-9]20 children and adolescents between 1967 and 2017. Sports Medicine, 50(6). 1129-1144. http://doi.org/10.1186/s12913-020-4899-y

Driller M, Dunican IC, (2020) No familiarization or 'first-night effect' evident when monitoring sleep using wrist actigraphy. Journal of Sleep Research. http://doi.org/10.1111/hsc.12996

Driller M, Rogers T, Hébert-Losier K, Beaven CM, (2020) Body mass changes and markers of fitness, health, and well-being over the first semester of university in New Zealand students. Journal of Science in Sport and Exercise. http://doi.org/10.1080/09638288.2020.1754474

Ebert JR, Webster KE, Edwards PK, Joss BK, D'Alessandro P, Janes G, Annear P, (2020) Current perspectives of the Australian knee society on rehabilitation and return to sport after anterior cruciate ligament reconstruction. Journal of Sport Rehabilitation, 29(7). 970-975. http://doi.org/10.3233/JPD-191838

Eitner A, Culvenor AG, Wirth W, Schaible H, Eckstein F, (2020) Impact of diabetes mellitus on knee osteoarthritis pain and physical and mental status: Data from the osteoarthritis initiative. Arthritis Care and Research. http://doi.org/10.3389/fneur.2020.00455

Ekås GR, Ardern CL, Grindem H, Engebretsen L, (2020) Evidence too weak to guide surgical treatment decisions for anterior cruciate ligament injury: a systematic review of the risk of new meniscal tears after anterior cruciate ligament injury. British Journal of Sports Medicine, 54(9). 520-527. http://doi.org/10.1186/s12891-020-03676-6

Ellis RE, Dodd KJ, Holland AE, Lim K, Tacey M, Shields N, (2020) Effect of eccentric exercise on quality of life and function in people with chronic heart failure: a pilot randomised controlled trial. Disability and Rehabilitation, [0-9]-10. http://doi.org/10.1177/1367493520976481

Esteve E, Rathleff MS, Hölmich P, Casals M, Clausen MB, Vicens-Bordas J, Pizzari T, Thorborg K, (2020) Groin problems from pre- to in-season: a prospective study on 386 male Spanish footballers. Research in Sports Medicine, [0-9]-7. http://doi.org/10.3390/sports8090129

Fenemor SP, Gill ND, Sims ST, Beaven CM, Driller M, (2020) Validity of a tympanic thermometer and thermal imaging camera for measuring core and skin temperature during exercise in the heat. Measurement in Physical Education and Exercise Science, 24(1). 49-55. http://doi.org/10.1016/j.apmr.2019.06.015

Ferreira AS, Mentiplay BF, Taborda B, Ferraz Pazzinatto M, de Azevedo FM, De Oliveira Silva D, (2020) Overweight and obesity in young adults with patellofemoral pain: impact on functional capacity and strength. Journal of Sport and Health Science, [0-9]-10. http://doi.org/10.1002/14651858.CD010255.pub3

Fluke CJ, Hegarty SE, MacMahon COM, (2020) Understanding the human in the design of cyber-human discovery systems for data-driven astronomy. Astronomy and Computing, 33. 1-13. http://doi.org/10.1186/s12877-020-1494-3

Ford J, Bower SE, Ford I, de Mello MM, Carneiro SR, Balasundaram A, Hahne A, (2020) Effects of specific muscle activation for low back pain on activity limitation, pain, work participation, or recurrence: a systematic review. Musculoskeletal Science and Practice, 50. 1-9. http://doi.org/10.1080/09638288.2020.1733107

Ford JJ, Kaddour O, Gonzales M, Page P, Hahne AJ, (2020) Clinical features as predictors of histologically confirmed inflammation in patients with lumbar disc herniation with associated radiculopathy. BMC Musculoskeletal Disorders, 21. 1-9. http://doi.org/10.1111/1440-1630.12666

Ford JJ, Kaddour O, Page P, Richards MC, McMeeken JM, Hahne AJ, (2020) A Multivariate Prognostic Model for Pain and Activity Limitation in People Undergoing Lumbar Discectomy. British Journal of Neurosurgery, 34(4). 381-387. http://doi.org/10.1186/s12913-020-05333-z

Ford PR, Bordonau JLD, Bonanno DR, Tavares J, Groenendijk C, Fink C, Gualtieri D, Gregson W, Varley MC, Weston M, Lolli L, Platt D, Di Salvo V, (2020) A survey of talent identification and development processes in the youth academies of professional soccer clubs from around the world. Journal of Sports Sciences, 38(44541). 1269-1278. http://doi.org/10.1016/j.jstrokecerebrovasdis.2020.105026

Franettovich Smith MM, Collins NJ, Mellor R, Grimaldi A, Elliott J, Hoggarth M, Weber KA, Vicenzino B, (2020) Foot exercise plus education versus wait and see for the treatment of plantar heel pain (FEET trial): a protocol for a feasibility study. Journal of Foot and Ankle Research, 13(1). 1-14. http://doi.org/10.1177/0308022620933095

Gabbe, B., Donaldson, A., Poulos, R., Lloyd, D., Cook, J., & Finch, C. F. (2015). Planning for implementation: use of intervention mapping (step 5) in two sports safety intervention case studies. In injury prevention Vol. 21 (pp. 2 pages). BMJ PUBLISHING GROUP. http://doi.org/10.1136/injuryprev-2012-040580e.23

Gabbe, B., Cook, J., Lloyd, D., Donaldson, A., Young, W., & Finch, C. (2015). Bridging the gap between research evidence and real-world implementation: the nogaps project. In Injury Prevention Vol. 21 (pp. 1 page). BMJ PUBLISHING GROUP. http://doi.org/10.1136/injuryprev-2012-040590g.3

Ganderton C, Kinsella R, Watson L and Pizzari T (2019). Getting more from standard rotator cuff strengthening exercises. Shoulder & Elbow (on-line first). http://doi.org/10.1177/1758573219888829

Geraghty J, Ablewhite J, das Nair R, Lincoln N, Kontou E, Roffe J, Lannin N, Drummond A, (2020) Results of a UK-wide vignette study with occupational therapists to explore cognitive screening post stroke. International Journal of Therapy and Rehabilitation, 27(7). http://doi.org/10.1186/s13104-020-05202-2

Gerrard JM, Bonanno DR, Whittaker GA, Landorf KB, (2020) Effect of different orthotic materials on plantar pressures: A systematic review. Journal of Foot and Ankle Research, 13(1). http://doi.org/10.3390/ijerph17176386

Gibbs AJ, Taylor NF, Hau R, Barton C, Fong C, Roddy L, Durant KJ, deVos LD, Wallis JA, (2020) Osteoarthritis Hip and Knee Service (OAHKS) in a community health setting compared to the hospital setting: A feasibility study for a new care pathway. Musculoskeletal Science and Practic, 49. 1-9. http://doi.org/10.12968/ijtr.2019.0064

Gilheany M, Edwards SR, Cotchett M, (2020) Capsular interposition arthroplasty with percutaneous suture anchoring: A pragmatic and novel surgical technique for hallux rigidus. Cureus, 12(6). 1-18. http://doi.org/10.1177/0308022620946640

Gledhill K, Hanna L, Nicks R, Lannin N, (2020) Defining discharge-readiness from subacute care from all stakeholders' perspectives: a systematic review. Disability and Rehabilitation. http://doi.org/10.1111/ene.14531

Goh SC, Saw AE, Kountouris A, Orchard JW, Saw R, (2020) Neurocognitive changes associated with concussion in elite cricket players are distinct from changes due to post-match with no head impact. Journal of Science and Medicine in Sport. http://doi.org/10.1161/STROKEAHA.120.030656

Gómez-piqueras P, Ardern C, Prieto-ayuso A, Robles-palazón FJ, Cejudo A, de Baranda PS, Olmedilla A, (2020) Psychometric analysis and effectiveness of the psychological readiness of injured athlete to return to sport (PRIA-RS) questionnaire on injured soccer players. International Journal of Environmental Research and Public Health, 17(5). http://doi.org/10.1002/14651858.CD012575.pub2

Green B, Bourne MN, van Dyk N, Pizzari T, (2020) Recalibrating the risk of hamstring strain injury (HSI): A 2020 systematic review and meta-analysis of risk factors for index and recurrent hamstring strain injury in sport. British Journal of Sports Medicine, 54(18). 1081-1088. http://doi.org/10.1111/1440-1630.12705

Green B, Lin M, McClelland JA, Semciw AI, Schache AG, Rotstein AH, Cook J, Pizzari T, (2020) Return to play and recurrence after calf muscle strain injuries in elite Australian football players. American Journal of Sports Medicine, 48(13). 3306-3315. http://doi.org/10.1186/s40814-020-00706-x

Green B, Lin M, Schache AG, McClelland J, Semciw A, Rotstein A, Cook J, Pizzari T, (2020) Calf muscle strain injuries in elite Australian Football players: a descriptive epidemiological evaluation. Scandinavian Journal of Medicine & Science in Sports, 30. 174-184. http://doi.org/10.1111/hex.13176

Gregson W, Di Salvo V, Varley MC, Modonutti M, Belli A, Chamari K, Weston M, Lolli L, Eirale C, (2020) Harmful association of sprinting with muscle injury occurrence in professional soccer match-play: A two-season, league wide exploratory investigation from the Qatar Stars League. Journal of Science and Medicine in Sport, 23(2). 134-138. http://doi.org/10.1080/09638288.2020.1852616

Grimshaw SL, Taylor NF, Mechinaud F, Conyers R, Shields N, (2020) Physical activity for children undergoing acute cancer treatment: a qualitative study of parental perspectives. Pediatric Blood and Cancer, 67(6). http://doi.org/10.1186/s12913-019-4873-8

Gurgel-Juarez N, Perrier M-F, Hoffmann T, Lannin N, Jolliffe L, Lee R, Brosseau L, Flowers H, (2020) Guideline recommendations for oral care after acquired brain injury: protocol for a systematic review. JMIR Research Protocols, 9(7). http://doi.org/10.1016/j.conctc.2019.100511

Haff GG, Garcia-Ramos A, James LP, (2020) Using velocity to predict the maximum dynamic strength in the power clean. Sports, 8(9). http://doi.org/10.1080/09638288.2020.1722264

Hannington M, Docking S, Cook J, Edwards S, Rio E, (2020) Self-reported jumpers' knee is common in elite basketball athletes – But is it all patellar tendinopathy?. Physical Therapy in Sport, 43. 58-64. http://doi.org/10.1111/1440-1630.12651

Harding KE, Snowdon DA, Prendergast L, Lewis AK, Kent B, Leggat SF, Taylor NF, (2020) Sustainable waiting time reductions after introducing the STAT model for access and triage: 12-month follow up of a stepped wedge cluster randomised controlled trial. BMC Health Services Research, 20(1). 1-9. http://doi.org/10.1016/j.jsams.2020.02.015

Harris M, Schultz A, Drew MK, Rio E, Adams S, Edwards S, (2020) Thirty-seven jump-landing biomechanical variables are associated with asymptomatic patellar tendon abnormality and patellar tendinopathy: a systematic review. Physical Therapy in Sport, 45. 38-55. http://doi.org/10.1080/09638288.2020.1745906

Harrison AL, Taylor NF, Frawley HC, Shields N, (2020) A consumer co-created infographic improves short-term knowledge about physical activity and self-efficacy to exercise in women with gestational diabetes mellitus: a randomised trial. Journal of Physiotherapy, 66(4). 243-248. http://doi.org/10.1186/s12913-020-05312-4

Harrison C, Ruddock S, Mayes S, Cook J, O'Halloran P, Ferrar K, Ruddock-Hudson M, (2020) Self-reported wellness in training and performance: a comparison of professional ballet dancers and professional athletes. Medical Problems of Performing Artists, 35(4). 196-201. http://doi.org/10.1097/XEB.0000000000000217

Hart HF, Crossley KM, Bonacci J, Ackland DC, Pandy MG, Collins NJ, (2020) Immediate effects of foot orthoses on gait biomechanics in individuals with persistent patellofemoral pain. Gait and Posture, 77. 20-28. http://doi.org/10.1161/STROKEAHA.120.030656

Hart HF, Culvenor AG, Guermazi A, Crossley KM, (2020) Worse knee confidence, fear of movement, psychological readiness to return-to-sport and pain are associated with worse function after ACL reconstruction. Physical Therapy in Sport, 41. 1-8. http://doi.org/10.3138/ptc-2019-0004

Hart HF, Gross KD, Crossley KM, Barton CJ, Felson DT, Guermazi A, Roemer F, Segal NA, Lewis CE, Nevitt MC, Stefanik JJ, (2020) Is step rate associated with worsening of patellofemoral and tibiofemoral joint osteoarthritis in women and men? The Multicenter Osteoarthritis Study. Arthritis Care and Research, 72(1). 107-113. http://doi.org/10.1007/s00421-020-04461-y

Hart HF, van Middelkoop M, Stefanik JJ, Crossley KM, Bierma-Zeinstra S, (2020) Obesity is related to incidence of patellofemoral osteoarthritis: the Cohort Hip and Cohort Knee (CHECK) study. Rheumatology International, 40(2). 227-232. http://doi.org/10.1136/bmjopen-2019-034696

Harvie D, Rio E, Smith R, Olthof N, Coppieters M, (2020) Virtual reality body image training for chronic low back pain: a single case report. Frontiers in Virtual Reality, 1. http://doi.org/10.1080/09638288.2020.1845404

Hasani F, Haines TP, Munteanu SE, Vicenzino B, Malliaras P, (2020) Efficacy of different load intensity and time-under-tension calf loading protocols for Achilles tendinopathy (the LOADIT trial): Protocol for a randomised pilot study. Pilot and Feasibility Studies, 6(1). 1-12. http://doi.org/10.1111/dmcn.14746

Hassan NM, Buldt AK, Shields N, Landorf KB, Menz HB, Munteanu SE, (2020) Reproducibility of foot dimensions measured from 3-dimensional foot scans in children and adolescents with down syndrome. Journal of Foot and Ankle Research, 13. http://doi.org/10.1111/ajr.12665

Hassett L, Tiedemann A, Hinman RS, Crotty M, Hoffmann T, Harvey L, Taylor NF, Greaves C, Treacy D, Jennings M, Milat A, Bennell KL, Howard K, Van Den Berg M, Pinheiro M, Wong S, Kirkham C, Ramsay E, O'Rourke S, Sherrington C, (2020) Physical activity coaching for adults with mobility limitations: protocol for the ComeBACK pragmatic hybrid effectiveness-implementation type 1 randomised controlled trial. BMJ Open, 10(11). 1-13. http://doi.org/10.1080/09638288.2019.1582720

Hayward KS, Jolliffe L, Churilov L, Herrmann A, Cloud GC, Lannin N, (2020) In search of Kipling's six honest serving men in upper limb rehabilitation: within participant case-crossover experiment nested within a web-based questionnaire. Disability and Rehabilitation. http://doi.org/10.3138/ptc-2018-0067

Hébert-Losier K, Finlayson SJ, Driller M, Dubois B, Esculier J-F, Beaven CM, (2020) Metabolic and performance responses of male runners wearing 3 types of footwear: Nike Vaporfly 4%, Saucony Endorphin racing flats, and their own shoes. Journal of Sport and Health Science. http://doi.org/10.1080/09638288.2020.1727576

Heerey J, Agricola R, Smith A, Kemp J, Pizzari T, King M, Lawrenson P, Scholes M, Crossley K, (2020) The size and prevalence of bony hip morphology does not differ between football players with and without hip and/or groin pain: findings from the FORCe cohort. Journal of Orthopaedic and Sports Physical Therapy, [0-9]-43. http://doi.org/10.1155/2020/5879295

Heerey JJ, Srinivasan R, Agricola R, Smith A, Kemp JL, Pizzari T, King MG, Lawrenson PR, Scholes MJ, Souza RB, Link T, Majumdar S, Crossley KM, (2020) Prevalence of early hip OA features on MRI in high-impact athletes. The femoroacetabular impingement and hip osteoarthritis cohort (FORCe) study. Osteoarthritis and Cartilage. http://doi.org/10.1080/09638288.2020.1773945

Heng H, Jazayeri D, Shaw L, Kiegaldie D, Hill AM, Morris M, (2020) Hospital falls prevention with patient education: a scoping review. BMC Geriatrics, 20. 1-12. http://doi.org/10.1080/09638288.2020.1836679

Hickey JT, Timmins RG, Maniar N, Rio E, Hickey PF, Pitcher CA, Williams MD, Opar DA, (2020) Pain-Free Versus Pain-Threshold Rehabilitation Following Acute Hamstring Strain Injury: A Randomized Controlled Trial. Journal of Orthopaedic and Sports Physical Therapy, 50(2). 91-103. http://doi.org/10.3233/PPR-200412

Hills SP, Barrett S, Thoseby B, Kilduff LP, Barwood MJ, Radcliffe JN, Cooke CB, Russell M, (2020) Quantifying the peak physical match-play demands of professional soccer substitutes following pitch-entry: assessing contextual influences. Research Quarterly for Exercise and Sport. http://doi.org/10.1080/00140139.2020.1834625

Hirohata K, Aizawa J, Furuya H, Mitomo S, Ohmi T, Ohji S, Ohara T, Koga H, Yagishita K, Webster KE, (2020) The Japanese version of the anterior cruciate ligament-return to sport after injury (ACL-RSI) scale has acceptable validity and reliability. Knee Surgery, Sports Traumatology, Arthroscopy, 28(8). 2519-2525. http://doi.org/10.1177/0309364620921749

Hoffmann C, Spiegl UJ, Paetzold R, Devitt B, Hauck S, Weiss T, Bühren V, Gonschorek O, (2020) Long-term results after thoracoscopic anterior spondylodesis with or without posterior stabilization of unstable incomplete burst fractures of the thoracolumbar junction: a prospective cohort study. Journal of Orthopaedic Surgery and Research, 15(1). 1-11. http://doi.org/10.1016/j.apmr.2020.04.026

Ihsan M, Watson G, Choo HC, Govus A, Cocking S, Stanley J, Abbiss CR, (2020) Skeletal Muscle Microvascular Adaptations Following Regular Cold Water Immersion. International Journal of Sports Medicine, 41. 98-105. http://doi.org/10.1002/pri.1813

Imms C, Kerr C, Bowe SJ, Karlsson P, Novak I, Shields N, Reddihough D, (2020) Efficacy of a knowledge translation approach in changing allied health practitioner use of evidence-based practices with children with cerebral palsy: a before and after longitudinal study. Disability and Rehabilitation. http://doi.org/10.1186/s13047-020-00397-w

Impellizzeri FM, Jones DM, Griffin D, Harris-Hayes M, Thorborg K, Crossley KM, Reiman MP, Scholes MJ, Ageberg E, Agricola R, Bizzini M, Bloom N, Casartelli NC, Diamond LE, Dijkstra HP, Di Stasi S, Drew M, Friedman DJ, Freke M, Gojanovic B, Heerey JJ, Hölmich P, Hunt MA, Ishøi L, Kassarjian A, King M, Lawrenson PR, Leunig M, Lewis CL, Warholm KM, Mayes S, Moksnes H, Mosler AB, Risberg MA, Semciw A, Serner A, van Klij P, Wörner T, Kemp J, (2020) Patient-reported outcome measures for hip-related pain: a review of the available evidence and a consensus statement from the International Hip-related Pain Research Network, Zurich 2018. British Journal of Sports Medicine, 54(14). 848-857. http://doi.org/10.1186/s40814-020-00639-5

Jackman M, Lannin N, Galea C, Sakzewski L, Miller L, Novak I, (2020) What is the threshold dose of upper limb training for children with cerebral palsy to improve function? A systematic review. Australian Occupational Therapy Journal, 67(3). 269-280. http://doi.org/10.1186/s12891-020-03809-x

James L, Haycraft J, Pierobon A, Suchomel T, Connick M, (2020) Mixed versus Focused Resistance Training during an Australian Football Pre-Season. Journal of Functional Morphology and Kinesiology, 5(4). 1-9. http://doi.org/10.1016/j.ptsp.2020.02.017

James L, Lidums M, Grant M, Talpey SW, Comfort P, Suchomel TJ, Gastin P, Driller M, (2020) Considerations in the development of a postgraduate strength and conditioning program. Strength and Conditioning Journal. http://doi.org/10.1016/j.gaitpost.2020.06.008

James LP, Connick M, Haff GG, Kelly VG, Beckman EM, (2020) The Countermovement Jump Mechanics of Mixed Martial Arts Competitors. Journal of Strength and Conditioning Research, 34(4). 982-987. http://doi.org/10.1016/j.gaitpost.2020.06.012

James LP, Suchomel TJ, Comfort P, Haff GG, Connick MJ, (2020) Rate of force development adaptations after weightlifting-style training. Journal of Strength and Conditioning Research. http://doi.org/10.2340/16501977-2725

Jazayeri D, Braine E, McDonald S, Dworkin S, Powell KL, Griggs K, Vajda FJE, O'Brien TJ, Jones NC, (2020) A rat model of valproate teratogenicity from chronic oral treatment during pregnancy. Epilepsia, 61(6). 1291-1300. http://doi.org/10.1007/s40279-020-01265-0

Jenner SL, Devlin BL, Forsyth AK, Belski R, (2020) Assessing the Nutrition Knowledge of Professional Female Australian Football (AFLW) Athletes. Science and Medicine in Football, 4(3). 240-245. http://doi.org/10.1080/15438627.2020.1860044

Jewson JL, Brukner P, Gara TJ, Fortington LV, (2020) Safety in the football codes: a historical review of fatalities in Australian print media. Medical Journal of Australia, 213(11). 501-5030. http://doi.org/10.1016/j.physio.2019.06.006

Johnston PT, McClelland JA, Feller JA, Webster KE, (2020) Knee muscle strength after quadriceps tendon autograft anterior cruciate ligament reconstruction: systematic review and meta-analysis. Knee Surgery, Sports Traumatology, Arthroscopy. http://doi.org/10.1136/bjsports-2019-100935

Jolliffe L, Hoffmann T, Churilov L, Lannin NA, (2020) What is the feasibility and observed effect of two implementation packages for stroke rehabilitation therapists implementing upper limb guidelines? A cluster controlled feasibility study. BMJ Open Quality, 9(2). 1-10. http://doi.org/10.1002/jmri.27164

Jolliffe L, Hoffmann T, Laver K, McCluskey A, Lannin NA, (2020) Stroke rehabilitation research translation in Australia: a survey of clinical trialists. Disability and Rehabilitation. http://doi.org/10.1186/s13047-020-00417-9

Jones D, Kemp J, Crossley K, Hart H, Ackerman I, (2020) Mismatch between expectations and physical activity outcomes at six months following hip-arthroscopy: A qualitative study. Physical Therapy in Sport, 45. 14-22. http://doi.org/10.1007/s00586-020-06452-1

Jones DM, Crossley KM, Ackerman IN, Hart HF, Dundules KL, O'Brien M, Mentiplay BF, Heerey JJ, Kemp JL, (2020) Physical Activity Following Hip Arthroscopy in Young and Middle-Aged Adults: A Systematic Review. Sports Medicine - Open, 6(1). http://doi.org/10.1002/14651858.CD012575.pub2

Kahn MB, Clark RA, Bower KJ, Mentiplay BF, Pua YH, Olver J, Williams G. The reproducibility and responsiveness of subjective assessment of upper limb associated reactions in people with acquired brain injury during walking. Clinical Rehabilitation 2020; 34(2):252-262.

Kahn MB, Clark RA, Williams G, Bower KJ, Banky M, Olver J, Mentiplay BF. The nature and extent of upper limb associated reactions during walking in people with acquired brain injury. Journal of NeuroEngineering and Rehabilitation 2019; 16:160.

Kahn MB, Williams G, Mentiplay BF, Bower KJ, Olver J, Clark RA, (2020) Quantification of abnormal upper limb movement during walking in people with acquired brain injury. Gait and Posture, 81. 273-280. http://doi.org/10.2519/jospt.2020.8895

Kaster T, Dooley FL, Fitzgerald JS, Walch TJ, Annandale M, Ferrar K, Lang JJ, Smith JJ, Tomkinson GR, (2020) Temporal trends in the sit-ups performance of 9, [0-9]39, [0-9]89 children and adolescents between 1964 and 2017. Journal of Sports Sciences, 38(16). 1913-1923. http://doi.org/10.1016/j.ptsp.2020.03.011

Kaur M, Ribeiro DC, Webster KE, Sole G, (2020) Knee biomechanics while navigating steps in participants with anterior cruciate ligament reconstruction, between 2 and 10 years following surgery. Physical Therapy in Sport, 46. 70-76. http://doi.org/10.1080/1091367X.2020.1835664

Kemp J, Mosler A, Hart H, Bizzini M, Chang S, Scholes M, Semciw A, Crossley K, (2020) Improving function in people with hip-related pain: a systematic review and meta-analysis of physiotherapist-led interventions for hip-related pain. British Journal of Sports Medicine, 54(23). 1382-1394. http://doi.org/10.2196/19111

Kemp JL, Østerås N, Mathiessen A, Nordsletten L, Agricola R, Waarsing JH, Heerey JJ, Risberg MA, (2020) Relationship between cam morphology, hip symptoms, and hip osteoarthritis: the Musculoskeletal pain in Ullersaker STudy (MUST) cohort. Hip International, [0-9]-8. http://doi.org/10.1080/00140139.2020.1834625

Kendrick M, Kendrick K, Morton P, Taylor NF, Leggat SG, (2020) Hospital staff report it is not burnout, but a normal stress reaction to an uncongenial work environment: findings from a qualitative study. International Journal of Environmental Research and Public Health, 17(11). 1-11. http://doi.org/10.1016/j.msksp.2020.102202

Kilkenny MF, Dalli LL, Kim J, Sundararajan V, Andrew NE, Dewey HM, Johnston T, Alif SM, Lindley RI, Jude M, Blacker D, Gange N, Grimley R, Katzenellenbogen JM, Thrift AG, Lannin NA, Cadilhac DA, (2020) Factors Associated With 90-Day Readmission After Stroke or Transient Ischemic Attack. Stroke, 51(2). 571-578. http://doi.org/10.1016/j.joca.2020.08.012

King MG, Semciw AI, Schache AG, Middleton K, Heerey JJ, Sritharan P, Scholes MJ, Mentiplay BF, Crossley KM, (2020) Lower-limb biomechanics in football players with and without hip-related pain. Medicine and Science in Sports and Exercise, 52(8). 1776-1784. http://doi.org/10.1186/s13047-020-00401-3

Kunstler BE, Cook JL, Freene N, Finch CF, Kemp JL, O'Halloran PD, Gaida JE. (19 Jul 2020). Letters to the Editor. Clinical journal of sport medicine: official journal of the Canadian Academy of Sport Medicine 30(4), e118-19

Kusmakar S, Shelyag S, Zhu Y, Dwyer D, Gastin P, Angelova M, (2020) Machine learning enabled team performance analysis in the dynamical environment of soccer. IEEE Access, 8. 90266-90279. http://doi.org/10.1186/s13047-020-00428-6

Kvist J, Filbay S, Andersson C, Ardern CL, Gauffin H, (2020) Radiographic and symptomatic knee osteoarthritis 32 to 37 years after acute anterior cruciate ligament rupture. American Journal of Sports Medicine, 48(10). 2387-2394. http://doi.org/10.1002/acr.24208

Lambell KJ, Tierney AC, Wang JC, Nanjayya V, Forsyth A, Goh GS, Vicendese D, Ridley EJ, Parry SM, Mourtzakis M, King SJ, (2020) Comparison of ultrasound-derived muscle thickness with computed tomography muscle cross-sectional area on admission to the intensive care unit: A pilot cross-sectional study. Journal of Parenteral and Enteral Nutrition. http://doi.org/10.2519/jospt.2020.9065

Landorf KB, Ackland CA, Bonanno DR, Menz HB, Forghany S, (2020) Effects of metatarsal domes on plantar pressures in older people with a history of forefoot pain. Journal of Foot and Ankle Research, 13(1). http://doi.org/10.1177/2049463720912208

Lannin NA, Ada L, English C, Ratcliffe J, Faux SG, Palit M, Gonzalez S, Olver J, Cameron I, Crotty M, Bowman M, Milte R, Vratsistas-Curto A, McNamara A, Shiner C, Lynch E, Schneider E, Beaumont L, Killington M, Coulter M, Sindhusake D, Anthonisz B, Mei Khor H, Tan J, Teo K, Ng L, Huang L, Paul M, Simon N, Gupta N, Martens R, Bolitho S, Morrison S, Hooper S, Chow Y, Watanabe Y, Cowling A, Flu C, Edwards D, Toma E, Hendrey G, Sheehan J, Butler J, Hocking J, Rutzou L, White M, Snigg M, Hughes R, Sweeney S, Flint S, Levy T, Bramah V, Lathlean C, McCallum C, Chui E, Allan F, Webber H, Cameron J, Campbell J, Lawson J, Zenouith K, Borschmann K, Moloney K, Jolliffe L, Cameron L, Howlett O, Nicks R, O'Keefe S, (2020) Effect of Additional Rehabilitation After Botulinum Toxin-A on Upper Limb Activity in Chronic Stroke: The InTENSE Trial. Stroke, 51(2). 556-562. http://doi.org/10.1016/j.ptsp.2020.09.003

Lannin NA, Coulter M, Laver K, Hyett N, Ratcliffe J, Holland AE, Callaway L, English C, Bragge P, Hill S, Unsworth CA, (2020) Public perspectives on acquired brain injury rehabilitation and components of care: A Citizens' Jury. Health Expectations. http://doi.org/10.1016/j.jsams.2020.10.015

Lathlean TJH, Gastin PB, Newstead SV, Finch CF, (2020) Player wellness (soreness and stress) and injury in elite junior Australian football players over 1 season. International Journal of Sports Physiology and Performance, 15(10). 1422-1429. http://doi.org/10.1016/j.apmr.2019.06.015

Laver KE, Adey-Wakeling Z, Crotty M, Lannin NA, George S, Sherrington C, (2020) Telerehabilitation services for stroke. Cochrane Database of Systematic Reviews, 2020(1). http://doi.org/10.1007/s00520-020-05436-7

Lawrenson PR, Vicenzino BT, Hodges PW, Crossley KM, Heerey JJ, Semciw AI, (2020) Pericapsular hip muscle activity in people with and without femoroacetabular impingement. A comparison in dynamic tasks. Physical Therapy in Sport, 45. 135-144. http://doi.org/10.1093/ptj/pzaa135

Leahy E, Chipchase L, Calo M, Blackstock FC, (2020) Which learning activities enhance physical therapist practice? Part 2: systematic review of qualitative studies and thematic synthesis. Physical Therapy, 100(9). 1484-1501. http://doi.org/10.1002/jmrs.432

Leahy E, Chipchase L, Calo M, Blackstock FC, (2020) Which learning activities enhance physical therapist practice? Part 1: systematic review and meta-analysis of quantitative studies. Physical Therapy, 100(9). 1469-1483. http://doi.org/10.1186/s13047-020-0370-x

Levy T, Crotty M, Laver K, Lannin N, Killington M, (2020) Does the addition of concurrent visual feedback increase adherence to a home exercise program in people with stroke: a single-case series?. BMC Research Notes, 13(1). http://doi.org/10.1007/s00167-019-05374-w

Lieshout K, Oates J, Baker A, Unsworth CA, Cameron ID, Schmidt J, Lannin NA, (2020) Burden and preparedness amongst informal caregivers of adults with moderate to severe traumatic brain injury. International Journal of Environmental Research and Public Health, 17(17). http://doi.org/10.1136/bjsports-2019-100983

Lithgow M, Munteanu S, Buldt A, Arnold JB, Kelly LA, Menz H, (2020) Foot structure and lower limb function in individuals with midfoot osteoarthritis: a systematic review. Osteoarthritis and Cartilage, 28(12). 1514-1524. http://doi.org/10.1016/j.jsams.2020.04.007

Lockwood K, Harding K, Boyd J, Taylor N, (2020) Home visits by occupational therapists improve adherence to recommendations: Process evaluation of a randomised controlled trial. Australian Occupational Therapy Journal, 67(4). 287-296. http://doi.org/10.1186/s13047-020-0377-3

Lynch EA, Labberton AS, Kim J, Kilkenny MF, Andrew NE, Lannin N, Grimley R, Faux SG, Cadilhac DA, (2020) Out of sight, out of mind: long-term outcomes for people discharged home, to inpatient rehabilitation and to residential aged care after stroke. Disability and Rehabilitation. http://doi.org/10.1080/09638288.2020.1807619

MacRi EM, Crossley KM, Hart HF, D'Entremont AG, Forster BB, Ratzlaff CR, Wilson DR, Khan KM, (2020) Clinical findings in patellofemoral osteoarthritis compared to individually-matched controls: A pilot study. BMJ Open Sport and Exercise Medicine, 6(1). http://doi.org/10.1186/s13047-020-00404-0

Macri EM, Hart H, Thwaites D, Barton C, Crossley K, Bierma-Zeinstra SMA, van Middelkoop M, (2020) Medical interventions for patellofemoral pain and patellofemoral osteoarthritis: a systematic review. Journal of Clinical Medicine, 9(11). 1-19. http://doi.org/10.1136/bjsports-2019-101776

Maniar N, Bryant AL, Sritharan P, Schache AG, Opar DA, (2020) Muscle contributions to medial and lateral tibiofemoral compressive loads during sidestep cutting. Journal of Biomechanics, 101. http://doi.org/10.1016/j.ptsp.2020.02.004

Maniar N, Schache AG, Pizzolato C, Opar DA, (2020) Muscle contributions to tibiofemoral shear forces and valgus and rotational joint moments during single leg drop landing. Scandinavian Journal of Medicine and Science in Sports, 30(9). 1664-1674. http://doi.org/10.1007/s00296-019-04472-9

Matthews M, Rathleff MS, Claus A, McPoil T, Nee R, Crossley KM, Kasza J, Vicenzino BT, (2020) Does foot mobility affect the outcome in the management of patellofemoral pain with foot orthoses versus hip exercises? A randomised clinical trial. British Journal of Sports Medicine, 54(23). 1416-1422. http://doi.org/10.1136/bmjsem-2020-000877

Mayes S, Ferris A-R, Smith P, Cook J., (2020) Hip Joint Effusion-Synovitis Is Associated With Hip Pain and Sports/Recreation Function in Female Professional Ballet Dancers. Clinical journal of sport medicine. 30(4):341-347.

Mayes S, Smith P, Stuart D, Cook J, (2020) Joint hypermobility does not increase the risk of developing hip pain, cartilage defects, or retirement in professional ballet dancers over 5 years. Clinical Journal of Sport Medicine, [0-9]-5. http://doi.org/10.1016/j.jns.2020.117022

Mayes S, Smith P, Stuart D, Semciw A, Cook J, (2020) Hip joint cartilage defects in professional ballet dancers. Clinical Journal of Sport Medicine. http://doi.org/10.1016/j.gaitpost.2020.03.005

McLeod G, O'Connor S, Morgan D, Kountouris A, Finch CF, Fortington LV, (2020) Medical-attention Injuries in Community Cricket: A Systematic Review. BMJ Open Sport and Exercise Medicine, 6(1). 1-11. http://doi.org/10.1016/j.gaitpost.2020.05.029

McLeod G, O'Connor S, Morgan D, Kountouris A, Finch CF, Fortington LV, (2020) Prospective reporting of injury in community-level cricket: a systematic review to identify research priorities. Journal of Science and Medicine in Sport, 23(11). 1028-1043. http://doi.org/10.1016/j.gaitpost.2020.06.025

McMaster DT, Tavares F, O'Donnell S, Driller M, (2020) Validity of vertical jump measurement systems. Measurement in Physical Education and Exercise Science. http://doi.org/10.1016/j.gaitpost.2020.08.110

Mentiplay BF, Clark RA, Bower KJ, Williams G, Pua YH, (2020) Five times sit-to-stand following stroke: relationship with strength and balance. Gait and Posture, 78. 35-39. http://doi.org/10.1177/2325967120969425

Menz HB, Auhl M, Tan JM, Levinger P, Roddy E, Munteanu SE, (2020) Comparative responsiveness of outcome measures for the assessment of pain and function in first metatarsophalangeal joint osteoarthritis. Arthritis Care & Research, 72(5). 679-684. http://doi.org/10.1097/PHM.0000000000001271

Meredith SJ, Rauer T, Chmielewski TL, Fink C, Diermeier T, Rothrauff BB, Svantesson E, Hamrin Senorski E, Hewett TE, Sherman SL, Lesniak BP, Bizzini M, Chen S, Cohen M, Villa SD, Engebretsen L, Feng H, Ferretti M, Fu FH, Imhoff AB, Kaeding CC, Karlsson J, Kuroda R, Lynch AD, Menetrey J, Musahl V, Navarro RA, Rabuck SJ, Siebold R, Snyder-Mackler L, Spalding T, van Eck C, Vyas D, Webster K, Wilk K, (2020) Return to sport after anterior cruciate ligament injury: Panther Symposium ACL Injury Return to Sport Consensus Group. Orthopaedic Journal of Sports Medicine, 8(6). 1-11. http://doi.org/10.1002/acr.24173

Messer DJ, Shield AJ, Williams MD, Timmins RG, Bourne MN, (2020) Hamstring muscle activation and morphology are significantly altered 1–6 years after anterior cruciate ligament reconstruction with semitendinosus graft. Knee Surgery, Sports Traumatology, Arthroscopy, 28(3). 733-741. http://doi.org/10.1136/bjsports-2019-101503

Mills B, Mayo B, Tavares F, Driller M, (2020) The effect of tissue flossing on ankle range of motion, jump and sprint performance in elite rugby union athletes. Journal of Sport Rehabilitation, 29(3). 282-286. http://doi.org/10.1093/ptj/pzaa108

Milte R, Ratcliffe J, Ada L, English C, Crotty M, Lannin NA, (2020) Protocol for the economic evaluation of the InTENSE program for rehabilitation of chronic upper limb spasticity. BMC Health Services Research, 20(1). http://doi.org/10.1093/ptj/pzaa107

Mine K, Girdwood M, Toyoda H, Nakayama T, (2020) Influences of Two-Year Professional Education Delivered in English on Japanese Undergraduate Physiotherapy Students' English Vocabulary and International Perspectives. Journal of Physical Therapy Education, 34(2). 115-119. http://doi.org/10.1123/jab.2019-0021

Moore D, Semciw AI, Pizzari T, (2020) A systematic review and meta-analysis of common therapeutic exercises that generate highest muscle activity in the Gluteus Medius and Gluteus Minimus segments. International journal of sports physical therapy, 15(6). 856-881. http://doi.org/10.1111/sms.13552

Moore D, Semciw AI, Wisbey-Roth T, Pizzari T, (2020) Adding hip rotation to therapeutic exercises can enhance gluteus medius and gluteus minimus segmental activity levels – An electromyography study. Physical Therapy in Sport, 43. 157-165. http://doi.org/10.1016/j.jbiomech.2020.109641

Moritz T, Snowdon D, Peiris CL, (2020) Combining aquatic physiotherapy with usual care physiotherapy for people with neurological conditions: A systematic review. Physiotherapy Research International, 25(1). http://doi.org/10.1177/0363546520914628

Murphy M, Gibson W, Chivers P, Docking S, Rio E, (2020) Considerations for multi-centre conditioned pain modulation (CPM) research; an investigation of the inter-rater reliability, level of agreement and confounders for the Achilles tendon and Triceps Surae. British Journal of Pain. http://doi.org/10.1111/sms.13711

Murphy MC, Chivers P, Mahony K, Mosler AB, (2020) Risk factors for dominant-shoulder injury in elite female Australian cricket players: A prospective study. Translational Sports Medicine, 3(5). 404-414. http://doi.org/10.1093/gerona/glz169

Murphy MC, Rio E, Chivers P, Debenham J, Docking S, Travers M, Gibson W, (2020) Do people with unilateral mid-portion Achilles tendinopathy who participate in running-related physical activity exhibit a meaningful conditioned pain modulation (CPM) effect: a pilot study. Journal of Science and Medicine in Sport. http://doi.org/10.1177/0363546520959327

Murray, A. M., & Varley, M. C. (2019). Technology in soccer. Elite Soccer Players: Maximizing Performance and Safety, 37.

Murray E, McLeod S, Biesiekierski J, Ng A, Croxford S, Stirling E, Bramley A, Forsyth A, (2020) Employability initiatives in undergraduate education and application to human nutrition: a scoping review. Journal of Teaching and Learning for Graduate Employability, 11(1). 63-80. http://doi.org/10.1007/s10439-020-02646-2

Naseri C, McPhail SM, Haines TP, Morris ME, Shorr R, Etherton-Beer C, Netto J, Flicker L, Bulsara M, Lee DCA, Francis-Coad J, Waldron N, Boudville A, Hill AM, (2020) Perspectives of older adults regarding barriers and enablers to engaging in fall prevention activities after hospital discharge. Health and Social Care in the Community, 28(5). 1710-1722. http://doi.org/10.1080/02701367.2020.1823308

Neal BS, Lack SD, Barton CJ, Birn-Jeffery A, Miller S, Morrissey D, (2020) Is markerless, smart phone recorded two-dimensional video a clinically useful measure of relevant lower limb kinematics in runners with patellofemoral pain? A validity and reliability study. Physical Therapy in Sport, 43. 36-42. http://doi.org/10.2519/jospt.2020.9705

Nelson M, Bourke M, Crossley K, Russell T, (2020) Telerehabilitation is non-inferior to usual care following total hip replacement — a randomized controlled non-inferiority trial. Physiotherapy, 107. 19-27. http://doi.org/10.5195/ijt.2020.6323

Nielsen RØ, Shrier I, Casals M, Nettel-Aguirre A, Møller M, Bolling C, Bittencourt NFN, Clarsen B, Wedderkopp N, Soligard T, Timpka T, Emery CA, Bahr R, Jacobsson J, Whiteley R, Dahlström Ö, van Dyk N, Pluim BM, Stamatakis E, Palacios-Derflingher L, Fagerland MW, Khan K, Ardern C, Verhagen E, (2020) Statement on methods in sport injury research from the first METHODS MATTER matter meeting, Copenhagen, 2019. Journal of Orthopaedic and Sports Physical Therapy, 50(5). 226-233. http://doi.org/10.1007/s00586-020-06379-7

Nunes GS, Barton C, Serrão FV, (2020) Impaired knee muscle capacity is correlated with impaired sagittal kinematics during jump landing in women with patellofemoral pain. Journal of Strength and Conditioning Research, [0-9]-7. http://doi.org/10.1136/bjsports-2020-102281

Nunes GS, Pizzari T, Neate R, Barton CJ, Semciw A, (2020) Gluteal muscle activity during running in asymptomatic people. Gait and Posture, 80. 268-273. http://doi.org/10.1016/j.ptsp.2019.10.008

O'Keefe S, Stanley M, Sansonetti D, Schneider EJ, Kras M, Morarty J, Lannin NA, (2020) Designing an intervention process that embeds work-focussed interventions within inpatient rehabilitation: An intervention mapping approach. Australian Occupational Therapy Journal. http://doi.org/10.1016/j.ptsp.2020.05.006

O'Sullivan IC, Crossley KM, Kamper SJ, Van Middelkoop M, Vicenzino B, Franettovich Smith MM, Menz HB, Smith AJ, Tucker K, O'Leary KT, Collins NJ, (2020) HAPPi Kneecaps! Protocol for a participant- And assessor-blinded, randomised, parallel group feasibility trial of foot orthoses for adolescents with patellofemoral pain. Journal of Foot and Ankle Research, 13(1). 1-10. http://doi.org/10.1016/j.ptsp.2020.03.005

O' Halloran PD, Holden J, Breckon J, Davidson M, Rahayu W, Monfries M, Taylor NF, (2020) Embedded Motivational Interviewing combined with a smartphone app to increase physical activity in people with sub-acute low back pain: Study protocol of a cluster randomised control trial. Contemporary Clinical Trials Communications, 17. http://doi.org/10.1016/j.ptsp.2020.04.031

O'Connor RF, King E, Richter C, Webster KE, Falvey ÉC, (2020) No Relationship Between Strength and Power Scores and Anterior Cruciate Ligament Return to Sport After Injury Scale 9 Months After Anterior Cruciate Ligament Reconstruction. American Journal of Sports Medicine, 48(1). 78-84. http://doi.org/10.1177/1120700020943853

Orchard JJ, Orchard JW, La Gerche A, Kountouris A, Raju H, Young M, Puranik R, Semsarian C, (2020) Audit of a cardiac screening policy for elite Australian cricketers. Journal of Science and Medicine in Sport, 23(6). 541-547. http://doi.org/10.1016/j.ptsp.2020.06.004

Owen PJ, Miller CT, Rantalainen T, Simson KJ, Connell D, Hahne A, Trudel G, Ford J, Belavy DL, (2020) Exercise for the intervertebral disc: a 6-month randomised controlled trial in chronic low back pain. European Spine Journal, 29(8). 1887-1899. http://doi.org/10.1161/STROKEAHA.119.027602

Paterson KL, Hinman RS, Menz HB, Bennell KL, (2020) Management of first metatarsophalangeal joint osteoarthritis by physical therapists and podiatrists in Australia and the United Kingdom: a cross-sectional survey of current clinical practice. Journal of Foot and Ankle Research, 13(1). http://doi.org/10.1111/ajag.12765

Paterson KL, Hinman RS, Metcalf BR, Jones SE, Menz HB, Munteanu SE, Kasza J, Bennell KL, (2020) Foot orthoses for first metatarsophalangeal joint osteoarthritis: study protocol for the FORT randomised controlled trial. BMC Musculoskeletal Disorders, 21(1). 1-9. http://doi.org/10.1136/bmjoq-2020-000954

Patterson B, Culvenor AG, Barton CJ, Guermazi A, Stefanik J, Morris HG, Whitehead TS, Crossley KM, (2020) Poor Functional Performance 1 Year After ACL Reconstruction Increases the Risk of Early Osteoarthritis Progression. BRITISH JOURNAL OF SPORTS MEDICINE, 54(9). 246-253. http://doi.org/10.2196/17249

Patterson BE, Crossley KM, Perraton LG, Kumar AS, King MG, Heerey JJ, Barton CJ, Culvenor AG, (2020) Limb symmetry index on a functional test battery improves between one and five years after anterior cruciate ligament reconstruction, primarily due to worsening contralateral limb function. Physical Therapy in Sport, 44. 67-74. http://doi.org/10.1080/09638288.2020.1807619

Patterson KAE, Ferrar K, Gall SL, Venn AJ, Blizzard L, Dwyer T, Cleland VJ, (2020) Cluster patterns of behavioural risk factors among children: Longitudinal associations with adult cardio-metabolic risk factors. Preventive Medicine, 130. http://doi.org/10.1080/09638288.2020.1815873

Pazzinatto MF, Silva DDO, Willy RW, Azevedo FM, Barton CJ, (2020) Fear of movement and (re)injury is associated with condition specific outcomes and health-related quality of life in women with patellofemoral pain. Physiotherapy Theory and Practice, [0-9]-11. http://doi.org/10.1016/j.ptsp.2020.01.012

Peat G, Rathod-Mistry T, Paskins Z, Marshall M, Thomas MJ, Menz HB, Nicholls E, Myers H, Duncan R, van der Windt DA, Roddy E, Dziedzic KS, (2020) Relative prevalence and distribution of knee, hand and foot symptomatic osteoarthritis subtypes in an English population. Musculoskeletal care, 18(2). 219-224. http://doi.org/10.1038/s41598-020-63030-7

Peiris CL, Taylor NF, Watts JJ, Shields N, Brusco NK, Mortimer D, (2020) Mapping the Functional Independence Measure to a multi-attribute utility instrument for economic evaluations in rehabilitation: a secondary analysis of randomized controlled trial data. Disability and Rehabilitation, 42(21). 3024-3032. http://doi.org/10.1186/s13047-020-00403-1

Pellegrino SA, Chan S, Simons K, Kinsella R, Gibbs P, Faragher IG, Deftereos I, Yeung JMC, (2020) Patterns of surveillance for colorectal cancer: experience from a single large tertiary institution. Asia-Pacific Journal of Clinical Oncology, [0-9]-7. http://doi.org/10.1177/0269215519877235

Perucca P, Anderson A, Jazayeri D, Hitchcock A, Graham J, Todaro M, Tomson T, Battino D, Perucca E, Ferri MM, Rochtus A, Lagae L, Canevini MP, Zambrelli E, Campbell E, Koeleman BPC, Scheffer IE, Berkovic SF, Kwan P, Sisodiya SM, Goldstein DB, Petrovski S, Craig J, Vajda FJE, O'Brien TJ, (2020) Antiepileptic Drug Teratogenicity and De Novo Genetic Variation Load. Annals of Neurology, 87(6). 897-906. http://doi.org/10.1371/journal.pone.0234265

Phan HT, Gall SL, Blizzard CL, Lannin NA, Thrift AG, Anderson CS, Kim J, Grimley RS, Castley HC, Kilkenny MF, Cadilhac DA, (2020) Sex differences in quality of life after stroke were explained by patient factors, not clinical care: evidence from the Australian Stroke Clinical Registry. European Journal of Neurology. http://doi.org/10.1016/j.gaitpost.2019.10.019

Pietrosimone LS, Blackburn JT, Wikstrom EA, Berkoff DJ, Docking SI, Cook J, Padua DA, (2020) Landing Biomechanics, But Not Physical Activity, Differ in Young Male Athletes With and Without Patellar Tendinopathy. Journal of Orthopaedic and Sports Physical Therapy. http://doi.org/10.1016/j.gaitpost.2019.12.012

Pietrosimone LS, Blackburn JT, Wikstrom EA, Berkoff DJ, Docking SI, Cook J, Padua DA, (2020) Landing biomechanics are not immediately altered by a single-dose patellar tendon isometric exercise protocol in male athletes with patellar tendinopathy: A single-blinded randomized cross-over trial. Physical Therapy in Sport, 46. 177-185. http://doi.org/10.1186/s13047-020-00384-1

Pizzolato C, Shim VB, Lloyd DG, Devaprakash D, Obst SJ, Newsham-West R, Graham DF, Besier TF, Zheng MH, Barrett RS, (2020) Targeted Achilles tendon training and rehabilitation using personalized and real-time multiscale models of the neuromusculoskeletal system. Frontiers in Bioengineering and Biotechnology, 8. 1-15. http://doi.org/10.1002/msc.1490

Pogrebnoy D, Dennett A, (2020) Exercise Programs Delivered According to Guidelines Improve Mobility in People With Stroke: A Systematic Review and Meta-analysis. Archives of Physical Medicine and Rehabilitation, 101(1). 154-165. http://doi.org/10.1186/s13047-020-00426-8

Pool D, Valentine J, Taylor N, Bear N, Elliott C, (2020) Locomotor and robotic assistive gait training for children with cerebral palsy. Developmental Medicine and Child Neurology. http://doi.org/10.1016/j.jphys.2020.09.010

Post AA, Rio EK, Sluka KA, Lorimer Moseley G, Bayman EO, Hall MM, de Cesar Netto C, Wilken JM, Danielson JF, Chimenti R, (2020) Effect of pain education and exercise on pain and function in chronic achilles tendinopathy: protocol for a double-blind, placebo-controlled randomized trial. JMIR Research Protocols, 9(11). 1-19. http://doi.org/10.1177/0363546520931854

Posthumus L, Macgregor C, Winwood P, Darry K, Driller M, Gill N, (2020) Physical and Fitness Characteristics of Elite Professional Rugby Union Players. Sports, 8(6). 1-12. http://doi.org/10.1177/2325967120946328

Posthumus L, Macgregor C, Winwood P, Tout J, Morton L, Driller M, Gill N, (2020) The physical characteristics of elite female rugby union players. International Journal of Environmental Research and Public Health, 17(18). 1-10. http://doi.org/10.1186/s13018-020-01807-2

Presland JD, Opar DA, Williams MD, Hickey JT, Maniar N, Lee Dow C, Bourne MN, Timmins RG, (2020) Hamstring strength and architectural adaptations following inertial flywheel resistance training. Journal of Science and Medicine in Sport, 23(11). 1093-1099. http://doi.org/10.1136/bmjopen-2020-037153

Pritchard E, Cussen A, Delafosse V, Swift M, Jolliffe L, Yeates H, (2020) Interventions supporting caregiver readiness when caring for patients with dementia following discharge home: A mixed-methods systematic review. Australasian Journal on Ageing, 39(3). e239-e250. http://doi.org/10.1016/j.jns.2019.116522

Proud E, Morris ME, Bilney B, Miller KJ, Nijkrake MJ, Munneke M, McGinley JL, (2020) Hand dexterity assessment in Parkinson's disease: construct validity of the 9-Hole peg test for the more affected hand. Disability and Rehabilitation, [0-9]-6. http://doi.org/10.1055/a-1044-2397

Provencher V, Clemson L, Wales K, Cameron ID, Gitlin LN, Grenier A, Lannin NA, (2020) Supporting at-risk older adults transitioning from hospital to home: who benefits from an evidence-based patient-centered discharge planning intervention? Post-hoc analysis from a randomized trial. BMC Geriatrics, 20(1). http://doi.org/10.1002/brb3.1578

Pua YH, Tan HH, Mentiplay BF, Lim LZX, Tham ACW, Quek JJE, Woon EL, Yeh TT, Tan CIC, Hunt MA, Clark RA, (2020) Immediate effects of valgus bracing on knee joint moments during walking in knee-healthy individuals: Potential modifying effects of body height. Gait and Posture, 80. 383-390. http://doi.org/10.1016/j.jns.2020.117022

Quick S, Cleary S, Shields N, (2020) How Effective Are Interventions to Increase Physical Activity Levels among Older Inpatients Receiving Rehabilitation, without Increasing the Amount of Therapy? A Systematic Review. Physiotherapy Canada, 72(1). 83-93. http://doi.org/10.2519/jospt.2020.9400

Raab M, Avugos S, Bar-Eli M, MacMahon C, (2020) The referee's challenge: a threshold process model for decision making in sport games. International Review of Sport and Exercise Psychology. http://doi.org/10.1111/sms.13767

Rabusin CL, Menz HB, McClelland JA, Evans AM, Malliaras P, Docking SI, Landorf KB, Gerrard JM, Munteanu SE, (2020) Efficacy of heel lifts versus calf muscle eccentric exercise for mid-portion Achilles tendinopathy (HEALTHY): a randomised trial. British Journal of Sports Medicine. http://doi.org/10.2196/18584

Rees L, Sherwood M, Shields N, (2020) Tragedy or over-achievement: a media analysis of spinal cord injury in Australia. Media International Australia. http://doi.org/10.1016/j.ptsp.2020.07.004

Reiman MP, Agricola R, Kemp JL, Heerey JJ, Weir A, Van Klij P, Kassarjian A, Mosler AB, Ageberg E, Hölmich P, Warholm KM, Griffin D, Mayes S, Khan KM, Crossley KM, Bizzini M, Bloom N, Casartelli NC, Diamond LE, Di Stasi S, Drew M, Friedman DJ, Freke M, Gojanovic B, Glyn-Jones S, Harris-Hayes M, Hunt MA, Impellizzeri FM, Ishøi L, Jones DM, King MG, Lawrenson PR, Leunig M, Lewis CL, Mathieu N, Moksnes H, Risberg MA, Scholes MJ, Semciw AI, Serner A, Thorborg K, Wörner T, Dijkstra HP, (2020) Consensus recommendations on the classification, definition and diagnostic criteria of hip-related pain in young and middle-aged active adults from the International Hip-related Pain Research Network, Zurich 2018. British Journal of Sports Medicine, 54(11). 631-641. http://doi.org/10.1080/09593985.2020.1830323

Reimert J, Lockwood KJ, Hau R, Taylor NF, (2020) Are hip movement precautions effective in preventing prosthesis dislocation post hip arthroplasty using a posterior surgical approach? A systematic review and meta-analysis. Disability and Rehabilitation, [0-9]-7. http://doi.org/10.1016/j.jshs.2020.12.002

Rice S, Olive L, Gouttebarge V, Parker AG, Clifton P, Harcourt P, Llyod M, Kountouris A, Smith B, Busch B, Purcell R, (2020) Mental Health Screening: Severity and Cut-off Point Sensitivity of the Athlete Psychological Strain Questionnaire in Male and Female Elite Athletes. BMJ Open Sport & Exercise Medicine, 6(1). 1-6. http://doi.org/10.1002/pbc.28264

Rice SM, Parker AG, Mawren D, Clifton P, Harcourt P, Lloyd M, Kountouris A, Smith B, McGorry PD, Purcell R, (2020) Preliminary psychometric validation of a brief screening tool for athlete mental health among male elite athletes: the Athlete Psychological Strain Questionnaire. International Journal of Sport and Exercise Psychology, 18(6). 850-865. http://doi.org/10.1080/14763141.2020.1726994

Rio, E. K., Mc Auliffe, S., Kuipers, I., Girdwood, M., Alfredson, H., Bahr, R., . . . Zwerver, J. (2020). ICON PART-T 2019–International Scientific Tendinopathy Symposium Consensus: recommended standards for reporting participant characteristics in tendinopathy research (PART-T). British Journal of Sports Medicine, 54(11), 627. http://doi.org/10.1136/bjsports-2019-100957

Rist B, Glynn T, Clarke A, Pearce A, (2020) The Evolution of Psychological Response to Athlete Injury Models for Professional Sport. The Journal of Science and Medicine, 2(4). 1-14. http://doi.org/10.1249/MSS.0000000000002297

Roberts AH, Greenwood D, Humberstone C, Raynor AJ, (2020) Pilot study on the reliability of the coach's eye: identifying talent throughout a 4-day cadet judo camp. Frontiers in Sports and Active Living, 2. 1-8. http://doi.org/10.2519/JOSPT.2021.9622

Roberts AH, Greenwood D, Stanley M, Humberstone C, Iredale F, Raynor A, (2020) Understanding the "gut instinct" of expert coaches during talent identification. Journal of Sports Sciences. http://doi.org/10.1016/j.joca.2020.12.013

Rogers SA, Hassmén P, Roberts AH, Alcock A, Gilleard WL, Warmenhoven JS, (2020) Movement competency training delivery: at school or online? A pilot study of high-school athletes. Sports, 8(4). http://doi.org/10.1136/bjsports-2019-101587

Ruhdorfer A, Wirth W, Culvenor AG, Eckstein F, (2020) Reduction in Thigh Muscle Strength Occurs Concurrently but Does Not Seem to Precede Incident Knee Pain in Women: Data From the Osteoarthritis Initiative Cohort. American Journal of Physical Medicine and Rehabilitation, 99(1). 33-40. http://doi.org/10.1136/bjsports-2019-101690

Saw R, Saw A, Kountouris A, Orchard J, (2020) Upper lumbar bone stress injuries in elite cricketers. Clinical Journal of Sport Medicine. http://doi.org/10.1177/2325967120930829

Schaefer A, Ferdinands RED, O'Dwyer N, Edwards S, (2020) A biomechanical comparison of conventional classifications of bowling action-types in junior fast bowlers. Journal of Sports Sciences, 38(10). 1085-1095. http://doi.org/10.1136/bjsports-2019-101453

Schwetlik SN, Baldock KL, Hill CL, Ferrar K, (2020) Chronic stress and arthritis: a scoping review. Arthritis Care and Research. http://doi.org/10.2519/jospt.2020.9400

Shambrook P, Kingsley M, Taylor N, Wundersitz D, Wundersitz CE, Gordon B, (2020) Multiple short bouts of exercise are better than a single continuous bout for cardiometabolic health: a randomised crossover trial. European Journal of Applied Physiology, 120(11). 2361-2369. http://doi.org/10.2519/jospt.2020.9485

Shambrook P, Kingsley MI, Taylor NF, Wundersitz DW, Wundersitz CE, Paton CD, Gordon BA, (2020) A comparison of acute glycaemic responses to accumulated or single bout walking exercise in apparently healthy, insufficiently active adults. Journal of Science and Medicine in Sport, 23(10). 902-907. http://doi.org/10.1016/j.ptsp.2020.02.004

Shaw B, Kinsella R, Henschke N, Walby A, Cowan S, (2020) Back pain "red flags": which are most predictive of serious pathology in the emergency department?. European Spine Journal, 29(8). 1870-1878. http://doi.org/10.1080/00140139.2020.1772379

Shaw L, Kiegaldie D, Morris ME, (2020) Educating health professionals to optimise falls screening in hospitals: Protocol for a mixed methods study. BMC Health Services Research, 20(1). http://doi.org/10.1080/00140139.2020.1839675

Sheedy R, Kramer SF, Johnson L, Shields N, Churilov L, Cadilhac DA, Bernhardt J, (2020) Acute hospital admission for stroke Is characterised by inactivity. Stroke Research and Treatment, 2020. http://doi.org/10.1016/j.jsams.2019.08.289

Shields N, Epstein A, Jacoby P, Kim R, Leonard H, Reddihough D, Whitehouse A, Murphy N, Downs J, (2020) Modifiable child and caregiver factors that influence community participation among children with Down syndrome. Disability and Rehabilitation. http://doi.org/10.1080/02640414.2020.1752440

Shields N, Stukas AA, Buhlert-Smith K, Prendergast LA, Taylor NF, (2020) Changing student health professionals' attitudes toward disability: a longitudinal study. Physiotherapy Canada. http://doi.org/10.3390/app10228149

Shields N, Willis C, Imms C, Prendergast LA, Watts JJ, van Dorsselaer B, McKenzie G, Bruder AM, Taylor NF, (2020) FitSkills: protocol for a stepped wedge cluster randomised trial of a community-based exercise programme to increase participation among young people with disability. BMJ Open, 10(7). 1-11. http://doi.org/10.1136/bjsports-2019-101337

SIMPSON M, Pizzari T, COOK T, WILDMAN S, LEWIS J, (2020) Effectiveness of non-surgical interventions for rotator cuff calcific tendinopathy: a systematic review. Journal of Rehabilitation Medicine, 52(10). 1-15. http://doi.org/10.5694/mja2.50856

"Sims K, Kountouris A, Stegeman JR, Rotstein AH, Beakley D, Saw AE, Cook JL, (2020) MRI bone marrow oedema signal intensity: a reliable and valid measure of lumbar bone stress injury in elite junior fast bowlers. Spine, 45(18). E1166-E1171. http://doi.org/10.1177/0363546520931854"

Slade SC, Bruce C, McGinley JL, Bloem BR, Morris ME, (2020) Patient and care partner views on exercise and structured physical activity for people with Progressive Supranuclear Palsy. PLoS ONE, 15(6). http://doi.org/10.1016/j.ptsp.2020.05.006

Slade SC, Finkelstein DI, McGinley JL, Morris ME, (2020) Exercise and physical activity for people with Progressive Supranuclear Palsy: a systematic review. Clinical Rehabilitation, 34(1). 23-33. http://doi.org/10.1371/journal.pone.0227815

Snowdon DA, Cooke S, Lawler K, Scroggie G, Williams K, Taylor NF, (2020) Physiotherapists prefer clinical supervision to focus on professional skill development: A qualitative study. Physiotherapy Canada, 72(3). 249-257. http://doi.org/10.1080/02640414.2020.1724044

Snowdon DA, Sargent M, Williams CM, Maloney S, Caspers K, Taylor NF, (2020) Effective clinical supervision of allied health professionals: a mixed methods study. BMC Health Services Research, 20(1). http://doi.org/10.1080/02640414.2020.1740490

Snowdon DA, Sounthakith V, Kolic J, Brooks S, Scanlon S, Taylor NF, (2020) Many inpatients may not be physically prepared for community ambulation on discharge from a publicly funded rehabilitation centre: a cross-sectional cohort study. Disability and Rehabilitation. http://doi.org/10.1080/17461391.2020.1775894

Snowdon DA, Storr B, Davis A, Taylor NF, Williams CM, (2020) The effect of delegation of therapy to allied health assistants on patient and organisational outcomes: a systematic review and meta-analysis. BMC Health Services Research, 20(1). http://doi.org/10.1109/ACCESS.2020.2992025

Sritharan P, Perraton LG, Munoz MA, Pivonka P, Bryant AL, (2020) Muscular Coordination of Single-Leg Hop Landing in Uninjured and Anterior Cruciate Ligament-Reconstructed Individuals. Journal of Applied Biomechanics, 36(4). 235-243. http://doi.org/10.1371/journal.pone.0240992

Sritharan P, Schache A, Culvenor A, Perraton L, Bryant AL, Crossley K, (2020) Between-limb differences in patellofemoral joint forces during running at 12 to 24 months after unilateral anterior cruciate ligament reconstruction. American Journal of Sports Medicine, 48(7). 1711-1719. http://doi.org/10.1123/ijspp.2019-0828

Stirling E, Willcox J, Ong KL, Forsyth A, (2020) Social media analytics in nutrition research: a rapid review of current usage in investigation of dietary behaviours. Public Health Nutrition, [0-9]-42. http://doi.org/10.1016/j.psychsport.2020.101662

Svantesson E, Hamrin Senorski E, Webster K, Karlsson J, Diermeier T, Rothrauff BB, Meredith SJ, Rauer T, Irrgang JJ, Spindler KP, Ma CB, Musahl V, the Panther Symposium ACL Injury Clinical Outcomes Consensus Group, Fu FH, Ayeni OR, Della Villa F, Della Villa S, Dye S, Ferretti M, Getgood A, Järvelä T, Kaeding CC, Kuroda R, Lesniak B, Marx RG, Maletis GB, Pinczewski L, Ranawat A, Reider B, Seil R, van Eck C, Wolf BR, Yung P, Zaffagnini S, Hao Zheng M, (2020) Clinical outcomes after anterior cruciate ligament injury:

Panther Symposium ACL Injury Clinical Outcomes Consensus Group. Orthopaedic Journal of Sports Medicine, 8(7). 1-19. http://doi.org/10.1016/j.jsams.2020.03.012

Swanton R, Gustafsson L, Froude E, Hodson T, McInerney M, Cahill LS, Lannin NA, (2020) Cognitive strategy training for adults with neurological conditions: a systematic review and meta-analysis exploring effect on occupational performance. British Journal of Occupational Therapy, 83(12). 723-740. http://doi.org/10.1080/1750984X.2020.1783696

Tagliaferri SD, Miller CT, Ford J, Hahne A, Main LC, Rantalainen T, Connell DA, Simson KJ, Owen PJ, Belavy DL, (2020) Randomized trial of general strength and conditioning versus motor control and manual therapy for chronic low back pain on physical and self-report outcomes. Journal of Clinical Medicine, 9(6). 1-17. http://doi.org/10.1016/j.ascom.2020.100423

Tamplin J, Morris ME, Marigliani C, Baker FA, Noffs G, Vogel AP, (2020) ParkinSong: outcomes of a 12-month controlled trial of Therapeutic Singing Groups in Parkinson's disease. Journal of Parkinson's Disease, 10(3). 1217-1230. http://doi.org/10.1002/ana.25724

Tan G, Dennett A, Nagarajan D, Freeman J, Peiris C, (2020) Program for Oncology Wellness and Exercise Rehabilitation (POWER): a feasibility study of oncology rehabilitation in the community. Journal of Cancer Rehabilitation, 3. 30-39. http://doi.org/10.1111/epi.16536

Tan HH, Mentiplay B, Quek JJE, Tham ACW, Lim LZX, Clark RA, Woon EL, Yeh TT, Tan CIC, Pua YH, (2020) Test–retest reliability and variability of knee adduction moment peak, impulse and loading rate during walking. Gait and Posture, 80. 113-116. http://doi.org/10.1186/s12913-020-05824-z

Tan JM, Crossley KM, Munteanu SE, Collins NJ, Hart HF, Donnar JW, Cleary G, O'Sullivan IC, Maclachlan LR, Derham CL, Menz HB, (2020) Associations of foot and ankle characteristics with knee symptoms and function in individuals with patellofemoral osteoarthritis. Journal of Foot and Ankle Research, 13(1). 1-10. http://doi.org/10.1016/j.msksp.2020.102167

Tan JM, Menz HB, Munteanu SE, Collins NJ, Hart HF, Donnar JW, Cleary G, O'Sullivan IC, Maclachlan LR, Derham CL, Crossley KM, (2020) Can radiographic patellofemoral osteoarthritis be diagnosed using clinical assessments?. Musculoskeletal Care, 18(4). 467-476. http://doi.org/10.1186/s12877-020-01515-w

Tan JM, Middleton KJ, Hart HF, Menz HB, Crossley KM, Munteanu SE, Collins NJ, (2020) Immediate effects of foot orthoses on lower limb biomechanics, pain, and confidence in individuals with patellofemoral osteoarthritis. Gait and Posture, 76. 51-57. http://doi.org/10.1080/02640414.2020.1741972

Tan SB, Williams AF, Tan EK, Clark RB, Morris ME, (2020) Parkinson's disease caregiver strain in Singapore. Frontiers in Neurology, 11. 1-10. http://doi.org/10.1177/1329878X20938062

Tarca BD, Wycherley TP, Bennett P, Meade A, Ferrar K, (2020) Modifiable physical factors associated with physical functioning for patients receiving dialysis: a systematic review. Journal of Physical Activity and Health, 17(4). 475-489. http://doi.org/10.1186/s40798-020-0234-8

Tarca BD, Wycherley TP, Meade A, Bennett P, Ferrar KE, (2020) Validity and Reliability of Hand-Held Dynamometry for Abdominal Flexion Muscular Assessment. Journal of Sport Rehabilitation, [0-9]-4. http://doi.org/10.1007/s00586-020-06452-1

Tatucu-Babet OA, Forsyth A, Owen E, Navarro-Perez D, Radcliffe J, Benheim D, Mendis H, Jois M, Itsiopoulos C, Tierney AC, (2020) Serum zonulin measured by enzyme-linked immunosorbent assay may not be a reliable marker of small intestinal permeability in healthy adults. Nutrition Research, 78. 82-92. http://doi.org/10.1123/jpah.2019-0338

Tavares F, Simões M, Matos B, Smith TB, Driller M, (2020) The acute and longer-term effects of cold water immersion in highly-trained volleyball athletes during an intense training block. Frontiers in Sports and Active Living, 2. http://doi.org/10.1080/02640414.2020.1823083

Taylor N, Gastin P, Mills O, Tran J, (2020) Network analysis of kick-in possession chains in elite Australian football. Journal of Sports Sciences, 38(9). 1053-1061. http://doi.org/10.1186/s40814-020-00706-x

Taylor NF, Wintle E, Longden C, Van De Water ATM, Shields N, (2020) Rehabilitation outcomes after proximal humeral fracture: An observational study. Physiotherapy Practice and Research, 41(2). 121-131. http://doi.org/10.1111/jorc.12321

Thomas CE, Abbott G, Gastin PB, Main LC, (2020) Construct validity and reliability of the talent development environment questionnaire in caribbean youth track and field athletes. PLoS One, 15(1). http://doi.org/10.1007/s40279-020-01265-0

Thomas CE, Gastin PB, Abbott G, Main LC, (2020) Impact of the talent development environment on the wellbeing and burnout of Caribbean youth track and field athletes. European Journal of Sport Science. http://doi.org/10.1016/j.ypmed.2019.105861

Thomeer L, Guan S, Gray H, Schache A, de Steiger R, Pandy M, (2020) Six-degree-of-freedom tibiofemoral and patellofemoral joint motion during activities of daily living. Annals of Biomedical Engineering. http://doi.org/10.1123/jpah.2019-0338

Thornton JS, Caneiro JP, Hartvigsen J, Ardern C, Vinther A, Wilkie K, Trease L, Ackerman KE, Dane K, McDonnell S-J, Mockler D, Gissane C, Wilson F, (2020) Treating low back pain in athletes: a systematic review with meta-analysis.. British Journal of Sports Medicine. http://doi.org/10.1080/02640414.2020.1763764

Tibrewala R, Ozhinsky E, Shah R, Flament I, Crossley K, Srinivasan R, Souza R, Link TM, Pedoia V, Majumdar S, (2020) Computer-aided detection AI reduces interreader variability in grading hip abnormalities with MRI. Journal of Magnetic Resonance Imaging, 52(4). 1163-1172. http://doi.org/10.1123/JSR.2019-0521

Tomkinson GR, Kaster T, Dooley FL, Fitzgerald JS, Annandale M, Ferrar K, Lang JJ, Smith JJ, (2020) Temporal trends in the standing broad jump performance of 10, [0-9]40, [0-9]01 children and adolescents between 1960 and 2017. Sports Medicine, [0-9]-18. http://doi.org/10.21091/mppa.2020.4028

Tredrea M, Middleton K, Bourne MN, Carey D, Scanlan AT, Dascombe BJ, (2020) Load centralization does not affect the kinetic and kinematic output of countermovement jumps. Journal of Strength and Conditioning Research. http://doi.org/10.1080/00140139.2020.1834625

Vickery-Howe D, Clarke A, Drain JR, Dascombe BJ, Middleton K, (2020) No physiological or biomechanical sex-by-load interactions during treadmill-based load carriage. Ergonomics, 63(9). 1175-1181. http://doi.org/10.1007/s40279-020-01394-6

Vickery-Howe DM, Drain JR, Clarke AC, Dascombe BJ, McWilliam JT, Middleton KJ, (2020) Treadmill load carriage overestimates energy expenditure of overground load carriage. Ergonomics, [0-9]-36. http://doi.org/10.3389/fbioe.2020.00878

Wallis JA, Ackerman IN, Brusco NK, Kemp JL, Sherwood J, Young K, Jennings S, Trivett A, Barton CJ, (2020) Barriers and enablers to uptake of a contemporary guideline-based management program for hip and knee osteoarthritis: A qualitative study. Osteoarthritis and Cartilage Open, 2(4). 1-7. http://doi.org/10.1080/1091367X.2019.1667361

Warmenhoven J, Weissensteiner JR, MacMahon C, (2020) "Dad! Let's go have a hit…": Sources and types of support in female cricket players. Journal of Science and Medicine in Sport, 23(10). 991-998. http://doi.org/10.1080/02640414.2020.1737387

Webster KE, Feller JA, (2020) Who passes return-to-sport tests, and which tests are most strongly associated with return to play after anterior cruciate ligament reconstruction?. Orthopaedic Journal of Sports Medicine, 8(12). http://doi.org/10.1177/0309364620921749

Wenzel L-A, White J, Sarkies MN, Morris ME, Carey L, Williams C, Taylor N, Martin J, Bardoel A, Haines TP, (2020) How do health professionals prioritize clinical areas for implementation of evidence into practice? A cross-sectional qualitative study. International Journal of Evidence-Based Healthcare, 18(3). 288-296. http://doi.org/10.1080/02640414.2020.1724044

West M, Sadler S, Hawke F, Munteanu SE, Chuter V, (2020) Foot health of Aboriginal and Torres Strait Islander Peoples in regional and rural NSW, Australia. Journal of Foot and Ankle Research, 13(1). 1-7. http://doi.org/10.1002/pbc.28264

Whittaker GA, Landorf KB, Munteanu SE, Menz HB, (2020) Predictors of response to foot orthoses and corticosteroid injection for plantar heel pain. Journal of Foot and Ankle Research, 13(1). 1-9. http://doi.org/10.1111/ajag.12765

Whittaker GA, Munteanu SE, Roddy E, Menz HB, (2020) Measures of foot pain, foot function, and general foot health. Arthritis Care and Research, 72(S10). 294-320. http://doi.org/10.3390/ijerph17186457

Wilson D, Driller M, Johnston B, Gill N, (2020) The effectiveness of a 17-week lifestyle intervention on health behaviors among airline pilots during COVID-19. Journal of Sport and Health Science. http://doi.org/10.1016/j.gaitpost.2020.05.029

Wilson F, Ardern CL, Hartvigsen J, Dane K, Trompeter K, Trease L, Vinther A, Gissane C, McDonnell SJ, Caneiro JP, Newlands C, Wilkie K, Mockler D, Thornton JS, (2020) Prevalence and risk factors for back pain in sports: a systematic review with meta-analysis. British Journal of Sports Medicine. http://doi.org/10.1093/gerona/glz169

Wilson M, Nickels M, Wadsworth B, Kruger P, Semciw A, (2020) Acute cervical spinal cord injury and extubation failure: A systematic review and meta-analysis. Australian Critical Care, 33(1). 97-105. http://doi.org/10.1080/1091367X.2020.1835664

Wörner T, Thorborg K, Webster K, Stålman A, Eek F, (2020) Psychological readiness is related to return to sport following hip arthroscopy and can be assessed by the Hip-Return to Sport after Injury scale (Hip-RSI). Knee Surgery, Sports Traumatology, Arthroscopy. http://doi.org/10.1016/j.jshs.2020.11.007

Wundersitz C, Caelli A, Georgy J, Musovic A, Manning R, Prause M, Robertson J, Taylor NF, (2020) Conducting community rehabilitation review sessions via videoconference: a feasibility study. Australian Journal of Rural Health, 28(6). 603-612. http://doi.org/10.1016/j.jshs.2020.11.012

Xu T, Clemson L, O'Loughlin K, Lannin N, Dean CM, Koh G, (2020) Stepping On after Stroke falls-prevention programme for community stroke survivors in Singapore: a feasibility study. British Journal of Occupational Therapy. http://doi.org/10.1111/jsr.13246

Young CM, Luo W, Gastin PB, Dwyer DB, (2020) Understanding the relative contribution of technical and tactical performance to match outcome in Australian Football. Journal of Sports Sciences. http://doi.org/10.1177/2049463720912208

Zacharias A, Pizzari T, Semciw AI, English DJ, Kapakoulakis T, Green RA, (2020) Gluteus medius and minimus activity during stepping tasks: Comparisons between people with hip osteoarthritis and matched control participants. Gait and Posture, 80. 339-346. http://doi.org/10.1519/JSC.0000000000003508

Zhang W, Anderson CS, Kilkenny MF, Kim J, Dewey HM, Andrew NE, Lannin NA, Thrift AG, Grimley R, Sundararajan V, Cadilhac DA, (2020) Hospital admissions prior to primary intracerebral haemorrhage and relevant factors associated with survival. Journal of Stroke and Cerebrovascular Diseases, 29(9). http://doi.org/10.3390/sports8090129

General enquiries

La Trobe Sport and Excercise Medicine
Research Centre
La Trobe University
VIC 3086
Australia

T +61 3 9479 2169

E semrc@latrobe.edu.au

B http://semrc.blogs.latrobe.edu.au/

F www.facebook.com/latrobesemrc

T @latrobeSEM

W www.latrobe.edu.au/lasem

LASEM

La Trobe Sport and Exercise Medicine Research Centre
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