INSTITUTE FOR HEALTH AND SPORT (iHeS)

Victoria University
Melbourne, Australia
Executive Director’s Welcome

I am delighted to welcome you to the Institute for Health and Sport (iHeS) at Victoria University in Melbourne, Australia. Victoria University is a young university on the move. We are in the top 2 percent of universities worldwide, ranked 301-350 and also ranked 53 in the world’s top universities aged under 50 years, in the Times Higher Education 2017/2018 World University Rankings. Victoria University is also ranked 21 globally in Sport Science, in the 2017 AWRU Rankings.

The Institute for Health and Sport is one of two Flagship Research Institutes in Victoria University. It was created in 2018, from amalgamation of our world-leading Institute of Sport, Exercise and Active Living (ISEAL), Centre for Chronic Disease Prevention and Management, and also other health-focused researchers. The Institute for Health and Sport takes a transformative, future-focussed, “whole-of-University” approach, undertaking research into issues of global significance in Health and Sport. Our research in Melbourne’s West is also up-scalable to address national and global issues.

Our mission as part of Victoria University’s Health, Sport and Active Living Flagship is “to build healthy, active and resilient communities, reduce the burden of chronic disease, enhance health and sport industries and develop a workforce that excels in diverse environments”.

Our research addresses each of the university’s Areas of Research Focus, and particularly Building Resilient, Inclusive and Creative Communities; Enabling Healthy and Active Populations; Promoting High Performance in Sport; and Enhancing the Evidence Base for Public Policy.

The terms Health and Sport in the Institute name are inclusive, with Health encompassing our institutional research in each of Exercise Science, Active Living, Chronic Disease, Biomedical Sciences, Technology, Nursing, Community Health, Psychology and Public Health; whilst Sport encompasses research in each of Sport Science, Sport Performance, Sport in Society, Sport Participation and Sport Business.

The Institute currently has around 369 highly active researchers, comprising 116 staff and 253 PhD students. Our research is supported by world-class research facilities located on our Footscray Park, Sunshine Hospital, Werribee, St Albans and Victoria University-Whitten Oval campuses in Melbourne’s West, as well as with our researchers embedded with our many industry partners.

Research in the Institute for Health and Sport is undertaken through four multi-disciplinary research programs:

- Mechanisms and Interventions in Health & Disease
- Clinical and Community Health and Wellbeing
- Healthy & Inclusive Communities- Sport, Physical Activity & Culture
- Sport Performance & Business

These programs and their research groups are detailed in this capability statement.

We would be delighted to discuss any collaborative opportunities.

Professor Michael J. McKenna, PhD
Executive Director
Institute for Health and Sport (iHeS)
Our People

The Institute for Health and Sport currently comprises 116 staff, around 253 Higher Degree by Research students, almost all of whom are PhD students, giving a total of 369 highly active researchers. In addition, iHeS includes 82 Adjunct appointees from across the world, as well as 10 Emeritus Professors.

Institute for Health and Sport Leadership

Executive Director: Professor Michael McKenna
Deputy Directors - Research Training: Professor John Price, Professor Nigel Stepto

Research Program Leaders:
Mechanisms and Interventions in Health and Disease Professor Vasso Apostolopoulos
Clinical and Community Health and Wellbeing Professor Mary Carolan-Olah
Healthy and Inclusive Communities – Sport, Physical Activity & Culture Professor Alex Parker
Sport Performance and Business Associate Professor Sam Robertson

Administrative Team: Executive Officer Ms Amanda Rea
Administrative Officer Ms Emma Macintosh

Institute Staff and Higher Degree by Research students
Executive and Administration 5
Research-only staff 38
Academic staff awarded Research Fellowships in IHES 61
Academic staff awarded Research Supervision Fellowships 12
Higher Degree by Research students ~253 students, ~205 EFTSL
Adjunct appointees 72
Emeritus Professors 10
Our Research Facilities

The Institute for Health and Sport is supported by world-class research infrastructure located on our Footscray Park, Sunshine Hospital, Werribee, St Albans and Victoria University-Whitten Oval campuses in Melbourne’s West.

The $68.5 million Sport and Exercise Science building is unparalleled nationally, internationally significant and is located at the Footscray Park Campus.

Our clinical and biomedical research facility within the $52 million Western Centre for Health Research and Education is located at Sunshine Hospital.
Our biomedical research facilities (basic and applied research and animal facility) at the recently renovated labs at Werribee Campus is part of a modern technology precinct, allowing our researchers to make major contributions to local and international scientific communities.

Our sport science research and knowledge exchange with the Western Bulldogs is located at the Victoria University-Whitten Oval, the home of the Western Bulldogs Football Club.
At our St Albans Campus the $17 million Health and Fitness multipurpose building houses state of the art treatment clinics and laboratories for research and education purposes.

**Higher Degree by Research Students**

There are currently a broad range of exciting research opportunities for postgraduate students who wish to undertake a PhD or MSc research degree at the Institute for Health and Sport. These provide the opportunities to develop specialised research skills, gain systematic and critical understanding of a complex field of knowledge as well as the generation of new knowledge that makes a substantial contribution to a given discipline. The breadth of research disciplines, the world class research facilities and the expert supervision, support and mentorship available to students within the Institute for Health and Sport, provides a rewarding, yet challenging experience at the cutting edge of research.

Embedded within one of our research groups, students have access to multiple research facilities and resources across our multiple campuses. Moreover, opportunities for our postgraduate students to perform their studies collaboratively with our partner organisations within industry, government and community, furthers research engagement, impact and career advancement within any chosen discipline.
Our Research Programs

The Institute for Health and Sport comprises four, integrated, multi-disciplinary research programs.

The Institute for Health and Sport takes a transformative, future-focussed, “whole-of-University” approach, undertaking research into issues of global significance in Health and Sport. Our research in Melbourne’s West is also up-scalable to address national and global issues.
Mechanisms and Interventions in Health & Disease

Research Program Leaders
Leader Professor Vasso Apostolopoulos
Deputy Leaders Associate Professor Itamar Levinger, Associate Professor Kulmira Nurgali

Main Purpose of Research Program
The program seeks to enhance the understanding of health and disease by researching the fundamental mechanisms of cells, biological systems and disease processes, and translating this knowledge into the development and implementation of interventions that maintain health, treat disease and inform policy and practice for enhanced health outcomes. Program members utilise fundamental basic, applied, clinical and translational research approaches.

The Program has three main research foci with ten research groups, comprising a total of more than 100 staff and higher degree research students within the program.
**Research Groups and Leaders**

<table>
<thead>
<tr>
<th>Research Group</th>
<th>Leader(s)</th>
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<tbody>
<tr>
<td>Genetics &amp; Epigenetics of Exercise</td>
<td>Associate Professor Nir Eynon</td>
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<td>Skeletal Muscle &amp; Training</td>
<td>Professor David Bishop</td>
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<tr>
<td>GAIT &amp; Intelligent Technologies</td>
<td>Professor Rezaul Begg</td>
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<tr>
<td>Bone Muscle &amp; Cardiovascular</td>
<td>Associate Professor Itamar Levinger and Dr Anthony Zulli</td>
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<tr>
<td>Nutrition &amp; Metabolic Health</td>
<td>Professor Michael Mathai</td>
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<tr>
<td>Muscle Wasting &amp; Metabolic Disease</td>
<td>Professor Alan Hayes</td>
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<tr>
<td>Women's Health</td>
<td>Professor Nigel Stepto</td>
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<tr>
<td>Immunology &amp; Translational Research</td>
<td>Professor Vasso Apostolopoulos</td>
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<tr>
<td>Cancer Biology &amp; Metastasis</td>
<td>Professor John Price</td>
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<tr>
<td>Enteric Neuropathy</td>
<td>Associate Professor Kulmira Nurgali</td>
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**Our Research Interests**
The program incorporates groups with current key research areas of expertise that encompass:

- Biomechanics, exercise science
- Muscle health and disease, genetics and epigenetics of exercise
- Therapeutic mechanisms and manual therapy
- Cardiovascular health and disease
- Nutrition in health and disease
- Cancer biology and metastasis
- Women's Health
- Molecular biology, structural biology (NMR, crystallography, molecular modelling)
- Immunology and regenerative medicine
- Drug design and development, immunotherapeutics and vaccine design

**Focus Areas**

- Cancer (breast, colon, ovarian, prostate, lung, leukemia)
- Autoimmune diseases (multiple sclerosis, Type-1 diabetes, inflammatory bowel diseases)
- Musculoskeletal disorders (Muscular dystrophy, cachexia, sarcopenia, osteosarcopenia)
- Metabolic Disorders (Obesity, Type-2 diabetes, Insulin resistance, stroke)
- Cardiovascular disease
- Mental health
- Polycystic ovarian syndrome
- Enteric neuropathy
- Motor neuron disease
- Lower back pain
- Hunger management
- Ageing
Partners, Funders and Collaborators

**Australian University Collaborations**
- Australian Catholic University, Melbourne
- Deakin University, Melbourne
- Flinders University, Adelaide
- Griffith University, Brisbane
- LaTrobe University, Melbourne
- Macquarie University, Sydney
- Monash University, Melbourne
- Queensland University of Technology, Brisbane
- RMIT University, Melbourne
- Swinburne University, Melbourne
- University of Adelaide, Adelaide
- University of Melbourne, Melbourne
- University of New South Wales, Sydney
- University of Sydney, Sydney
- University of Southern Queensland, Brisbane
- University of Tasmania, Hobart
- University of Western Sydney, Sydney

**International University Collaborations**
- Ahvaz Jundishapur University of Medical Sciences, Iran
- Aristotle University, Greece
- Guangzhou Sport University, China
- Harvard University, USA
- Indiana University, USA
- Plymouth University, UK
- Sathyabama University, India
- The Chinese University of Hong Kong, Hong Kong
- Tumor Immunity Medical Research Center, Seoul
- National University, South Korea
- University of Aalborg, Denmark
- University of Applied Sciences Kaiserslautern, Germany
- University Children’s Hospital Basel, Switzerland
- University College Erasmus, Netherlands
- University of Copenhagen, Denmark
- University Insulbria, Italy
- University of Ioannina, Greece
- University of Texas at El Paso, USA
- University of North Carolina, USA
- University of Patras, Greece
- Universidad Rey Juan Carlos, Spain
- University of Tubingen, Germany
- University of Windsor, Canada
- University of Wisconsin-Madison, USA

**Industry Partners, Funders and Collaborators**
- Athletics Australia, Australia
- Austin Hospital, Australia
- Australian Institute for Musculoskeletal Science (AIMSS), Australia
- Baker IDI, Australia
- Bosch Institute, Australia
- Cardiology Clinic Skopje, Macedonia
- Centre for Food Allergen Research, Australia
- Cobalt Niche Ltd, Australia
- Copenhagen University Hospital, Denmark
- Defence, Science and Technology (DST) Group, Australia
- Dorsa Vi Ltd, Australia
- ELDrug S.A, Greece
- Florey Neurosciences Institute, Australia
- Garvin Institute for Medical Research, Australia
- Gencor Pacific Ltd, Hong Kong
- Institute for Breathing and Sleep, Australia
- IPC Health, Germany
- Karolinska Institute, Sweden
- Macfarlane Burnet Institute for Medical Research, Australia
- Moffitt Cancer Centre, USA
- Murdoch Children’s Research Institute, Australia
- NewDrug S.A, Greece
- NovoNordisk Foundation for Basic Metabolic Research, Denmark
- NTNU: Norwegian University of Science and Technology, Norway
- Pasteur Institute, Greece
- Peter MacCallum Cancer Centre, Australia
- Prolipsis Medical Centre, Greece
- Royal Melbourne Hospital, Australia
- Sanitarium Foods, Australia
- SimPharma Pty, Ltd, Australia
- SimPharma Pte. Ltd, Singapore
- The Product Makers (TPM), Australia
- Vianex S.A, Greece
- Victorian Institute of Sport, Australia
- Western Health, Australia
- Xblades Ltd, Australia
Clinical and Community Health and Wellbeing

Research Program Leaders
Leader
Professor Mary Carolan-Olah
Deputy Leaders
Professor Jenny Sharples, Dr Michelle Ball

Main Purpose of Research Program
The purpose of this program is to enhance and promote individual and community health and wellbeing. Our applied and translational research is situated in clinical, community and workplace settings and encompasses social equity and diversity.

Our Research Expertise
The research program incorporates approximately 23 staff and higher degree research students. Our research focuses around mental health and addiction, pregnancy risk, diabetes in pregnancy, acute and chronic conditions; identity; wellbeing; workforce development & capacity building and women’s & men’s health.
Research Groups and Leaders

<table>
<thead>
<tr>
<th>Mental Health and Addiction</th>
<th>Professor Terence McCann</th>
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<tr>
<td>Maternal and Child Health</td>
<td>Professor Mary Carolan-Olah</td>
</tr>
<tr>
<td>Capacity Building in Health and Wellbeing</td>
<td>Professor Sharon Andrew and Professor Jenny Sharples</td>
</tr>
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Partners, Funders and Collaborators

**Industry Partners, Funders and Collaborators**
- Behavioural Neurotherapy Clinic, Australia
- BioScreen, Australia
- CFS Discovery Centre, Australia
- Hope Street Youth and Family Services, Australia
- Mercy Health, Australia
- North Western Mental Health, Australia
- Turning Point, Australia
- Western Bulldogs Community Foundation, Australia
- Western Health, Australia
- Youth Support and Advocacy Service (YSAS), Australia
- Victoria Cooperative on Children's Services for Ethnic Groups (VICSEG), Australia
Healthy and Inclusive Communities – Sport, Physical Activity and Culture

Research Program Leaders

Leader: Professor Alex Parker
Deputy Leader: Professor Ramon Spaaij

Main Purpose of Research Program

The main aim of the research program is to contribute to healthy and resilient individuals and communities by enhancing social engagement and impacting behaviour, social, and policy changes.

Our research addresses the questions: “How, why, and to what extent do physical activity, sport, and culture shape individuals, communities, and society?”; and “How can physical activity, psychological, educational, health, sporting, and cultural interventions lead to positive changes for individuals, communities, and society?”

The research program includes five research groups in total with more than 20 staff and 40 higher degree research students.
Research Groups and Leaders

<table>
<thead>
<tr>
<th>Research Group &amp; Change</th>
<th>Leader</th>
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<tbody>
<tr>
<td>Physical Activity, Body Image &amp; Mental Health</td>
<td>Professor Alex Parker</td>
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<tr>
<td>Active Living &amp; Public Health</td>
<td>Dr Zeljko Pedisic</td>
</tr>
<tr>
<td>Sport &amp; Recreation Spatial</td>
<td>Associate Professor Rochelle Eime</td>
</tr>
<tr>
<td>Sport Diversity &amp; Social Change</td>
<td>Professor Ramon Spaaij</td>
</tr>
<tr>
<td>Community, Identity &amp; Displacement</td>
<td>Professor Christopher Sonn</td>
</tr>
</tbody>
</table>

We address the major aim of our research program by engaging in a range of integrated and complimentary projects across the diverse research groups. We focus on interdisciplinary projects that are designed to:

- Measure, understand, and promote physical activity to optimise mental wellbeing, positive body image/body satisfaction, and to prevent and treat mental illness using observational (descriptive and correlational) and experimental (interventions and clinical trials) studies and systematic reviews, with a focus on implementation and translation into practice;
- Increase the understanding of public health aspects of physical activity and sedentary behaviour and design, implement and evaluate interventions to promote active living;
- Investigate sport and recreation participation and facilities, and health for evidence-based decision making across the sport and recreation sector;
- Examine equity, inclusion, and exclusion in sport, physical activity, and physical education contexts using a range of methods such as ethnography, interviews, surveys, focus groups, observations, and policy, media, and archival analysis;
- Conduct community based research and action into forms of symbolic and structural violence, its impacts, and individual and group responses to overcome and prevent it, using various approaches, including participatory and creative methodologies to partner with communities to address issues pertinent to them.

Partners, Funders and Collaborators

**Australian University Collaborations**
- University of Canberra, Canberra
- University of Melbourne – Centre for Youth Mental Health, Melbourne
- University of South Australia – Alliance for Research in Exercise Nutrition and Activity (ARENA), Sansom Institute, Adelaide
- University of Southern Queensland - Physically Active Lifestyles Research Group (USQ PALs), Institute for Resilient Regions, Brisbane
- University of Sydney – Prevention Research Collaboration, Charles Perkins Centre, Sydney

**Industry Partners, Funders and Collaborators**
- CoHealth, Australia
- Cochrane Work Review Group, Finnish Institute for Occupational Health, Finland
- headspace, The National Youth Mental Health Foundation, Australia
- Orygen, The National Centre of Excellence in Youth Mental Health, Australia
- Sport and Recreation Victoria, Australia
- UKK Institute for Health Promotion Research, Finland
- VicHealth, Australia

**International University Collaborations**
- Auckland University of Technology Department – Physical Activity, Nutrition, and the Outdoors, Human Potential Centre, New Zealand
- London South Bank University, UK
- Universidad del Rosario, Colombia
- University of Nottingham, UK
- University of Witwatersrand, South Africa
- University of Zagreb – Faculty of Kinesiology, Croatia
Sport Performance and Business

Research Program Leaders
Leader
Associate Professor Sam Robertson
Deputy Leader
Associate Professor Camilla Brockett

Main Purpose of Research Program
To enhance the performance of sport in training, competition and the business environments. We focus on sport that inspires – specifically how we can advance and develop the performer, coach, umpire, practitioner, administrator & organisation. We have a global focus with respect to developing partners and a strong commitment to engage with government and industry to address big-picture, real-world problems.

Our Research Expertise
The research program includes five research groups with approximately 93 staff and higher degree research students.

The Game Insight Group (GIG) consists of a team of experts revolutionising tennis through science. GIG pursues three research themes: The Perfect Game, Analytics and Technology. Research is conducted with athletes across the participation pathway, as well as with other stakeholders such as coaches, broadcasters and fans.

TRACK is a new initiative currently under development as part of the Sport, Performance and Business program. This is designed to facilitate the development of commercial opportunities related to human tracking, utilising the skills of staff and HDR students within the research program in an agile manner.
Research Groups and Leaders

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<tr>
<td>Analytics &amp; Technology</td>
<td>Dr Kevin Ball</td>
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<tr>
<td>Skill &amp; Development</td>
<td>Dr Sharna Spittle</td>
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<tr>
<td>Sport Business, Policy &amp; Integrity</td>
<td>Associate Professor Dennis Hemphill</td>
</tr>
<tr>
<td>Training</td>
<td>Professor Robert Aughey</td>
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</tbody>
</table>

Partners, Funders and Collaborators

**International University Collaborations**
- Auckland University of Technology, New Zealand
- Beijing Sports University, China
- Central University of Finance and Economics, China
- German Sports University, Cologne
- Guangzhou Sport University, China
- Shanghai Sport University, China
- South West University, China
- Tsukuba International Academy for Sport, Japan
- University of Tsukuba, Japan
- Western University, Canada

**Industry Partners, Funders and Collaborators**
- Australian Football League (AFL), Australia
- Australia-India Council, Australian Government, India
- Australian Institute for Musculoskeletal Science (AIMSS)
- Australian Institute of Sport (AIS)
- Australian Paralympic Committee
- Australian Sports Commission (ASC)
- Cricket Australia
- Fédération Internationale de Football Association (FIFA)
- Football Federation Victoria
- Golf Australia
- Government of Kerala, India
- Gymnastics Australia
- Hockey Australia
- International Institute of Sports Management, India
- Maribyrnong Sports Academy, Australia
- Ministry of Youth Affairs and Sports, Government of India
- Procam International, India
- Punjab Institute of Sport, India
- Real Madrid, Spain
- San Antonio Spurs, Texas
- Sport Australia Hall of Fame, Australia
- Sports Authority of India
- Sports Performance Research Institute New Zealand (SPRINZ)
- Swimming Australia
- Tennis Australia
- Western Bulldogs Football Club, Australia
- Western Health, Australia
- Zone StartUps India
Global Research Partnerships and Collaborations

Strategic Partnership Agreements – Australia
Australian Institute of Sport (AIS); Australian Sports Commission (ASC); Tennis Australia; Maribyrnong Sports Academy; Western Bulldogs; Western Health; Australian Institute for Musculoskeletal Science (AIMSS)

National Research Collaborations
Swimming Australia; Cricket Australia; Golf Australia; Hockey Australia; Australian Football League (AFL); Gymnastics Australia; Football Federation Victoria; Sport Australia Hall of Fame; Australian Paralympic Committee; CoHealth; CoHealth Arts Generator; Youth Support and Advocacy Service (YSAS); Champion Data
International Partnerships and Collaborations

China
Beijing Sports University; Shanghai Sport University; Guangzhou Sport University; Central University of Finance and Economics; South West University;

New Zealand
Sports Performance Research Institute, New Zealand (SPRINZ); Auckland University of Technology

India
Punjab Institute of Sport; Sports Authority of India; Government of Kerala; Zone StartUps India; Procam International, International Institute of Sports Management; Ministry of Youth Affairs and Sports, Government of India; Australia-India Council, Australian Government
Japan
Tsukuba International Academy for Sport; University of Tsukuba

Europe
German Sports University, Cologne; Real Madrid, Spain; Fédération Internationale de Football Association (FIFA);

North America
Western University, Canada; San Antonio Spurs, Texas; Pro Referees, New York
Research Groups in iHeS
Mechanisms and Interventions in Health and Disease Research Program
Muscle, Exercise and Movement Research Foci

Genetics and Epigenetics of Exercise
Associate Professor Nir Eynon
Along with diet, exercise is an essential component to tackle the increasing burden of chronic disease, and to increase the number of years spent in good health, yet people respond remarkably differently to similar exercise; some people respond well or very well to exercise and others do not. These adaptations depend on our genetic code, and also on epigenetic change (i.e., environmental stimuli influencing the expression of genes). The overarching aim of the group is to identify epigenetic and genomic biomarkers that predict fitness changes and the ageing process, in healthy and diseased population. To achieve this aim, the group is utilising various state-of-the-art genome-wide genetic and epigenetic sequencing methods.

Skeletal Muscle and Training
Professor David Bishop
We undertake research to better understand and optimise skeletal muscle adaptations to exercise training to improve both health and performance. In particular, we are interested in mitochondrial characteristics and sodium/potassium ion regulation in response to both a single session of exercise and exercise training.

Disease / Dysfunction Areas: Type-2 diabetes, insulin resistance

Our Team
Associate Professor Nir Eynon, Group Leader
Dr Sarah Voisin
Ms Danielle Hiam

HDR Students
Ms Macsue Jacques
Ms Shanie Landen
Mr Ioannis Papadimitriou

Our Team
Professor David Bishop, Group Leader
Professor Michael McKenna
Dr Amanda Genders
Dr Jujiao Kuang
Dr Xu (Sean) Yan
Dr Aaron Peterson
Dr Christos Stathis
Dr James Broatch

HDR Students
Mr Weiliang Chung
Mr Javier Botella Ruiz
Mr Nicholas Jamnick
Mr Shane O’Riordan
Mr Christopher Hedges
Mr Danny Christiansen
Mr Matthew Lee
Mr Nicholas Saner
Mr Muath Altarawneh
Mr Trevor Farr
Gait and Intelligent Technologies

Professor Rezaul Begg

The Group’s aim is to engage in state-of-the-art interdisciplinary research to advance our understanding of gait and balance and finding innovative solutions to both fundamental scientific problems and community and industry needs.

Key areas of application are: falls prevention in older adults and other populations with gait and postural impairments, such as people with stroke and diabetes; wearable sensors and computational prediction tools; real-time biofeedback technology and exercise interventions for gait rehabilitation; exoskeletons and other wearable devices for assisting locomotion in military and gait-impaired populations; and improving running mechanics in recreational and elite athletes.

A major strength of our Group’s research is that it is multidisciplinary, with team members having backgrounds in biomechanics, exercise science, engineering, motor control, therapeutic mechanisms of manual therapy and lower back pain, health sciences, and computing.

Disease / Dysfunction Areas: Ageing, Type-2 diabetes, stroke

Our Team
Professor Rezaul Begg, Group Leader
Professor Glenn McConell
Associate Professor Pat McLaughlin
Associate Professor Daniel Lai
Associate Professor Gary Fryer
Dr Simon Taylor
Dr Kurt Mudie
Dr Karen Mickle
Dr Hanatsu Nagano
Dr Tony Sparrow
Dr Lisa James
Associate Professor Pazit Levinger (NARI)
Dr Dan Billing (DST Group)

HDR Students
Mr Abdelrahman Zaroug
Mr Alessandro Garofolini
Mr Calum Downie
Ms Jasmine Proud
Mr Peter Battle
Mr Soheil Bajelan
Ms Sou Mehdikhani
Mr Hamed Shahidan
Cardio-Metabolic and Muscle Disorders

Bone Muscle and Cardiovascular Research
Associate Professor Itamar Levinger and Dr Anthony Zulli

The main aim of our group is to improve the clinical outcome, functional capacity and quality of life of people with musculoskeletal disorders and cardiovascular disease. The group is unique and built around key strategic direction, ‘bench-to-bedside’, and it includes three main components. (i) Basic science/mechanistic research to identify novel drug targets to fight musculoskeletal disorders and cardiovascular disease, (ii) Pre-clinical research to test new therapeutic avenues in in vivo models and (iii) Clinical research, to uncover the cross-talk between different organs and systems in humans and its implications for disease management, muscle function and metabolism and functional capacity in people with chronic conditions.

The group brings together a wide variety of disciplines including exercise science, physiology, medicine, cardiology and endocrinology.

Our Team
Associate Professor Itamar Levinger, Group Leader
Dr Anthony Zulli, Group Leader
Professor Alan Hayes
Dr Alessandra Ferri
Dr Chris Neil
Dr Craig Goodman

HDR Students
Ms Mary Woessner
Mr Xuzhu (Steve) Lin
Ms Catherine Giuliano
Mr Alexander Tacey
Ms Tawar Qaradakhi
Ms Cassandra Smith
Ms Renee Smith

Nutrition and Metabolic Health
Professor Michael Mathai

The research theme of our group is to study the effect of selected micronutrients and dietary interventions on diseases and conditions including obesity, cardiovascular disease and diabetes. This research includes testing the safety and efficacy of these interventions in clinical trials and exploring the mechanisms through which the beneficial effects are mediated using a range of cell culture and animal experiments. We have successfully shown how dietary lipids such as omega-3 fatty acids, endocannabinoids and vitamin E tocotrienols alter and improve fat and glucose metabolism and muscle physiology. We have also shown how plant extracts (Caralluma Fimбриата, Coleus Forskoli, Beetroot, Queen Garnet plum juice) improve cardiovascular disease, dyslipidaemia and appetite satiety signalling, with key application to the treatment of hypertension and hunger management.

Disease / Dysfunction Areas: Cardiovascular disease, Type-2 diabetes, obesity, hunger management

Our Team
Professor Michael Mathai, Group Leader
Professor Andrew McAinch
Professor Nigel Stepto
Dr Xiao Su
Dr Xu Sean Yan
Dr Puspha Sinnayah

HDR Students
Ms Sadia Khan
Ms Collise Njume
Ms Min Shi
Ms Jacqueline Krassie
Ms Karen Hill
Ms Kristina Vingrys
Mr Abilash Jayathilake
Mr Venkata Thunuguntla
Muscle Wasting and Metabolic Diseases
Professor Alan Hayes

In 2010, the global burden of disease study demonstrated that musculoskeletal disorders are the second most common cause of disability worldwide, with estimates of a 45% increase in the last 25 years. This burden is expected to continue to rise with an increasingly sedentary, obese and older population. These figures do not include death and disability occurring due to muscle wasting conditions. Muscle wasting, be it from muscle diseases such as muscular dystrophy, secondary to almost all chronic diseases, or simply aging (sarcopenia is the loss of muscle size and strength as we age), is a strong predictor of death and disability. As such, strategies must be explored to maintain and build muscle mass and strength.

Our group has particular focus on muscular dystrophy, chemotherapy-induced wasting, osteosarcopenia and sarcopenic obesity. The aims of this group are to investigate exercise training and/or nutrition manipulation or lifestyle modification or pharmaceutical interventions, to increase muscle mass and improve muscle function.

We further aim to understand the molecular regulation of skeletal muscle wasting and growth and manipulate the basic balance of protein synthesis and degradation in skeletal muscles to understand how muscles respond to the interventions used to maximise impact and minimise side-effects. In addition, we conduct research to determine nitric oxide function and regulation of sodium/potassium ions in response to exercise training. Furthermore, we are interested in determining the role of exercise early in life to prevent obesity and development of diabetes. Results can be applied to multiple chronic/metabolic disease conditions and also lends itself to analysis of current data, development of diagnostic tools and subsequent population health impacts.

**Disease / Dysfunction Areas:** Muscular dystrophy, cancer & cachexia, Type-2 diabetes, insulin resistance, obesity, sarcopenia, sarcopenic obesity, osteosarcopenia, night shift work, ageing

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**Our Team**
Professor Alan Hayes, Group Leader
Professor Glenn McConell
Associate Professor Itamar Levinger
Associate Professor Kulmira Nurgali
Dr Craig Goodman
Dr Emma Rybalka
Dr Christos Stathis
Dr Cara Timpani
Dr Alessandra Ferri

**HDR Students**
Mr Andrew Hibbert
Mr Owala Shavlin Chandrasiri
Ms Metodija Kjertakov
Ms Vickie Arthur
Ms Vera Koslova-Fu
Ms Renee Smith
Mr Robin Wilson
Ms Meagan Fry
Ms Lucinda Mayer
Ms Ewelina Akehurst
Ms Danielle Debruijn
Mr Christopher Lillico
Mr William Deasy
Mr Ben Harvey
Mr Dean Campelj
Mr James Sorensen
Mr Jarrod Kerr
Mr Xuzhu (Steve) Lin
Mr Chris Hedges
Women’s Health
Professor Nigel Stepto

Our group is studying the aetiology of chronic diseases that uniquely impact women, like Polycystic Ovarian Syndrome (PCOS), which adversely impacts metabolic, reproductive and mental health. We focus on benchtop work in metabolic tissues like skeletal muscle and fat to explore mechanisms of insulin resistance. We also use lifestyle (diet, exercise and behaviour change) therapy with the aim to explore the impacts on clinical features and mechanisms of action to improve clinical best practice. This is achieved via additional activities in evidence synthesis and guideline development to inform lifestyle recommendations.

**Disease / Dysfunction Areas:** Polycystic Ovarian Syndrome (PCOS), insulin resistance, reproductive health

Our Team
Professor Nigel Stepto, Group Leader
Professor Itamar Levinger
Dr Alba Moreno-Asso
Ms Danielle Hiam

HDR Students
Mr Luke McIlvenna
Ms Rhiannon Patten
The immune system plays a major role in health and disease. Understanding the cellular, molecular and functional changes to the immune system in chronic diseases, will lead to their prevention, treatment and management strategies. In addition, our group is involved in drug design and vaccine formulations for chronic diseases, in pre-clinical models, clinical research and translational focus. Although our primary core discipline is immunology we have a multi-disciplinary focus with disciplines including, exercise immunology, structural biology (crystallography, NMR, molecular modelling), medicinal chemistry, biochemistry, molecular biology, bioinformatics, cell biology, nutrition research, drug development, clinical research, translational research.

**Disease / Dysfunction Areas:** Cancer, autoimmunity, metabolic disorders, mental health.

**Our Team**
- Professor Vasso Apostolopoulos, Group Leader
- Professor Alex Parker
- Professor Maximilian de Courten
- Professor Todor Vasiljevic
- Associate Professor Kulmira Nurgali
- Dr Sarah Fraser
- Dr Fatah Atesh
- Dr Samy Sakal
- Dr Anthony Zulli
- Dr Michelle Ball
- Dr Kathy Tangalakis
- Dr Maja Husanic
- Dr Jim Kiatos
- Dr Osaana Donkor
- Mr Joshua Johnson
- Mr Majid Hassanzadehganroudsari
- Professor Lily Stojanovask (Emeritus)
- Professor John Matsoukas (Adjunct)
- Mr Geoffrey Pietersz (Adjunct)
- Professor Remco Polman (Adjunct)

**HDR Students**
- Mr Christopher Apostolou
- Ms Ramya Sindhoora Juyothi
- Mr Marco Papageorgou
- Ms Supa Pudkasam
- Ms Tawar Qaradakhi
- Ms Nyanbol Kuol
- Ms Kathleen Mikkelsen
- Ms Narges Dargahi
- Ms Rhiannon Filiponne
- Ms Kristina Vingrys
- Ms Elizabeth Donald
- Ms Manpreet Grewal
- Ms Swati Garg
- Mr Jack Feehan
- Ms Maria Adamopoulou
- Mr Antonio Lagana
Cancer Biology and Metastasis

Professor John Price

Cancer is the leading cause of disease burden in Australia. The primary cause of cancer death and mortality is due to the spread of the cancer to secondary sites/organisms, a process termed, metastasis. Knowledge of the molecular mechanisms of metastasis is limited and current therapies are ineffective. Currently no cure for metastatic cancer exists. The overarching aims for the group are to define essential molecular mediators and mechanisms of metastasis, as well as identifying and/or designing drugs to block the actions of these molecules upon which metastatic cancer cells rely for their activity, growth and survival. We use combined expertise in cell and molecular biology, gene expression/bioinformatics analysis, peptide-based drug design, protein biochemistry, in vivo models of metastasis, advanced animal imaging approaches and biomarker discovery in cancer patient materials.

Disease / Dysfunction Areas: Breast, renal, melanoma, prostate and lung cancers

Enteric Neuropathy

Associate Professor Kulmira Nurgali

The Group focuses on the development of new therapies for enteric neuropathy associated with inflammatory bowel disease, colorectal cancer, and side-effects of anti-cancer chemotherapy. In addition, mental health research associated with gut-brain axis is another focus of the group. The research philosophy is to translate scientific discoveries of basic science research (bench) into novel therapies for human disease (bedside).

Disease / Dysfunction Areas: Inflammatory bowel disease, inflammation induced cancer, mental health, colorectal cancer, inflammation induced osteosarcopenia

Our research involves a range of topics including:
- Inflammatory bowel disease: novel molecular targets for development of effective therapies
- Inflammation-induced cancer: mechanisms and novel treatments
- Role of the nervous system in cancer development and progression
- Mesenchymal stem cell-based therapies for inflammatory bowel disease and colorectal cancer
- Inflammation-induced osteosarcopenia: mechanisms and novel treatments
- Enteric neuropathy as a target to alleviate gastrointestinal side-effects of chemotherapy
- Methamphetamine-induced depression: mechanisms and novel treatments
Clinical and Community Health and Wellbeing Research Program

Research Groups

Mental Health and Addiction

Professor Terence McCann

Promotion and maintenance of good mental health is a national health priority. This research team focuses on:

- prevention and early intervention in young people and adults with mental health and substance misuse problems
- promotion of recovery in people with severe and enduring mental illness and substance misuse problems
- primary caregiver/family capacity building

Examples of recent group projects include:

- Evaluating the use of restraint and seclusion in inpatient aged psychiatry units
- Preventing mental health problems in young people through better mental health literacy
- A peer support program for enhancing medication adherence in mental health consumers with schizophrenia
- Evaluation of a cognitive behaviour therapy based self-help manual for adults with depression
- Evaluation of a problem-based self-help manual for family caregivers of young people with first-episode psychosis
- Bridging the Gap: Educating family members from sub-Saharan African immigrant communities about seeking help for depression, anxiety and substance misuse in young people
- Exploring needs – navigating obstacles: Key family members who support adults with drug and alcohol use problems
- Improving men’s access to care: A national ambulance approach to improve help-seeking and men’s mental health
- Evaluation of a mental health literacy programme on community leaders’ knowledge about and attitudes towards people with mental disorders in Ghana: Cluster randomised controlled trial
- A pilot randomised control trial to assess the feasibility of a peer-based low-intensity psychosocial intervention for reducing depressive symptoms in pregnant women in rural Bangladesh

Our Team

Professor Terence McCann, Group Leader
Dr Gayelene Boardman
Dr Susan Kidd

HDR Students

Meg Polacsek
Yaw Arthur
Rehenuma Tarannum
Mulki Said
James Shanahan
Jillian Goullet
Maternal and Child Health
Professor Mary Carolan-Olah

The group’s main research focuses around Pregnancy risk and Diabetes in pregnancy.

The research team aims to promote the health and wellbeing of childbearing women, their children and families. In particular, the team explores women’s pregnancy outcomes, risk in pregnancy, perinatal health and morbidity, older maternal age and sexual health and social challenges impacting on pregnant women.
Capacity Building in Health and Wellbeing
Professors Sharon Andrew and Jenny Sharples
The aim of the research group is to investigate capacity building at the individual, community, organisation and system levels.

Our research foci includes: Acute and chronic conditions; brain behaviour and cognition; identity; wellbeing; workforce development; women's health and men's health. Research topics include:

- Examining interactions between enteric microbiota and symptom expression
- Resilience and recovery after aneurysmal subarachnoid haemorrhage
- Reconceptualising the Nature of Executive Functioning: introducing a hierarchical model of skill complexity
- Self-control, emotional eating and eating behaviour
- Microbiot-Gut-Brian interactions in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome: Neuropsychological symptoms, sex comparisons and treatment potential
- Mental health of musicians, actors and dancers: Culture and individual factors
- Self-efficacy as a mediator of health behaviour change in a gender-sensitised health intervention for men delivered through a professional sports club
- Correlates of quality of life and victimisation of women on the autism spectrum: Comparing the experiences of diagnosed, self-identifying and neurotypical women.
- “That Whole Macho Male Persona Thing”: The role of insults in young Australian male friendships.
- Paramedic mental health project
- An evaluation for Hope Street Youth and Family Services’ “Hope to Home” program
- Evaluation of the VIVSEG Refugee Student Engagement and Support program
- Venting anger in Cyberspace: Self-entitlement versus self-preservation in #roadrage tweets
- Influences on affiliate stigma of siblings: Self-esteem and perceived personal control over sibling’s mental health issues
- Resilience and wellbeing in men: The role of social support
- Investigation into the relationship between compassion fatigue, compassion satisfaction, and self-care practices in Australian youth workers
- Seeking help from police for intimate partner violence: Applying a relationship phase framework to the exploration of victims’ evolving needs
- Meeting the needs of young people with alcohol and other drug problems in regional Victoria: Towards the development of a service model

Our Team
Professor Sharon Andrews, Group Leader
Professor Jenny Sharples, Group Leader
Professor Maximillian De Courten
Associate Professor Gavin Ivey
Dr. Michelle Ball
Dr Annie Venville
Dr. Kim Shearson
Dr. Peter Gill
Dr. Carolyn Deans
Dr. Karen Livesay
Dr. Lucy Lu
Dr Alexia Pavlis
Dr Keis Ohtsuka
Dr Emra Suleyman
Dr Tina Kostecki
Dr Gina Kruger
Dr Robyn Moffitt
Healthy & Inclusive Communities – Sport, Physical Activity and Culture Research Program

Physical Activity, Body Image and Mental Health
Professor Alex Parker

The aim of the research group is to examine the role of exercise and physical activity in preventing and treating mental ill-health and the relationship to body image. We engage in projects that aim to measure, understand, and promote physical activity to optimise mental wellbeing, positive body image and to prevent and treat mental illness.

We aim to maximise the potential of physical activity in achieving better clinical outcomes, improved functioning and wellbeing in those at risk of or experiencing body dissatisfaction and mental health problems. Our research involves a range of topics including:
• Effectiveness of exercise and physical activity interventions in promoting mental health and wellbeing and preventing mental illness
• Effectiveness of behaviour change physical activity interventions or exercise interventions in treating mental illness
• Determining relationships between physical activity, body image and mental health
• Identifying barriers and facilitators to accessing treatment, and increasing intentions to seek treatment for body dissatisfaction, disordered eating, and eating disorders
• Effectiveness of physical activity interventions to improve body dissatisfaction and mental health
• Effectiveness of physical activity and exercise interventions in the prevention and treatment of secondary physical health problems associated with mental illness
• Effectiveness of physical activity and exercise interventions in the prevention and treatment of secondary mental health problems associated with poor physical health and/or chronic disease
• Effect of physical activity on the immune system, inflammatory biomarkers and immune cell functionality
• Cross-talk between the immune system with the neurological system, and its implications to mental health
• Prevalence, trends, correlates and determinants of physical activity among people with mental health problems and in mental health settings
• Assessing and addressing the barriers and facilitators to engaging in physical activity for mental health at individual, group/family, community, service provider, service delivery and government levels.

Our Team
Our research team has multidisciplinary expertise in psychology, clinical exercise science, public health, epidemiology, measurement, health promotion, education, translation and implementation, evidence-based practice and behaviour change.

Professor Alex Parker, Group Leader
Professor Elisabeth Wilson-Evered
Professor Glenn McConell
Professor Jenny Sharples
Professor Vasso Apostolopoulos
Professor Nigel Stepto
Associate Professor Melinda Craike
Dr Carolyn Deans
Dr Joanna Doley
Dr Lisa Hodge
Dr Michaela Pascoe
Dr Michelle Ball
Dr Robyn Moffitt
Dr Romana Morda
Dr Petra Plencnerova
Dr Sian McLean
Dr Warwick Hosking
Dr Zali Yager
Dr Zeljko Pedisic

HDR Students
Rhiannon Patten
Nipun Shrestha
Kerrin Ford
Joshua Marmara
Emily Keohane
Sport Diversity and Social Change
Professor Ramon Spaaij

The research group is primarily concerned with social justice, and asks critical questions regarding equity, inclusion and exclusion in sport, physical activity, and physical education contexts. The group seeks to understand how people’s experiences of sport, physical activity and physical education are shaped and constrained by broader structures and cultural processes; and how to facilitate positive social change in and through sport, physical activity and physical education.

The group is grounded in social science and humanities – in particular, sociology and cultural studies, and researchers employ a range of methods such as ethnography, interviews, surveys, focus groups, observations, policy, media and archival analysis. The group has specific interest and expertise in migration, cultural diversity and social inclusion; race and racism; and gender and sexuality.

Our Team
Professor Ramón Spaaij, Group Leader
Associate Professor Dennis Hemphill
Dr Brent McDonald
Dr Fiona McLachlan
Dr Michael Burke
Dr Tom Forsell
Ms Sarah Oxford
Active Living and Public Health
Dr Zeljko Pedisic

The research group is guided by: [i] the Social Ecological Model as a framework for investigating individual, social, environmental, and policy factors affecting physical activity and sedentary behaviour of communities and populations; [ii] the Activity Balance Model as a framework for epidemiological investigation of health outcomes of physical activity and sedentary behaviour considered as integrative parts of the time-use composition; and [iii] the Behaviour Change Wheel as a framework for characterising and designing physical activity and sedentary behaviour interventions. The group conducts research on:

- Prevalence, trends, correlates and determinants of physical activity and sedentary behaviour;
- Population-level outcomes of physical activity and sedentary behaviour;
- Effectiveness of interventions to increase physical activity and reduce sedentary behaviour;
- Measures and methods for assessment and population surveillance of physical activity and sedentary behaviour.

This work makes an important societal contribution by increasing the understanding of public health aspects of physical activity and sedentary behaviour and designing, implementing, and evaluating interventions to promote active living. The research has broad application for public policy, community facility development, and improving health and overall quality of life of populations.

Our Team
Dr Zeljko Pedisic, Group Leader
Professor Alexandra Parker
Professor Warren Payne
Associate Professor Rochelle Eime
Dr Dan van der Westhuizen
Dr John Tower
Dr Melinda Craike
Dr Zali Yager

HDR Students
Bojana Klepac-Pogrmilovic
Gabrielle Lindsay Smith
Jozo Grgic
Kathryn McDonald
Nipun Shrestha
Nucharapon Liangruenrom
Community Identity Displacement Research Group

Associate Professor Christopher Sonn

This research group aims to conduct community-based collaborative research into various forms of social exclusion and displacement and its impacts upon individuals, groups and communities. Our research also documents resources and strategies that are vital to resilience, resistance, survival and wellbeing. We utilise innovative and culturally responsive research approaches including participatory action research, arts-based research, and qualitative and quantitative methods to partner communities to develop knowledge address social issues and to create receptive and nurturing social environments that fosters sense of community, belonging, and social justice.

Our research includes a number of topics such as:

- Pride, Passion and Pitfalls: Working in the Australian Entertainment Industry
- Community arts, critical psychosocial accompaniment and Aboriginal empowerment
- African background people negotiating identity and belonging in Australia
- An evaluation of the Horace Petty public housing estate – A place-based education intervention for highly vulnerable young people
- Dialogues of Change - Youth Peer Education through Applied Theatre
- Evaluation of the Polyglot Theatre Program
- Building Resilience Project

Our team

The team is made up of local and international researchers from diverse disciplines that promote interdisciplinary approaches to research and action. Our discipline backgrounds include critical community and applied social psychology, sociology, cultural studies, Indigenous studies, education, social work with expertise in quantitative, qualitative and evaluation research methodologies and participatory, creative, and arts-based methodologies.

Associate Professor Christopher Sonn, Group Leader
Professor Ramon Spaaij
Associate Professor Melinda Craike
Associate Professor Gavin Ivey
Dr Alison Baker
Dr Laurie Chapin
Dr Carolyn Deans
Dr Brent McDonald
Dr Romana Morda
Dr Amy Quayle
Dr Julie van den Eynde
Sport and Recreation Spatial
Associate Professor Rochelle Eime

Sport and Recreation Spatial provides a strong evidence base and an increased capacity for research, strategic planning and development of participation programs and facilities. This is achieved through: a national geographic information system for presenting spatial data relevant to all levels of the sport and recreation industry and an associated research program which can address questions of national and international significance. Key research focuses are participation levels and trends; influences on participation; value of sport: the health benefits of participation; places to play: the nexus between facilities and participation.

Sport and Recreation Spatial has developed a range of commercial research projects:

- **Sport and Recreation Studies.** Analysis of sport and recreation data at a national, state and local community level, for planning and development by government and the sport and recreation development.
- **Sport Retention Studies.** Analysis for major sports of continuing participants and those who have dropped out. This includes participation trends, demographics, barriers and facilitators, analysed by geographical location. This is vital information to guide recruitment and development strategies to gain, maintain and retain players and members.
- **Community Profiles.** Analysis and benchmarking of LGAs in relation to a range of indicators including: demographics, health, education and physical activity and sport participation and facilities. This is vital for community strategic planning in sport and recreation.
- **Sports Facility Forecasting.** Analysis of sports facility requirements/provision both now and into the future. This is vital for facility infrastructure planning and development and to maximise participation in sport.
- **Social Return on Investment.** Analysis of the economic, health and social benefits of participation in sport and its return on investment value.
- **Geographical Information System (GIS).** Sport and Recreation Spatial provides a national geographical Information System (GIS) for presenting spatial data relevant to all levels of the sport and recreation sector.
- **Consulting Services.** Sport and Recreation Spatial is available to take consulting briefs involving sport and recreation and the interaction of participation and facilities provision with health outcomes.
- **Database Development.** Sport and Recreation Spatial has strength in developing, creating and monitoring database systems in sport and recreation. These assist organisations to quantify their mission and vision and underpin strategic planning and solutions with a strong evidence base.

Our Team
The team brings together a strong and professional team. Each team member brings extensive experience on projects across a range of disciplines including health, education, sport, recreation and technology. This is complimented by extensive research in the areas of behavioural epidemiology, sport management and public health combined with technical skills.

Associate Professor Rochelle Eime, Group Leader
Professor Hans Westerbeek
Dr Jack Harvey
Dr Helen Thompson
Ms Melanie Charity
Mr Paul Feely

HDR Students
Jenna Fowlie
Ambili Unni
Gabrielle Lindsay Smith
Andrew O'Loughlin
Sport Performance and Business

Program Research Groups

Analytics & Technology

Dr Kevin Ball

The group focuses on the ‘development and application of innovative techniques in the acquisition and analysis of data, with respect to enhancing sporting performance’. It also works as a linking function between other iHeS Program and Groups in order to ensure best practice analysis techniques are implemented across the Institute’s research.

Our Team
Dr Kevin Ball, Group Leader
Professor Will Hopkins
Associate Professor Sam Robertson
Dr Alice Sweeting
Dr Stephanie Kovalchik
Dr Nader Chmait
Dr Elaine Tor
Dr Graham Spence
Dr Kokum Weeratunga
Mr Bart Spencer

HDR Students
Mr Joseph Gomory
Ms Stephanie Blair
Ms Shaan Naughton
Ms Susanne Ellens
Mr James Peacock
Ms Emily Cust
Mr Ben Gogos
Mr Xavier Schelling Del Alcazar
Mr Karl Trounson
Mr Jeremy Alexander
Ms Jade Haycraft
Mr Sam McIntosh
Mr Jarred Pilgrim
Mr Scott Williams
Ms Elissa Denton
Mr Peter Browne
Skill and Development
Dr Sharna Spittle

The group examines factors that contribute to the development and proficiency of skilled movement. It aims to develop an understanding of how movements and skills are learnt and controlled thus providing insight that can be applied to optimise the performance of individuals within their chosen setting. This knowledge has practical application in a wide range of domains, which include physical education, sport, exercise and active living.

The Skill and Development group focusses on understanding how skills are learnt including methods of practice and other learning-related variables, processes that underlie motor performance, how movements are controlled and how this learning and control of motor skills vary based on experience and expertise. The aim is to better understand the relationship that exists between all the factors that play a role in skilled task execution. Key research areas include:

- Skill learning
- Perceptual-cognitive (decision making) skill development
- Skill practice and feedback optimisation
- Psycho-social agents of skill development
- Talent identification and development

Sport Business, Policy & Integrity
Associate Professor Dennis Hemphill

The overall aims of the Sport Business, Policy and Integrity Group are:

- To enhance sports capability* in terms of the performance and integrity of individuals, practices and systems in sport organisations.
- To facilitate multi-disciplinary, cross-college collaborations to address global/big-picture, real-world problems facing sport business.
- To strengthen existing and develop new partnerships with government, community and industry to advance sport business intelligence.

* ‘Capability’ can refer to effective and ethical management of resources and functions, to achieving competitive advantage in local and global markets, to ethical leadership and social responsibility, to meet or surpass legal, professional and industry standards regarding competition fairness and participant safety, and to meeting community expectations around social inclusion and development.

Our Team
Dr Sharna Spittle, Group Leader
Professor Damian Farrow
Associate Professor Michael Spittle
Dr Andrew Dawson
Dr Janet Young
Dr Paul Larkin
Dr Tim Buszard

HDR Students
Yulia Fetisova
Helen Hadlyan
Victoria Brackley
Nathan Broadbent
Lyndon Krause
Peter Le Noury
Aden Kittel
Jarred Pilgrim
Jade Haycraft
Nathan Bonney
Riki Steven Lindsay
Sho Itoh

Our Team
Associate Professor Dennis Hemphill, Group Leader
Professor Hans Westerbeek
Professor Elisabeth Wilson-Evered
Professor Anne-Marie Hede
Associate Professor Camilla Brockett
Associate Professor Clare Hanlon
Dr Eric Schwarz
Dr Zali Yager
Dr Michael Linley

HDR Students
Mr Giang Hong
Mr Muhammad Subhan Iswayhyudi
Ms Marina Keenan
Ms Michelle Fenwick
Mr Renato Ulpiano
Ms Sylvia Tran
Mr Simon Bishop
Mr Anthony Gabbert
Mr Greg Gilbert
Ms Claire Jenkin
Mr Michael Linley
Ms Aurelie Pankowiak
Mr Jie Fe
Training
Professor Robert Aughey

This group is focussed on the design, application and monitoring of training programs to enhance athletic performance. We have extensive expertise in designing training to enhance performance of elite athletes across AFL, Rugby, Rugby League, Soccer, Cycling, Rowing and other sports. We collaborate closely internally with the analytics and technology and skill development groups to offer a one-stop research solution to problems relating to how the athletes train, interventions to enhance performance and effective monitoring to improve training and training outcomes.

Our Team
Professor Robert Aughey, Group Leader
Professor Andrew Stewart
Dr Andre Nelson
Dr Fabio Serpiello
Dr George Elias
Dr James Zois
Dr James Broatch

HDR Students
Mr Brendan Lazarus
Mr Alireza Esmaeili
Mr Michele Lo
Mr Amber Rowell
Mr Ana Holt
Mr Kristal Hammond
Mr Alex Bauer
Mr Scott Graham
Mr Sam Howe
Ms Amy Wallis
Ms Anushka Bhargava
Ms Terri Dentry
Mr Ryan Hodder
Mr Damian Kovacevic
Mr Shane O’Riordan
Mr Jeremy Ieronimo