



SESNZ 2024 CONFERENCE NOV 20–22, ŌTEPOTI DUNEDIN

SESNZ

SPORT & EXERCISE SCIENCE
— NEW ZEALAND —

The evolution of exercise science: bridging research and real-world impact

**CO-HOSTED
WITH ISPAS**

ISPAS

INTERNATIONAL SOCIETY OF
PERFORMANCE ANALYSIS OF SPORT



**University of Otago,
Otago Polytechnic &
Tūhura Otago Museum**



Ōtākou
Whakaihu Waka
UNIVERSITY OF OTAGO



OTAGO
POLYTECHNIC
Te Kura Matatini ki Otago

TŪHURA
Otago Museum

*School of Physical Education Sport and
Exercise Sciences: 55/47 Union Street West
Sargood Centre: 40 Logan Park Drive
Otago Museum: 419 Great King Street*

**Scan the QR code for a
Google Maps list with all
conference locations**



SCAN ME

PROGRAMME AT A GLANCE:

Wed Nov 20th

- Pre-conference workshops 9am–3.00pm
(*registration required*)
- Conference Opening 3.30pm
- Welcome Reception 6.00pm

Thurs Nov 21st

- Morning Activities 6:30–7:30am
(*registration required*)
- Conference Program 9:00am–5:00pm
- Conference Dinner from 6:30pm
(*registration required*)

Fri Nov 22nd

- Conference Program 8:30am–12.30pm
- Conference Closing 12.00pm

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DRAFT PROGRAMME

WEDNESDAY 20 NOVEMBER

All workshops will take place at the School of Physical Education, Sport and Exercise Sciences

9.00AM	<u>WORKSHOP</u> Flume (Cold Shock) <i>Prof. Jim Cotter</i>	<u>WORKSHOP</u> REDS <i>Dane Baker</i>	<u>WORKSHOP</u> Motion Analysis <i>Dr. Neil Anderson</i>
11.00AM	<u>WORKSHOP</u> Heat Chamber <i>Prof. Jim Cotter</i>	<u>WORKSHOP</u> Diastasis Recti Rehab <i>Esme Soan</i>	<u>WORKSHOP</u> EMCR - Writing <i>Prof. Debra Waters</i>
1.00PM	<u>WORKSHOP</u> Blood flow restriction training <i>Hoani Smith</i>	<u>WORKSHOP</u> Motivational Interviewing <i>Chris Higgs</i>	<u>WORKSHOP</u> Optimising sport science strategies <i>Dr. Steve Barrett</i>

3.30PM	<u>Opening ceremony</u> Location: Sargood Centre		
4.00PM	<u>Keynote #1</u> <i>Speaker:</i> Dr. Ihirangi Heke <i>Title:</i> Māori Health & Physical Activity <i>Location:</i> Sargood Centre		
5.00PM	<u>High Performance Sport New Zealand Panel</u> 1. <u>High Jump/Athletics</u> : Detail on the gold medal winning campaign from a Coach PTA perspective – <i>Presented by James Sandilands (Coach/PTA/S&C)</i> 2. <u>Sailing</u> : Venue profiling and building effective tactical workbooks for sailors and coaches – <i>Presented by Alex Anastasiou (Sailing PTA)</i> 3. <u>Canoe racing</u> : How performance and technique analysis contributed to an accelerated learning environment within CRNZ's medal winning campaigns - <i>Presented by Paul McAlpine (HOD and CRNZ PTA)</i> 4. 15-minute panel discussion <i>Location:</i> Sargood Centre		
6.00PM	<u>Welcome Reception</u> Location: Sargood Centre		
7.00PM	<u>Early Career network function</u> Location: Ombrellos		



THURSDAY 21 NOVEMBER - AM

6.30AM
7.30AM

Physical activities, see advertisement

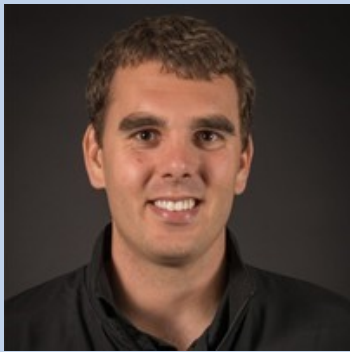
9.00AM
10.00AM

Keynote #2

Speaker: Steve Barrett

Title: Answering performance questions in an applied setting:
The role of academia to support practice





Location: Otago Museum, Hutton Theatre



playermaker

10.00AM

Morning tea

	 <i>Hutton Theatre</i>	 <i>Barclay Theatre</i>	 <i>Kākāpo Room</i>	 <i>Conservatory</i>
10.30AM 12.00PM	Ageing	Strength, Conditioning & Biomechanics	Exercise Physiology	Performance Mindset Coaching
	Chair: TBC	Chair: Ryan Overmeyer	Chair: TBC	Chair: Kylie Wilson
	<div><div>1. <u>Mike Annear</u></div><div>Active ageing in an urban metropolis across the pandemic: problematic life stages and complex environments provide lessons for walkability.</div><div>2. <u>Andrew Garrett</u></div><div>Hot water immersion to protect older people from heat injury in the time of climate change.</div><div>3. <u>Lara Vlietstra</u></div><div>Physical function and the association with self-reported health-outcomes of retired older elite athletes.</div><div>4. <u>Jennifer Gale</u></div><div>Macronutrient intakes of retired elite New Zealand athletes over the age of 60 years.</div><div>5. <u>Meredith Peddie</u></div><div>24-hour movement patterns of retired elite New Zealand athletes: an observational study.</div><div>6. <u>Tianci Li</u></div><div>Characteristics and correlates of walking behaviour among ageing populations in Japanese age friendly cities.</div></div>	<div><div>1. <u>Oliver Hanham</u></div><div>“On track for jumping”: in-the-field kinematic body position tracking over large distances during BMX jumping.</div><div>2. <u>Andrew Kilding</u></div><div>The effects of super shoes on running economy, gait and performance following cycling in triathletes.</div><div>3. <u>Raul Martin Gomez</u></div><div>Validation of step time and asymmetry detection algorithm in high-intensity running with Movesense IMU.</div><div>4. <u>Moses Bygate-Smith</u></div><div>Characteristics associated with countermovement jump performance in adult team-sport athletes: A systematic review.</div><div>5. <u>Kyra Seiler</u></div><div>Physiological comparison of eccentric versus concentric upper-body cycling at light to moderate intensity.</div><div>6. <u>Brett Smith</u></div><div>The relationship between horizontal scrum force and 1RM squat in professional rugby union players.</div></div>	<div><div>1. <u>Jeffrey Rothschild</u></div><div>A novel approach to measuring carbohydrate and energy expenditure during endurance exercise.</div><div>2. <u>Chris Button</u></div><div>Comparison of measurement methods to estimate body fat percentage.</div><div>3. <u>Kane Cocker</u></div><div>How the physiological cost of floating varies over time and by individual.</div><div>4. <u>Nic Daniels</u></div><div>Quantifying the physiological response to simulated motorsport driving in the heat.</div><div>5. <u>Charles Simpson</u></div><div>The effect of hypoxia (80% SpO2) on neuromuscular activity during repeated cycle sprints in young athletes.</div><div>6. <u>Nicole Spriggs</u></div><div>Incidence and magnitude of head acceleration events experienced by female adolescent rugby players across a season of rugby participation.</div></div>	<div><div>1. <u>Panel Discussion (45 min.)</u></div><div>Exploring the integration of mental skills and psychology into performance: perspectives of high performance coaches.</div><div>2. <u>Jason McKenzie</u></div><div>Referees are athletes too: An intentional approach integrating wellbeing and mental skills to create a performance edge.</div><div>3. <u>Kylie Wilson</u></div><div>Paris 2024 Olympics: Psychology and mental skills insights and recommendations.</div><div>4. <u>David Galbraith</u></div><div>The art of weaving mental skills and traditional performance coaching within high performance sport – where people and performance are seen as one in the same.</div></div>



THURSDAY 21 NOVEMBER - PM

12.00PM – 12.30PM	Poster Pulse: 2-Minute Spotlights Location: Otago Museum, Hutton Theatre			
12.30PM – 1.30PM	Lunch Sponsor exhibition & poster session			
1.30PM – 2.30PM	Keynote #3 <i>Speaker:</i> Esme Soan (AEP, ESSAM) <i>Title:</i> ‘Change the face’ of women’s health <i>Location:</i> Otago Museum, Hutton Theatre			 
	 <i>Hutton Theatre</i>	 <i>Barclay Theatre</i>	 <i>Kākāpo Room</i>	 <i>Conservatory</i>
2.30PM – 3.30PM	Exercise and Women's Health Chair: TBC <hr/> <ol style="list-style-type: none">1. <u>Penelope Matkin-Hussey</u> Continuous glucose monitors - a novel tool in relative energy deficiency in sport (REDS).2. <u>Marc Murray</u> Exercise tolerance and adaptation in untrained females: A 12-week training study.3. <u>Brendon Timmins</u> Adapting to new challenges; preparing an amateur female Dragon Boat team.4. <u>Michaela Rogan</u> FE-MALE Study: Female Exercisers – Menstrual (follicular And Luteal) Effects, a pilot study.	Performance Analysis Chair: TBC <hr/> <ol style="list-style-type: none">1. <u>Ieuan Leigh</u> A new measure of acceleration: GPS can accurately measure a 10m standing start.2. <u>Mico Olivier</u> Applying performance analysis in elite women’s water polo to understand the relationship between defensive formations and offensive outcomes.3. <u>Alyssa-Joy Spence</u> Depth perception: Analysing the squat depth standard of the International Powerlifting Federation using motion capture.4. <u>Brett Smith</u> Workload demands during ball-in-play periods: Comparison of locomotive and contact metrics in professional male versus female Rugby Union players.	Teaching & Coaching Chair: TBC <hr/> <ol style="list-style-type: none">1. <u>Hayden Croft</u> Applying an information framework for presenting coaches with large datasets.2. <u>Anja Zoellner</u> Evaluating a framework for concussion management in New Zealand’s secondary schools.3. <u>Chris Button</u> Coming of age? Evaluating the acceptability of nonlinear pedagogy to PE teachers in Singapore.4. <u>Rachel van Gorp</u> Empowering athletes: supporting educational achievement alongside athletic pursuits.	Performance Mindset Coaching Chair: Kylie Wilson <hr/> <ol style="list-style-type: none">1. <u>Natalie Chapman</u> Back-to-back-to-back Gold: Tailoring mental skills and psychology support to meet personal and performance needs across multiple-Paralympic cycles.2. <u>Kylie Wilson</u> The mahi between the magic: Mentally resetting between events at the Paris 2024 Olympic Games3. <u>Panel Discussion (45 min.)</u> The evolution and revolution of mental skills and psychology in Aotearoa New Zealand.
3.30PM	Afternoon tea			
4.00PM – 5.00PM	Keynote #4 <i>Speakers:</i> Dr. Brigit Mirfin-Veitch & Dr. Robbie Francis Watene <i>Title:</i> Exploring perspectives on sport and physical activity among people with disabilities <i>Location:</i> Otago Museum, Hutton Theatre			 
6.30PM	Conference dinner Location: Sargood Centre			

FRIDAY 22 NOVEMBER

8.30AM

Keynote #5

Speaker: Dr. Nathan Elsworthy
Title: Monitoring performance & wellbeing of team sport athletes and referees.
Location: Otago Museum, Hutton Theatre



9.30AM

Morning tea & AGM

10.30AM – 12.00PM

Hutton Theatre

Exercise and Women's Health

Chair: TBC

- 1. Rebecca Julian
Does aerobic fitness modulate the effects of dehydration in females?
- 2. Rebecca Attwell
Hormonal fluctuations and sport performance: A Delphi study on menstrual cycle secondary impacts and monitoring in female athletes.
- 3. Violet Owans
Menstrual tracking: Hormone profiling for athlete research.
- 4. Mary-Ann Moller
Riding with flow: Menstrual health in World Cup and World Championship mountain bikers.
- 5. Monica Nelson
The bleeding edge of women's performance enhancement? Examining sportswomen's interest in menstrual cycle-based training.
- 6. Val Burke
Strength for skinny athletes – using strength training for bone health in an elite professional trail runner.

Barclay Theatre

PA & Health

Chair: TBC

- 1. Nancy Rehrer
Physical activity environment and wellbeing: Effects of nature.
- 2. Nick Parata
Tama tu tama ora, tama noho tama mate - Play, Active Recreation and Sport (PARS) for rangatahi Māori mental wellbeing.
- 3. Samantha Heyward
The effect of a single hot water immersion or high-intensity interval training exposure on 24-hour ambulatory blood pressure in adults with hypertension.
- 4. Codi Ramsey
Exploring the impact of app-based instruction, group exercise class on the future role of group fitness instructors and personal trainers.
- 5. Siobhan Milner
What is pain (and what can we do about it)?
- 6. Elahe Salehi
Bidirectional associations between screen time and sleep and the influence of physical activity in pre-teens.

Kākāpo Room

Sport Sociology

Chair: TBC

- 1. Brendon Timmins
Autoethnography of preparing an amateur female team to prepare for Dragon Boat World Club Championship.
- 2. Lili Ovendale
High performing athletes' experiences: Precarity, health and science-informed performance conundrums.
- 3. Shannon Booth
Journey to the stage: An ethnographic exploration of the complex thoughts of a female bodybuilder.
- 4. Eleanor Crabill
The hosting of the 2023 FIFA Women's World Cup in Aotearoa/New Zealand: Legacy, policies, and practice.
- 5. Timothy Dawbin
The political economy of youth sports: Are young athletes a common pool resource?

Conservatory

Performance Analysis

Chair: TBC

- 1. Kirsten Spencer
Performance analysis insights into elite-level trampoline routine: Gender variation, routine movement patterns, construction strategies, and scoring components.
- 2. Martinique Sparkes
Female field hockey match intensities: Comparing practice matches against male club-level players and international female teams versus international competition matches.
- 3. Hayden Croft
Revisiting the development and application of virtual reality and first-person perspective video in team sports training: A netball case-study.
- 4. Peter Tu
Advanced pressing and team performance in elite football.

12.00PM

Closing & take away lunch

