

# SESNZ CONFERENCE 2022 – PROGRAMME

Day One: Wednesday 23<sup>rd</sup> November - Morning

**07:30** Registration Opens (AF foyer). Tea & Coffee

**08:30** **Mihi Whakatau / Welcome / Opening**  
Faculty Dean / Head of School / Chair, SESNZ  
AF114

**08.45- 09:30** **gbc Biomed Keynote Speaker:**  
**Dr Arne Nieuwenhuys**, University of Auckland  
*Tired and out of control? Effects of sleep and fatigue on performing under pressure*  
AF114  
Chair: Professor Nick Draper

Parallel Sessions	<b>AF114</b> Theme: Physiology Chair: Dr Ed Maunder	<b>AF116</b> Theme: Biomechanics Chair: Dr Liz Bradshaw	<b>AJ100</b> Theme: AEP/CEP/Health Chair: Matt Wood
<b>09:35</b>	Effects of blood flow restriction as a potentiating tool in trained female athletes <i>Martyn Beaven</i>	Measurement and reporting of footwear characteristics in running biomechanics: A systematic search and narrative synthesis of contemporary research methods <i>Codi Ramsey</i>	The effect of high-intensity interval training and heat therapy on cardiorespiratory fitness in patients with severe lower-limb osteoarthritis <i>Brendon Roxburgh</i>
<b>09:50</b>	Team Pursuit: Fitter is Faster <i>Charles Pugh</i>	Functional compartmentalisation of motor units during the stretch reflex <i>Danielle Culbertson</i>	Autonomic dysfunction alters heart rate responses during non-contact boxing in Parkinson's disease <i>Tone Panassollo</i>
<b>10:05</b>	The acute effects of lower limb blood flow restriction during aerobic exercise with trained cyclists <i>Patrick Lander</i>	Lower-limb asymmetry decreases when fatigued during maximal sprinting in humans <i>Shayne Vial</i>	The effect of exercise engagement on low back disability at 12-months is mediated by pain and catastrophizing Paul Marshall
<b>10:20</b>	Effects of shear stress on acute cerebrovascular function <i>Emma Jones</i>	How accurate is 3D body scanning technology at estimating body fat percentage? <i>Samantha Rodrigues</i>	Promoting mental health: building resilience in teenage children <i>Edmond Otis</i>

10:35-11:00

Morning Tea

Parallel Sessions	<b>AF114</b> Theme: Sport and Exercise Psychology Chair: Dr Arne Nieuwenhuys	<b>AF116</b> Theme: Performance Analysis Chair: Associate Professor Kirsten Spencer	<b>AJ100</b> Theme: AEP/CEP/Health & Fitness Chair: Dr Justin Richards
<b>11:00</b>	Sport psychology: The attitudes of New Zealand athletes <i>Samuel Richardson</i>		

11:15	Influence of an evaluative audience on conscious motor processing and performance during a stop-signal soccer penalty shooting task <i>Robyn Sullivan</i>	<b>Invited speaker</b> The need to have a robust, objective assessment of performance analysis competencies <i>Kirsten Spencer, AUT</i>	<b>Invited Speaker</b> Exercise: Friend or Foe <i>Lynette Hodges, Massey University</i>
11:30	The effect of cognitive fatigue on swimming technique and performance in competitive swimmers <i>Efe Celik</i>		
11:45	Effect of exercise intensity and modality on post-exercise executive function <i>Tina van Duijn</i>	Combining Sportscode and GPS metrics to monitor locomotion and contact workloads in rugby union <i>Brett Smith</i>	Kī o Rahi He Taonga Tuku Iho: Exploring how Kī o Rahi influences hauora <i>Tasha Burton</i>
12:00	Elite hockey performance: Examining the relationship between propensity for reinvestment and performance in different game situations <i>Merel Hoskens</i>	How New Zealand Rugby transition our people from not using data and technology to using it <i>Jason Healy</i>	Moving in the Margins: A qualitative study into the role of physical activity in marginalised communities <i>Ella Creagh</i>
12:15	Effect of acute exercise on the state anxiety and autonomic regulation of moderately-anxious, Sedentary Individuals <i>Orla Scanlon</i>	Panel discussion - Use of performance analysis in rugby	He hauora te taonga - Exploring Kī o Rahi as a tool to assess components of fitness <i>Nicholas Parata</i>

12:30-13:45

Lunch & Poster Presentations

Day One: Wednesday 23<sup>rd</sup> November - Afternoon

13:45-14:30

**Keynote Speaker** Dr David Mizrahi, The Daffodil Centre  
*Exercise-oncology and chemotherapy-induced peripheral neuropathy*  
AF114  
Chair: Dr Paul Marshall

Parallel Sessions	AF114 Theme: Nutrition Chair: Glenn Kearney	AF116 Theme: S&C Chair: Associate Professor Andrew Foksett	AJ100 Theme: Sport and Exercise Psychology Chair: Dr Tina van Duijn
14:35	Full-time nutrition practitioner support may positively influence meal distribution of dietary protein in provincial academy rugby union athletes <i>Charlie Roberts</i>	<b>Invited Speaker</b> Developing Physically Robust Team Sport Athletes for International Competition <i>Scott Logan, Auckland Cricket</i>	Increasing exercise workload degrades the precision of rapid eye movements <i>Yasmin Kessner</i>
14:50	The influence of dietary carbohydrate on perceived recovery status differs at the group and individual level – evidence of nonergodicity among endurance athletes <i>Jeffrey Rothschild</i>		To pass or not to pass: Investigating the effect of uniform colour on inhibition when passing <i>So Hyun Park</i>

15:05

The hydrating effects of hypertonic, isotonic, and hypotonic sports drinks and waters on central hydration during continuous exercise  
*David Rowlands*

Using the Muller-Lyer illusion as a tool to investigate visual size perception in concussion  
*Amanpreet Sidhu*

15:20-15:45

Afternoon Tea

Parallel Sessions

**AF114**

Theme: Student & Early Career Researchers  
Chair: Nicole Spriggs

**AF116**

Theme: S&C  
Chair: Mark Drury

**AJ100**

Theme: CEP/AEP  
Chair: Stacey Pine

15:45

Gender-specific strength training improves components of military fitness in female soldiers  
*Jacques Rousseau*

16:00

**Invited Speaker**

Enhancing Early-Stage Academic Research Career Development  
*Douglas Seals, University of Colorado*

Effects of concurrent plyometric and endurance training sequence on leg power and leg strength in college volleyball players  
*Eng Hoe Wee*

16:15

Student led Q&A Session

The application of rehabilitation, strength training and sport science in the case study of an x-games gold medallist and 3x Olympian free skier over a 5-year period.  
*Val Burke*

16:30

The relationships between physical fitness attributes and match demands in rugby union referees officiating the 2019 Rugby World Cup  
*Matthew Blair*

SESNZ's AEP Strategic Group Meeting

16:45

**VX Sport Keynote Speaker: Professor Karl Friedl, USARIEM**  
*Current and Future Directions in Human Performance Monitoring*  
AF114  
Chair: Professor Jim Cotter

17:30 – 18:30

Networking Reception – AF Foyer

Day Two: Thursday 24<sup>th</sup> November - Morning

07:45 Registration, Tea & Coffee

**Cosmed Keynote Speaker: Dr Douglas Seals**, University of Colorado  
*Exercise Training for Promoting Vascular Health During Aging*  
 AF114  
 Chair: Associate Professor James Fisher

Parallel Sessions	AF114 Theme: Physiology Chair: Professor David Rowlands	AF116 Theme: S&C Chair: Matthew Blair	AJ109 Theme: AEP/CEP Chair: Matt Wood
09:15	Handling the heat: Does lower baseline body temperature or opportunity for behaviour improve heat tolerance? <i>Tiarna Stothers</i>	<b>Invited Speaker</b> Use of movement screenings in S&C <i>Emily Carter, Tennis New Zealand</i>	<b>Invited Speaker</b> Pain: Considerations for The Clinical Exercise Physiologist <i>Debbie Bean</i>
09:30	Does adaptation to cold shock provide cross adaptation to the basic control of breathing? <i>James Cotter</i>		
09:45	Altered light exposure during basic training in military barracks on subsequent sleep, wellbeing, and performance of new recruits: a placebo-controlled study <i>Martyn Beaven</i>		
10:00	Validity of three core temperature measurement techniques for cool water Swimming <i>Blake Miller</i>	Associations between movement competence and sport specialisation in youth football players <i>Anja Zoellner</i>	The biomedical and biopsychosocial beliefs of physiotherapists and accredited exercise physiologists in the treatment of people with low back pain <i>Paul Marshall</i>
10:15	Cross-adaptation of cold shock to cold-pressor (pain-related) responsiveness. <i>Kane Cocker</i>	Do current agility training practices in elite Australian football align with the demands of competition? <i>Russell Rayner</i>	Patient education and different exercise modalities for people with chronic low back pain, as scoped for accredited exercise physiologists <i>Paul Marshall</i>

10:30-11:00

Morning Tea

Parallel Sessions	AF114 Theme: Performance Analysis Chair: Associate Professor Kirsten Spencer	AF116 Theme: S&C Chair: Mark Drury	AJ109 Theme: AEP/CEP Chair: Stacey Pine
11:00	Performance analysis and its role at High Performance Sport NZ <i>Paul McAlpine</i>	<b>Invited Speaker</b> Physical preparation considerations for elite netball athletes <i>Chloe McKenzie, Robinhood Northern Stars, MIT</i>	<b>Invited Speaker</b> Exercise prehabilitation – preparing cancer patients for surgery and beyond <i>Matt Wood, Human Potential Centre</i>

11:15	Behind Closed Doors: a preview into the Silver Ferns implementation of performance analysis <i>Hayden Croft</i>		
11:30	Managing data at scale to drive performance. <i>Evan Wilson</i>		<b>Invited Speaker</b> Exercise and childhood cancer: What is the evidence and the role of exercise? <i>David Mizrahi, The Daffodil Centre</i>
11:45	Maximising efficiency and workflow with limited resources <i>Sam Mulholland-Goad</i>	The validity and reliability of the Optojump Next system for both flight time and plyometric push up height <i>Nathan Smith</i>	
12:00	Panel discussion – Integration of performance analysis at player and management levels	Modelling the relationship between the repetitions left in reserve and movement velocity during resistance training: an accurate method for prescribing intensity and volume and controlling the level of fatigue <i>Ivan Jukic</i>	Q&A/Panel: Cancer & Exercise Prescription in NZ
12:15	Mapping sport performance analysis – Integrated landscape of sport <i>Hayden Croft</i>	Positive effects of isokinetic eccentric exercise on post-activation potentiation in the lower-body for resistance trained men. <i>Cam Olsen</i>	
12:30-13:45 <b>Lunch, Posters and SESNZ AGM</b>			

Day Two: Thursday 24 <sup>th</sup> November - Afternoon			
Parallel Sessions	<b>AF114</b> Theme: Physiology Chair: Professor Jim Cotter	<b>AF116</b> Theme: S&C Chair: Associate Professor Andrew Fosskett	<b>AJ109</b> Theme: Biomechanics Chair: Associate Professor Melanie Bussey
13:45	The effects of blackcurrant and caffeine combinations on performance and physiology during repeated high-intensity cycling. <i>Carl Paton</i>	<b>Invited Speaker</b> Integrating Strength & Conditioning Practices Within Rowing NZ: Balancing the Off- and On-Water <i>Ryan Turfrey, HPSNZ</i>	Automated body segment inertial parameters for the purpose of personalised injury Prevention <i>Kelly Sheerin</i>
14:00	Expiratory flow limitation during exercise in athletic adolescents and young adults <i>Ryan Welch</i>		Collisions in junior rugby <i>Nicole Spriggs</i>
14:15	Polo: What do we know now? <i>Russ Best</i>	One velocity loss threshold does not fit all: consideration of sex, training status, history, and personality traits when monitoring and controlling fatigue during resistance training <i>Ivan Jukic</i>	Impact of reduced training load on Royal New Zealand Navy recruits' injury and fitness. <i>Adam Dooley</i>
14:30	Blue Light— A phone-y concept or a facilitative function? <i>Martyn Beaven</i>	Reliability and validity of a portable mid-thigh pull device and inertial cycling ergometer <i>Fionn Cullinane</i>	A step-by-step analysis of sprinting acceleration in adolescent boys spanning maturation.

			<i>Jako Bekker</i>
<b>14:45</b>	Mixed-methods heat acclimation in elite male rugby sevens athletes <i>Stephen Fenemor</i>	Fatigue and the recovery of neuromuscular function following consecutive days resistance exercise in trained men <i>Paul Marshall</i>	Recreating field head impact kinematics using machine learning <i>Danyon Stitt</i>

**15:05- 15:45**

**IMeasureU Invited Speaker: Dr Elizabeth Bradshaw**, Deakin University  
Emerging Sensor Technology Use for Measuring Musculoskeletal Loads in Sport  
*AF114*  
Chair: Dr Kelly Sheerin

**15:45** Awards and Closing

**16:00** End