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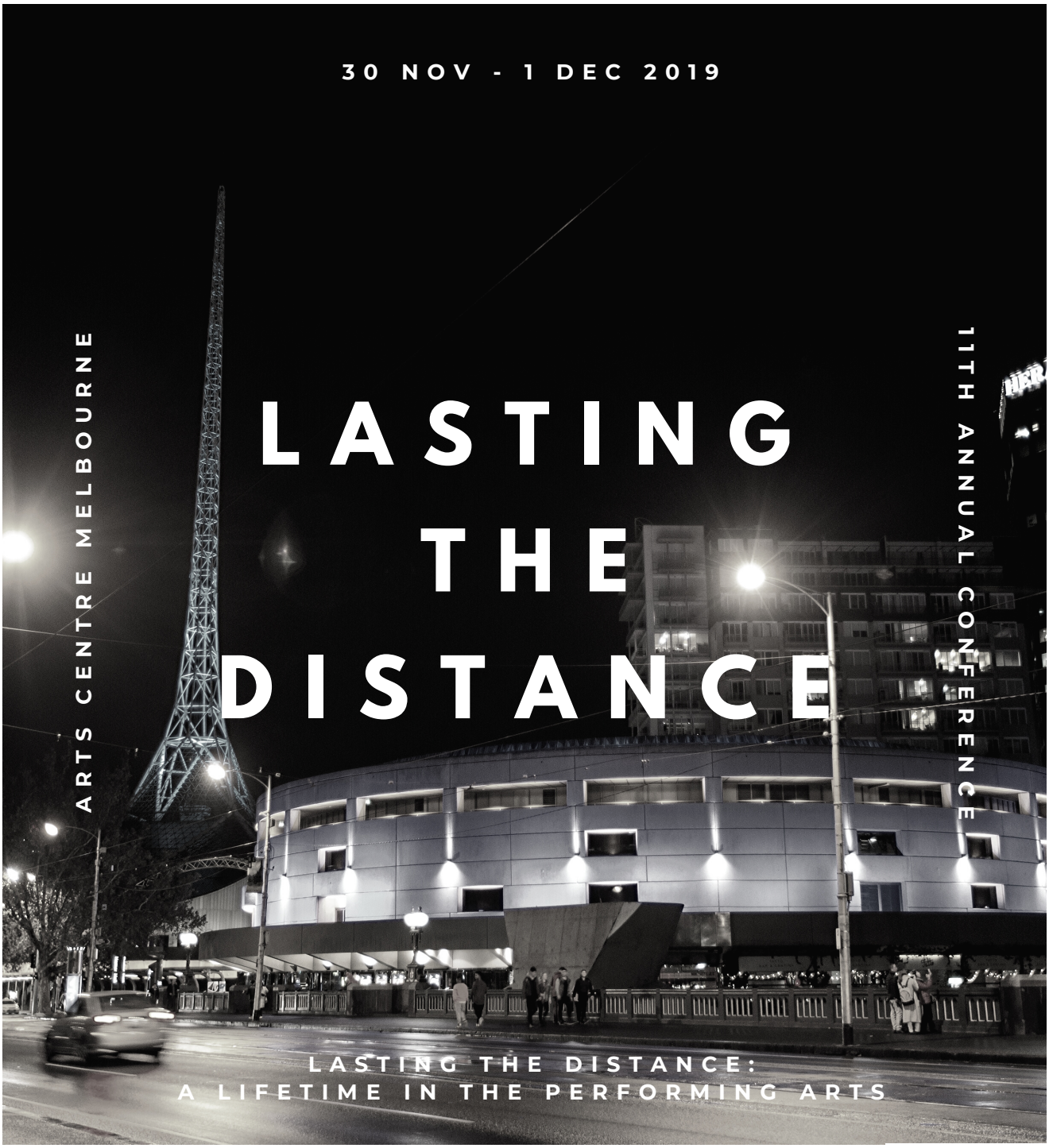

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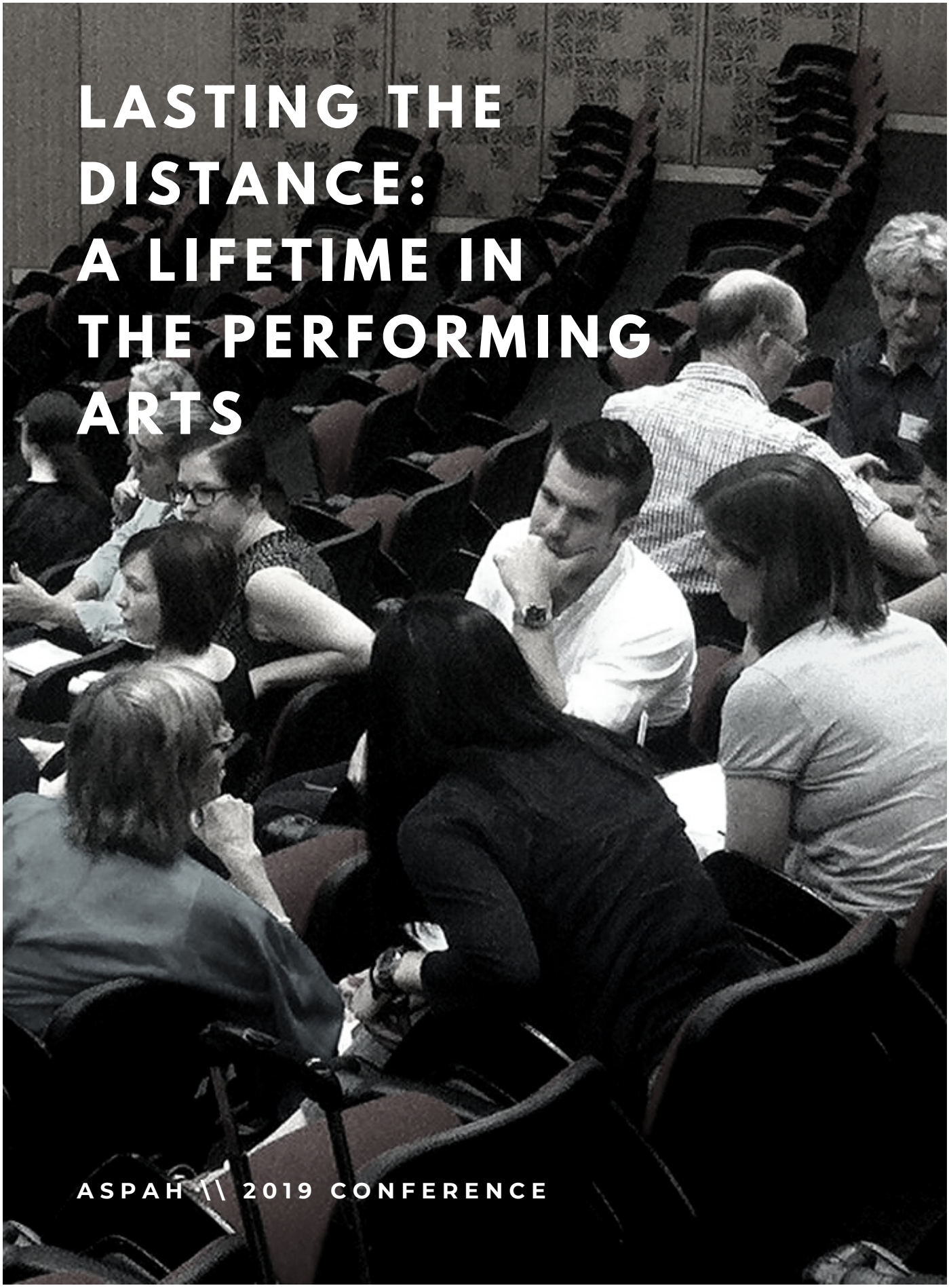
2019 CONFERENCE PROGRAM

#ASPAH2019 SOCIAL MEDIA COMPETITION
Share your conference experience on social media for your chance to win a $50 Ticketek gift voucher. Post your highlights of the conference on Twitter or Facebook using #ASPAH2019
The winning post will be the original post with the most likes/ shares/ retweets. Entries close Sunday November 1st at 12.30pm and the winner will be announced during the closing address.


LASTING THE DISTANCE:
A LIFETIME IN THE PERFORMING ARTS
ASPAH \\ 2019 CONFERENCE

WELCOME

Lasting the distance: A lifetime in the performing arts

This year's conference theme is a perfect demonstration of ASPAH's mission for performers and all in the performing arts to enjoy a long and rewarding involvement in their chosen art pursuit.

The key, overall health and wellbeing, is the thread linking this year's 33 presentations. Our keynote presenter, Dr Sue Mayes, The Australian Ballet's Principal Physiotherapist, begins by presenting that company's multidisciplinary approach to optimising artistic performance, health and career longevity.

Current research is placing a spotlight on the psychological wellness of performing artists and production practitioners, and nine of our presentations investigate that vital issue. The conference culminates with writer/director Ben Steel's moving new documentary, ***The Show Must Go On.*** This film, followed by a panel discussion and question time, offers each of us a new understanding of the complex relationship between life within the performing arts and life as social beings.

Several presentations examine the links between the psychological and physiological aspects of life as a performing artist. The theme is supported by our launch of the ASPAH Collection of Healthcare Guides, to be found in your conference bag. Thanks to the generosity of our donors and advertisers, this resource will be distributed, free of charge, to performers, students, and all concerned with their welfare.

Each year, ASPAH conferences welcome newcomers and regular faces, some as presenters and others simply as delegates, some in the realm of performance and some involved in healthcare, education or training. Recognising the powerful resources lying within these individuals, 2019 marks the launch of our discussion groups. These small-group sessions allow participants to explore given topics and to connect with other delegates in a low-key, friendly atmosphere.

On behalf of the ASPAH National Executive, I welcome you all to this conference. We trust that you will enjoy the wide-ranging knowledge underpinning each of our speakers' presentations, and we hope many of you will be inspired to submit an abstract for our 2020 event.

Janet Karin OAM
ASPAH National Executive Committee
Chair, Conference and Content Development Subcommittees

SATURDAY 30 NOVEMBER		
	AMCOR LOUNGE	STATE THEATRE LOUNGE
0820	*Upload presentations*	REGISTRATION, REFRESHMENTS
0900	Opening address: Dr Luke Hopper	
	9.10am -10.20am Moderator: Dr Luke Hopper	
0910	KEYNOTE ADDRESS Optimising artistic performance and health *Dr Sue Mayes*	
1000	The key to fitting pianists to pianos: Interaction between hand span and different keyboard sizes *Ju-Yang Chi*	
1020	*Upload presentations*	*Upload presentations* MORNING TEA
	10.50am-11.50am Moderator: Dr Rachel Ward	*10.50am-11.30am Moderator: Janet Karin*
1050	Development of a field-based wearable sensor system to detect internal loads in ballet *Danica Hendry*	WORKSHOP Character, persona and shape: How healthier creation of a role can enable healthier 'letting go' of a role *Dr Mark Seton*
1110	Developing an athlete management system for professional ballet dancers *Carly Harrison*	
1130	Leading with the front foot: Eating disorder prevention, identification and intervention *Fiona Sutherland & Philippa Ziegenhardt*	
1150	*Upload presentations*	*Upload presentations*
1210	ASPAH Annual General Meeting (all welcome)	LUNCH
	1.10pm-2.30pm Moderator: Danica Hendry	*1.10pm-2.30pm Moderator: Dr Mark Seton*
1310	Posture, functional movement and its relationship with injuries in university dancers *Isabel Artigues Cano*	WORKSHOP Developing, sustaining and correcting co-ordination: In service of a healthy lifetime of performance *Greg Holdaway*
1330	Pre-pointe testing and your child's ability to dance on pointe *Georgina Barr*	
1350	Injuries across a tertiary dance training program: a 3 year retrospective cohort study *Melanie Fuller*	WORKSHOP A somatic movement exploration of the finger and hand to scapula connection *Simone Maurer*
1410	Developing evidence-based policy and practice in psychosocial health in the performing arts *Claire Cordeaux*	
1430	*Upload presentations*	*Upload presentations* AFTERNOON TEA
	3pm-4pm Moderator: Dr Sonia Ranelli	*3pm-3.45pm Moderator: Danica Hendry*
1500	The origins of pains in musicians *Dr Hara Trouli & Dr Nikos Reissis*	WORKSHOP Promoting hip health in the performing arts *Dr Sue Mayes*
1520	Ergonomic adaptability of upper string instruments *Sarah Lesjak*	
1540	ACT for music performance anxiety *Laura Clarke*	
	4pm-5pm Moderator: Melanie Fuller	
1600	The earlier the better! Embedding performance skills training into music lessons and practice *Anneliese Gill*	
1620	Mental health initiatives for performing arts training institutions *William Centurion*	
1640	Towards a better understanding of accidents and near misses in contemporary circus arts *Dr Fleur van Rens*	
1700	END OF DAY ONE PRESENTATIONS	
	Walk to ABS (5 minutes)	
1720	The Australian Ballet Centre guided tour with Dr Sue Mayes	

SUNDAY 1 DECEMBER		
	AMCOR LOUNGE	STATE THEATRE LOUNGE
0820	*Upload presentations*	REGISTRATION, REFRESHMENTS *Upload presentations*
	9am-10.20am Moderator: Melanie Fuller	*9am-9.40am Moderator: Janet Karin*
0900	The well-being of culturally and linguistically diverse artists in Australia *Trisnasari Fraser*	WORKSHOP Pilates for singers: Increasing body awareness through movement *Catherine Etty-Leal*
0920	Ankle and foot contributions to extreme plantar flexion in ballet dancers *Sarah Carter*	
		9.40am-10.20am Moderator: Dr Mark Seton
0940	Surgery: A performing act *Dr Nikos Reissis*	WORKSHOP Care and caring structures in dance practice *Ebony Muller*
1000	Sensory characteristics in young string musicians with playing-related musculoskeletal problems *Dr Sonia Ranelli*	
1020	*Upload presentations*	*Upload presentations* MORNING TEA
	10.50am-11.50am Moderator: Anneliese Gill	*10.50-11.30am Moderator: Amy Naumann*
1050	The impact of health promotion and education programs in university dancers *Isabel Artigues*	WORKSHOP Connecting with your blueprint for movement *Jane Shellshear*
1110	Stepping sideways: Career transition from dance to health *Isaac Campbell*	
1130	Variability and the myth of perfect performance *Janet Karin*	
1150	*Upload presentations*	*Upload presentations*
1220	DISCUSSION GROUPS Pain: The performer's frenemy Priorities for performing arts medicine training Transitioning between and beyond performance careers *Apply at Registration Desk*	LUNCH
1250		
	1.10pm-2.10pm Moderator: Dr Rachel Ward	*1.10pm-1.50pm Moderator: Amy Naumann*
1310	Pilates for singers: Increasing body awareness to optimise voice *Catherine Etty-Leal*	WORKSHOP Myofascia, movement & voice *Annie Strauch*
1330	Wellness monitoring in elite performers: Comparing professional ballet dancers and athletes *Carly Harrison*	
1350	Dueling with dancers' injuries: The bio, the psycho and the social *Danica Hendry & Melanie Fuller*	
1410		AFTERNOON TEA
1440	THE SHOW MUST GO ON A new film shining a spotlight on mental wellbeing in the entertainment industry *Followed by a panel discussion with Dr Mark Seton (Chair), Dr Margaret Osborne and Ben Steel* All delegates are welcome	Putting dance on the sports medicine agenda Sports Medicine Australia working group meeting By invitation only
1640	Conference awards and closing remarks *Dr Luke Hopper*	
1700	END OF DAY TWO PRESENTATIONS	

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BALGOWLAH & ST LEONARDS

KEYNOTE ADDRESS: OPTIMISING ARTISTIC PERFORMANCE AND HEALTH

Dr Sue Mayes
Principal Physiotherapist,
The Australian Ballet

A gradual implementation of injury prevention strategies over two decades has resulted in a significant decline of injury and surgery rates at The Australian Ballet; dancers have longer careers and are retiring healthier. Over 20 years of injury data will demonstrate trends in injury and surgery rates, and in worker's compensation premiums.

Preparing the dancer for the physical and mental demands of a career in a professional ballet company is multifaceted, relying on a multidisciplinary team approach supported by effective communication throughout the organisation. Screening begins when the dancers join the company. It aims to evaluate key physical requirements that have been identified through examining injury trends and associated physical impairments in ballet. Injury risk analysis guides individualised and target group programs. Ballet class may not always provide specific conditioning required to prevent injury, and exercises can be introduced to address these deficits. Specific injury prevention programs are provided to all company dancers upon employment and then individualised and progressed throughout their careers.

Education of dancers and staff has been key, including the importance of early reporting, workload modification, consistency of loading and recovery techniques. The company has recognised the importance of clinical research and has partnered with La Trobe University to develop a research program that supports The Australian Ballet's vision of optimising artistic performance and health.

Photographer: Kate Longley
The Australian Ballet: Dr Sue Mayes, Physiotherapist; Lana Jones, dancer

ABSTRACTS

THE KEY TO FITTING PIANISTS TO PIANOS – INTERACTION BETWEEN HAND SPAN AND DIFFERENT SIZES OF KEYBOARDS

Presenting author: Mr. Ju-Yang Chi
PhD Candidate, The University of Sydney, NSW,

Abstract: Pianists with smaller hand spans have reportedly been restricted to less physically demanding repertoire and have been at greater risk of hand injury than larger-handed-pianists. However, objective measures of muscle activity levels in relation to hand span using different keyboard sizes is unclear. The aim of this study was to evaluate the interaction between hand span dimensions and piano size on muscle activation levels during piano performance. Twenty-four pianists (AMEB LMusA level or above) randomly performed 2 designated excerpts (chords and octaves) on 3 pianos with different size keyboards (5.5", 6.0" and 6.5" (regular size) per octave). Subjects' hand span and demographics were collected. Surface electromyography (EMG) readings of 16 muscles of the upper torso, shoulders and bilateral upper limbs were measured during performance. Perceived exertion (RPE) and keyboard preference were obtained at the end of trial. Repeated-measures analysis of variance was used for data analysis. Small-handed pianists generally had higher levels of muscle activity in the distal limbs on the regular key size piano than on those with smaller-scaled keyboards, while large-hand-span players showed no obvious changes among pianos ($p < 0.05$). All pianists showed the lowest muscle activation level in the forearms and hands (except for the index finger abductor) on the smallest-scaled keyboard while playing octaves ($p < 0.05$). The outcome of RPE and preference support the EMG results. Preliminary EMG findings suggests small-hand-span pianists may benefit from using reduced size keyboards in terms of decreasing muscle exertion during performance of chords and octaves. Further research with a larger sample size would be useful to corroborate results.

Clinical Implications: Understanding the effect of smaller keyboards on the effort required in piano performance may facilitate smaller-handed pianists to perform more safely and effectively.

Biography: Mr. Ju-Yang Chi is a PhD candidate in the School of Medical Sciences, Faculty of Medicine and Health, The University of Sydney. He received his M.S., Acupuncture Science from China Medical University in 2014 and his B.S. Physiotherapy from National Taiwan University and is interested in musician healthcare with current research focusing on ergonomics for musicians. He presented pilot research results on hand span in piano playing at the Performing Arts Medicine Association symposium in 2018.

Other authors:
Dr. Mark Halaki, PhD, MSc (Biomed Eng), BSc (Mech Eng), The University of Sydney, NSW
Ms. Erica Booker, DSCM (P&T), LMusA Piano, AMusA Piano and Singing, Dip Spec. Mus. Ed., Dip. Suzuki Pedagogy
Ms. Rhonda Boyle, B.Sc.(Hons), M. Env. Sc., MUP
Dr. Bronwen Ackermann, PhD, MPH, BAppSc.(Physio), The University of Sydney, NSW

DEVELOPMENT OF A FIELD-BASED WEARABLE SENSOR SYSTEM TO DETECT INTERNAL LOADS IN BALLET

Presenting author: Ms Danica Hendry
PhD Candidate, Curtin University, Perth, WA

Background and Purpose: Accurate field-based monitoring of dancers external and internal load is considered critical to capture risk of pain development. Internal load includes a dancer's biomechanics, commonly measured using expensive laboratory-based equipment with low ecological validity. The aim of this study was to develop a field-based wearable sensor system that is able to accurately predict biomechanical internal load features during ballet jumps

Methods: Female dancers (n=14) performed a series of bilateral and unilateral ballet jumps. Dancers wore a single, sacrum mounted, Actigraph Link wearable sensor (100Hz). Data was collected simultaneously with an 18 camera Vicon Motion Analysis System and using 2 AMTI force platforms. A customised Labview program synchronised the Vicon, force platform and Actigraph data. Two machine learning models (bilateral and unilateral landings) were applied to predict the ground reaction force (GRF) and jump height. Models were validated using leave one out cross validation.

Results: The degree of accuracy for ground phase/ air phase prediction was 89%. GRF was predicted with an average root mean square error of 0.3 times body weight ($r = 0.97$). Jump height results are being finalised at the time of abstract submission.
Conclusions: A machine learning model applied to wearable sensor data can accurately predict the GRF during bilateral and unilateral jump landings, presenting a model which is capable of field-based measurement of dancers' biomechanics.

Clinical Implications: This system creates the potential for monitoring dancers' internal loads and identifying the risk of musculoskeletal pain development in the dance studio, using commercially available wearable sensor technology. Currently no such system exists within dance, or sport. As well as load monitoring, the implications of this research have

scope to extend to real time feedback systems on dancers' biomechanics during commonly practised jumping techniques.

Biography: Stemming from a career as a professional dancer, Danica is a titled sports and exercise physiotherapist with a keen interest in the health and well being of dancers. She works clinically with dancers and performers from a recreational to elite level, is a touring physiotherapist with The Australian Ballet and has been resident physiotherapist on a number of musical theatre productions including Matilda The Musical. Additionally, she is a tutor within the School of Physiotherapy and Exercise Science at Curtin University. Danica is currently completing her PhD, exploring the contributing factors towards pain related disability in pre-professional dancers.

Other authors:

Dr Amity Campbell and Prof Peter O'Sullivan, School of Physiotherapy and Exercise Science, Curtin University
Mr Ryan Leadbetter and Dr Kristiffer McKee, School of Civil and Mechanical Engineering, Curtin University
Dr Luke Hopper, Western Australian Academy of Performing Arts, Edith Cowan University
Prof Leon Straker, School of Physiotherapy and Exercise Science, Curtin University

DEVELOPING AN ATHLETE MANAGEMENT SYSTEM FOR PROFESSIONAL BALLET DANCERS: A PILOT STUDY

Presenting author: Miss Carly Harrison
PhD Candidate, La Trobe University
Melbourne, VIC

Background and Purpose: Athlete Management Systems (AMS), as monitoring tools, are used extensively in elite sport as valid indicators of the recovery status of an athlete; however, wellness monitoring via an AMS has not been trialled in the professional Australian performing arts industry. This research aimed to evaluate the practicality of using an AMS in a professional ballet company.

Methods: Three male and two female professional ballet dancers (M = 26 years, SD = 2.6) volunteered to take part in the pilot study. Dancers recorded daily wellness scores (sleep quality and quantity, stress, fatigue and muscle soreness) on a 10-point Likert scale, where 10 indicates a high level of wellness. At completion of the trial, dancers participated in a focus group reflecting on their experiences and perceived benefits of using the AMS. Audio recording of the focus group discussion was transcribed, and themes were qualitatively analysed.

Results: Four main themes were identified: 1) The effectiveness and ease of the AMS; 2) Self-awareness through the AMS; 3) Recommended improvements for further development of the AMS wellness monitoring for the ballet profession and; 4) Overall perceptions of the AMS and practicality in the ballet profession. Professional ballet dancers reported that the AMS enhanced awareness of their wellbeing.

Conclusions: Perceptions of wellness and experiences using the application were favourable with regards to the practicality of an AMS in the professional ballet industry. It is recommended that the application be industry specific whilst also being consistent with professional sport AMS format. A larger sample size may provide further depth to interpret wellness patterns and fluctuations.

Clinical Implications: These findings have important implications for further development of AMS within professional ballet companies for real-time monitoring and long-term analysis of trends in performance, training and medical data.

Biography: Carly is a PhD candidate studying at La Trobe University. Carly is employed as an Associate Lecturer at La Trobe University and is an Occupational Rehabilitation Counsellor, assisting people with physical and psychological injury to return to work. Recently Carly completed accredited courses and is a Certified Wellness Practitioner, Meditation and Mindfulness Teacher and completed Acceptance Commitment Therapy modules through Dr Russ Harris. Carly is passionate about holistic wellbeing and early intervention in the performing arts industry.

Other authors:

Dr Susan Mayes, The Australian Ballet
Dr Mandy Ruddock-Hudson, Dr Scott Ruddock, Dr Paul O'Halloran, Dr Jillian Cook, La Trobe University

LEADING WITH THE FRONT FOOT – AN EATING DISORDER PREVENTION, EARLY IDENTIFICATION AND INTERVENTION PROJECT

Presenting Author: Ms Fiona Sutherland
Director, The Mindful Dietitian

Background and Purpose: Literature indicates that classical dancers have an increased risk of developing eating disorders, due to biological, temperamental and environmental factors, therefore, we sought to answer the question: "How can we actively support opportunities for eating disorder prevention, early identification and early, evidence-based treatment in elite adolescent ballet students?

Methods: We worked collaboratively with elite ballet students, staff and families at XXX Ballet School to develop an Eating Disorder (ED) Early Intervention Framework & Guidelines, as well as establishing prevention initiatives, early identification and timely evidence-based treatment of eating disorders. This

was a systematic, coordinated, multi-disciplinary approach, differing from others by focusing more strongly on prevention and early intervention rather than intervening only when ED symptoms are more established. Staff Pre/Post Survey of Training Forum, File Audit of pre and post implementation were used to support assessment.

Results: Establishing "flag" system of care (early identification). Faster response time upon early identification. Access to evidence-based assessment & treatment. Reduced stigma & barriers.

Conclusions and Clinical Implications: Eating Disorders are a common concern within all performing arts sectors, yet many feel lacking in confidence & resources. Developing cohesive policies and practices which are implemented across all groups (staff, students) has the capacity to significantly enhance mental and physical wellbeing of dancers and students. Further research opportunities may be identified in areas such as leadership, communication, stigma, student engagement, prevention models and education.

Biography: Fiona Sutherland is an Accredited Practising Dietitian and Director of both The Mindful Dietitian, & Body Positive Australia. She has been practising for over 15 years primarily in the areas of eating behaviour, eating disorders, body image, sports nutrition & education/training. She is Nutrition Director at The Australian Ballet School.

Philippa Ziegenhardt is a former professional ballet dancer and registered Counsellor. She is School Counsellor and performance psychology teacher at The Australian Ballet School and has been supporting performing artists for 9 years through private practice and online mindset programs with StageMinded.

Other authors:

Mrs Philippa Ziegenhardt, School Counsellor, The Australian Ballet School

POSTURE, FUNCTIONAL MOVEMENT AND ITS RELATIONSHIP WITH INJURIES IN UNIVERSITY DANCERS

Presenting author: Mrs Isabel Artigues Cano

Institute Arts Barcelona, Spain

Background and Purpose: In recent years, pre-semester dance screenings have become the norm across dance genres at the university level, often for various purposes, including injury assessment. While there is a plethora of research on the effects of posture and functional movement on injury, there is a dearth of research exploring longitudinal relationships - particularly as it relates to university-level dancers. The aim of this study was to observe and explore potential links between posture, functional movement quality and previous history of injury of university-level dancers via a pre-semester screening examination.

Methods: 200 university students took part in this 5-year study. Screenings were administered before the start of the first year of their degree. Participants included BA, MA and one-year-program students. A questionnaire was conducted to gather information about dancers' general health and their injuries within the past 12 months. A battery of tests for flexibility, strength and functional movement were administered as well as a physiotherapy evaluation looking at postural asymmetries in standing. All postural assessments were done by the same expert therapist to ensure consistent ratings across participants.

Results: A total of 108 participants (59.7%) reported experiencing at least one injury in the 12-month period before the screening. Most students reported healthy levels in posture and functional movement. Kruskal-Wallis H test was computed with number of injuries in the last 12 months being the quasi-independent variable and each measure for Posture and Functional Movement being the dependent variables. Three functional movement tests were associated with greater number of past injuries.

Conclusions: This study showed that the assessment of posture may provide best insights into identifying past injuries, both new and recurring. Longer-term longitudinal research is needed to better understand past injury and its impact on movement and performance.

Biography: Pioneering and accomplished Physiotherapist specialised in Performing Arts Medicine and Healthcare Development, combining diverse clinical experience and published academic research with regular lecturing at higher education institutions in the UK, US and Spain. Consultant in Healthcare Administration, Business Development and COO/Strategy, helping physical therapy clinics and medical settings grow and optimise. Founder of the onsite health clinic at the Institute Arts Barcelona (Spain).

PRE-POINTE TESTING AND YOUR CHILD'S ABILITY TO DANCE ON POINTE

Presenting author: Miss Georgina Barr

Masters Candidate, Lincoln University, New Zealand

Background and Purpose: The progression to dancing on pointe can be a confusing process for young dancers and their parents. There are many varying criteria engaged with by ballet teachers and dance schools for allowing progression to pointe work but no systematic unity or clear guidelines have been established.

Methods: This study explored the views of parents of dancers who were already on pointe, regarding the progression to pointe process in New Zealand. Particular focus was placed on the use or absence of a pre-pointe assessment and the parents' views of the importance and relevance of such an assessment to increase their confidence in their child's safety in dancing on pointe. The idea therefore was that assessments were not engaged with because they were not seen as relevant and important and would therefore not increase confidence. 88 dance schools which offered ballet, and ballet syllabus organisations throughout New Zealand, were contacted via email with a request to forward the information and survey link to the parents of their dancers who had already progressed to dancing on pointe. The survey was open for four weeks over April and May 2019. The survey was created through Qualtrics and analysed using SPSS.
Results: There were 43 respondents. Respondents' views on pre-pointe assessment relevance and importance to increase their confidence in their child's ability to safely dance on pointe is not strongly correlated with assessment completion. Instead, all respondents highly valued pre-pointe assessments to increase their confidence in their child's ability to safely progress to dancing on pointe. A lack of access to pre-pointe assessments is the main reason assessments were not completed by respondents' children.
Conclusions and Clinical Implications: More research needs to be done to discover ways to increase access to pre-pointe assessments throughout New Zealand.
Biography: Georgina is a full-time podiatrist at SportsMed, Christchurch. She runs her own business, Barrina Ltd, providing a custom pointe shoe fitting service, lectures on anatomy and biomechanical physiology and engages in dance mentoring. In 2019 Georgina started her Masters, focusing on dance medicine. Georgina created the Podiatrist for Dancers Facebook page to allow open connections between dancers and the sharing of knowledge on managing dance injuries. Georgina is a Christchurch Ballet Society affiliated committee member, a Friend of the Royal Academy of Dance, a member of the International Association for Dance Medicine & Science and has Juon Pointe training.

INJURIES ACROSS A TERTIARY DANCE TRAINING PROGRAM: A 3 YEAR RETROSPECTIVE COHORT STUDY

Presenting author: Ms Melanie Fuller
PhD Candidate, Queensland University of Technology, QLD

Background and Purpose: Training loads in pre-professional dance are high when compared to traditional sports. Injuries have been observed to be higher in certain year levels of training across different dance contexts. Wyon (2010) suggests implementing periodisation into pre-professional dance training to avoid injury, however the division of the academic year into semesters presents a challenge to continuity in tertiary training. This paper aims to consider injury patterns across a three-year tertiary dance training program, to guide future load management prevention strategies.
Methods: A three-year retrospective analysis was conducted on the records of consenting final-year tertiary dance students. Injury was defined as those presenting to an onsite physiotherapy clinic, regardless of time loss. Data were extracted from physiotherapy notes, timetables, academic history, and audition application material. Incidence per 1000 hours, risk and rate ratios relative to the first semester of training, and proportions of the location of the injury and the injured tissue were calculated.
Results: All participants (n=17) were injured across the duration of the program. Injury incidence per 1000 hours of dance training was 2.71 (95% confidence intervals: 2.22, 3.20). The ankle was the most common injury location (17.65%) and muscle the most commonly injured tissue (23.53%). A trend was seen of increasing injury incidence across the program.
Conclusions: Injuries were shown to occur early in the training program, and a trend of increasing injury incidence across the program was observed.
Clinical Implications: We suggest that training intensity and duration be graded over the initial weeks of a tertiary dance training program, with attention paid to a gradual increase in repetition and introducing unaccustomed conditioning modalities.
Biography: Melanie Fuller, PhD candidate at QUT, is investigating injury in dance, with the aim to guide future load management injury prevention strategies. She is an Australian Physiotherapy Association dual titled Sports and Exercise, and Musculoskeletal Physiotherapist, with dual master's qualifications. She has worked clinically in pre-professional and professional dance across various dance genres. Melanie has presented at both regional and annual international conferences for the International Association of Dance Medicine and Science. Having worked clinically in private practice for years in Brisbane, Melanie has recently taken up a position at James Cook University.
Other authors: Professor Gene Moyle, Assoc Dean, Creative Industries Faculty, Queensland University of Technology, Brisbane, Queensland, Australia
Dr Geoffrey Minett, Senior Lecturer, School of Exercise and Nutrition Sciences, Faculty of Health, Queensland University of Technology, Brisbane, Queensland, Australia

DEVELOPING EVIDENCE-BASED POLICY AND PRACTICE IN PSYCHOSOCIAL HEALTH IN THE PERFORMING ARTS

Presenting author: Ms. Claire Cordeaux
British Association for Performing Arts Medicine, UK

Background and Purpose: Prevalence of mental health problems is high among performing artists, and suicide rates are above the national average. As the performing arts industry increasingly recognises the need to support workers with mental health problems, healthcare providers and others are asking what the industry can do to prevent and mitigate mental ill-health and what types of services are most needed. This study aimed to understand the spectrum of need in the population to determine services required and current gaps in provision.

Methods: The records of 240 patients presenting with psychosocial problems over two years were reviewed by a national performing arts medicine provider. A panel of clinicians and academics experienced in working with performing artists used a mental-health stepped-care model derived from published evidence from mainstream mental health services to consider the evidence from the review and map the services known to be available to performing artists against each step. They also considered evidence from health promotion and occupational health research.

Results: Patients presented with a spectrum of psychosocial problems: 53% reported anxiety and depression, 35% suffered performance anxiety, and 12% had a history of psychiatric care or reported suicide ideation. A total of 23% also reported an associated physical problem and only 50% had consulted their mainstream provider.

Conclusions: Guidance is needed for commissioners and performing arts service providers to outline care pathways and identify where investment would be most helpful.

Clinical Implications: Clinical assessments are needed at an early stage, initial brief interventions should be delivered by performing arts health specialists and multi-disciplinary approaches should be developed to provide swift access to diagnosis and treatment. In an environment where many providers are working alone, this poses an interesting challenge for clinical governance.

Biography: Claire is the Director of the British Association for Performing Arts Medicine, a national charity in the UK which looks after the healthcare of performing artists, delivering clinician services, health promotion training, developing standards for best practice and contributing to research. With a background in the UK National Health Service

management at local, regional and national levels, Claire was also the global director for healthcare technology company embedding tools allowing communities to improve planning for population health. As a musician herself, Claire brings a combination of skills and experiences to the mission to improve the health of performing artists.

Other authors:
Professor Jane Ginsborg, Royal Northern College of Music

THE ORIGINS OF PAINS IN MUSICIANS

Presenting author: Dr Hara Trouli
Musicians' Clinic, London, UK

Background and Purpose: Background literature informs the relationship between performance anxiety and somatisation (Nagel 1993), disorganisation of cortical sensorimotor representation (Harris 1999, Zamorano et al 2014) and hyperactivity of the autonomic nervous system in musicians (Hassler, 2000). Studies in work-related upper limb disorders discuss neuromuscular illness of the proximal body (Pascarelli and Hsu 2001) and their uncertain pathophysiology (MacIver et al 2007). Winspur in 2003 highlights controversy in the role of repetition and cumulative microtrauma and White et al in 2003 suggests pain as a protective mechanism when fitness is inadequate. Non-specific upper limb pain troubles health practitioners. It is easily said, however less confidently assumed, that musicians' mystery pains derive from mechanical, neurological or psycho-social origins that can be explored through expanded interviews, ergonomic assessments or multi-disciplinary approach. Our purpose is to present a dynamic protocol with patient centered participation that will guide diagnosis, bespoke management and future prevention.

Methods: We present a patient series of 30 instrumentalists from a specialised clinic at a national performing arts medicine organisation and a dedicated musicians' clinic considering previous studies on pain education (Moseley and Butler 2015) and pain self-reporting tools (Berque et al 2014, Cruder et al 2018). We observe and list clinical presentations and physical findings but also skills, knowledge, attitudes, environmental stressors and career expectations. We discuss our clinical diagnostic process and question whether previous multiple medical opinions may complicate and subsequently inhibit early resolution.

Results: We present a protocol to include diagnostic, management and prevention steps including patient participation.

Conclusions and Clinical Implications: Standardizing teamwork among health specialists, will optimise how to resume pain-free play. Future research should focus on large scale implementation of protocols shared by established clinical settings with clear measurable outcomes.

ERGONOMIC ADAPTABILITY OF UPPER STRING INSTRUMENTS

Presenting author: Miss Sarah Lesjak
MSc Candidate, University College London, UK

Background and Purpose: As the violin and the viola require asymmetric postures, adjustable aids have been invented to enable the most ergonomic instrumental set up possible. The purpose of adjusting the shoulder and chin rests of the violin and viola is for the player to be in a more comfortable position, consequently reducing effort and exhaustion or even performance related injuries. The aim of this literature search was to identify if adaptations of those devices actually affect performance and to identify objective outcome measures.

Methods: Literature was obtained searching the databases PubMed, Scopus, Web of Science, PEDro, the Performing Arts Database (ProQuest), the websites Google Scholar and ResearchGate as well as the archives of the Medical Problems of Performing Artists journal.

Results: The set up of chin rest and shoulder rest may have an impact on the performance in regard to comfort and effort as well as the prevalence of performance-related injuries of violin and viola players

Conclusions: Research has been published highlighting changes in objective and subjective parameters after adjusting the chin rest or shoulder rest.Clinical Implications: Knowledge about the effect of changes to the instrumental set up and the impact on performance may help to develop targeted preventative as well as therapeutic treatments.

Biography: As a trained violin teacher and physiotherapist, my interest in Performing Arts Medicine has been strong throughout all stages of my professional development, finally leading into obtaining a Master of Science in Performing Arts Medicine from University College London in September 2019. After graduating from the postgraduate program, I will start working in a private physiotherapy practice with emphasis on treating instrumentalist musicians.

Other authors: Dr Hara Trouli, Programme Lead, Division of Surgery and Interventional Science, University College London

ACT FOR MUSIC PERFORMANCE ANXIETY

Presenting author: Miss Laura Clarke
Masters Candidate, The University of Melbourne, VIC

Background and Purpose: Music performance anxiety (MPA) is prevalent across the lifespan, affecting both professional and student musicians alike. Vocalists present a unique challenge for clinicians, as performance relies on vocal and breathing apparatuses which work differently when anxious. Musicians who experience MPA may give up performing or develop maladaptive coping mechanisms (e.g. avoidance or substance use) which can impact their career and wellbeing. This project addressed a gap in the literature through the design and evaluation of a brief, group-based ACT (Acceptance Commitment Therapy) intervention for student vocalists experiencing MPA. It was hypothesised that participants would show decreased symptoms of MPA and improved psychological flexibility (ability to respond to experiences in adaptive, value-directed ways).
Methods: Potential participants completed an online survey including the Kenny Music Performance Anxiety Inventory, Multidimensional Psychological Flexibility Inventory, Depression, Anxiety, and Stress Scale, and Mental Health Continuum. Those with elevated MPA scores were assessed for suitability using the Structured Clinical Interview for DSM-5. Selected participants engaged in one 2-hour group ACT session each week for six weeks. Three-month follow-up via an online survey consisted of the same pre-intervention measures and qualitative questions.
Results: MPA significantly decreased and psychology flexibility improved. Significant improvements were also demonstrated in self-reported wellbeing. Data from the three-month follow-up study are being analysed and will be presented at the conference.
Conclusions: Brief, group-based ACT appears to be effective in improving psychological flexibility and decreasing symptoms of MPA in student vocalists. Due to small sample size and purposive sampling, generalisability of results is limited; further research is needed utilising larger sample size and a more diverse population of participants.
Clinical Implications: This program may be a cost-effective and accessible intervention offered within tertiary music education courses to support students to understand and manage MPA early in their careers.
Biography: Laura has a background in music and mental health work. This study is the research component of Laura's Master of Clinical Psychology, which she is currently completing at the University of Melbourne. Laura also completed a research project as part of her honours degree in psychology, which investigated work stress and wellbeing in singer-songwriters. Laura has worked as a professional musician for many years and has worked in the mental health field since 2014.
Other authors:
Dr Margaret Osborne, The University of Melbourne
Dr John Baranoff, Centre for Treatment of Anxiety and Depression, Central Adelaide Local Health Network

THE EARLIER THE BETTER! EMBEDDING PERFORMANCE SKILLS TRAINING INTO MUSIC LESSONS AND PRACTICE

Presenting author: Ms Anneliese Gill
PhD Candiate, The University of Melbourne, VIC

Background and Purpose: The psychological well-being of the performer is important in performance success. Whilst there is an increasing focus on performance health at the tertiary level, it is noticeably absent in the education of adolescent musicians. Self-efficacy is a key factor in performance success and well-being, however, few interventions have been designed for adolescents or targeted self-efficacy in music performance. Class and studio music teachers are ideally placed to play a key role in enhancing students' self-efficacy within music lessons.
Methods: A 14-week, blended-learning, teacher-directed, program was designed for adolescent musicians. The program combined weekly online tutorials with practice and lesson activities, aiming to develop self-efficacy, psychological performance skills and performance preparation across six key areas: confidence, focus, performance simulation, imagery, pre-performance routines, and arousal management. Two studies investigating the effects of this program on self-efficacy, anxiety and performance were conducted within individual (studio) and group (school music class) lessons.
Results: Participants showed significant increases in their self-efficacy and improved performance outcomes. They also strengthened their performance skills whilst anxiety levels decreased in some sub-groups. There were differential effects for each instructional condition which may be age related and/or a reflection of the contrasting teaching environments and performance settings.
Conclusions: This study provides new insights into the design and delivery of music performance interventions. Whilst some confounding control group factors limits the conclusions, the program did enhance performance self-efficacy, self-rated performance and a range of psychological skills associated with well-being in music performance. It also indicates that an online, teacher-guided

intervention can be embedded within the standard music curriculum enabling preventative measures to be implemented early on.
Clinical Implications: This provides an accessible, practical and cost-effective resource for delivering key skills associated with performance success and well-being.
Biography: Anneliese Gill is a musician, and Fulbright Scholar. She has a Masters of Music from the Manhattan School of Music, New York, a BA in music from the Victorian College of the Arts, Melbourne and a graduate and post-graduate diploma in psychology from Monash University, Melbourne. With over 20 years experience as a music teacher, and performer she has also spent a number of years as a member of the music-psychology research team at Monash University. In 2016 she was awarded an Australian Research Training Award to complete a PhD in music performance psychology at The University of Melbourne.
Other authors:
Dr Margaret Osborne and Professor Gary McPherson, The University of Melbourne

MENTAL HEALTH INITIATIVES FOR PERFORMING ARTS TRAINING INSTITUTIONS – AN ILLUSTRATION AND METHODOLOGY

Presenting author: Mr. William Centurion
Australian College of Applied Psychology

Background and Purpose: Mental health concerns are widespread within the performing arts industry (Entertainment Assist, 2016). Performance anxiety, depression, imposter syndrome, insomnia, burnout, self-harm and suicide are common in performers (Van de Eyende, Fish & Son 2016) and begin to present during the formative years of a performer's training. This is hardly surprising considering training orthodoxes that now demand an elite level of excellence in adolescent performers. That combined with a low level of tolerance for vulnerability, result in performers being ill-equipped to mange the impacts these demands have on their wellbeing (Maxwell, Setton & Szabo 2013).This presentation is a lived-experience account of the prevalence of mental health issues within the performing arts sector and will highlight how the lack of education, resources and support protocols affect the individuals within those cultures. I will discuss how my own mental health struggles as a performer have led me to become an advocate for the psychological well being of actors, singers, dancers, and how these insights have supported the development of best practice protocols and the delivery methods of my treatment modalities (ACT, Narrative Therapy, SFT). I will also discuss the challenges that come to the forefront in creating awareness for intervention and prevention of mental health concerns in performing arts institutions and workplaces and how these can be addressed.
Biography: Will Centurion is a graduate from the Australian College of Applied Psychology and a Counsellor and Life Coach for Actors, Singers and Dancers. His main areas of focus are in the psychological needs of creative minds. In 2019 William moved to Melbourne to create a Mental Health service that targets performing arts institutions and workplaces. Providing workshops that educate emerging performers on challenges like performance anxiety, imposter syndrome and burnout. Having worked as performer for 20 years on Australian and international stages, Will hopes to use his insights to create a relatable service that performing arts students can benefit from.

TOWARDS A BETTER UNDERSTANDING OF ACCIDENTS AND NEAR MISSES IN CONTEMPORARY CIRCUS ARTS: A PSYCHOLOGICAL APPROACH

Presenting author: Dr Fleur van Rens
Murdoch University, Perth, WA

Background and Purpose: Accidents in a range of contemporary circus disciplines may cause severe injuries or even death. To understand the mechanisms underlying incidences of accidents and near misses in contemporary circus arts, it is important to consider the artists' circus discipline, their perception of risk associated with participation in this discipline, their personality, and experiences of sensation, emotion regulation and agency. The first aim of this study is to explore associations among these factors, with the aim to identify those that predict accidents and near misses in contemporary circus arts. Second, the circus categories of aerial acrobatics, floor acrobatics and object manipulation were compared in terms of perceived risks, experiences of sensation, emotion regulation, and agency, and circus artists' personality.
Methods: 248 circus artists completed an online survey containing validated measures of sensation, emotional regulation and agency, personality, accidents and near misses, as well as demographic information.
Results: Our path-analytical model containing the outcome variables 'accidents' and 'near misses', and predictor variables 'perceived risk', 'emotion regulation', and 'conscientiousness' showed a good model fit, and explained 7.8% of the variance in accidents, and 6.2% of the variance in near misses**.** Analyses of variance indicated several significant

differences between circus categories. Notably, floor acrobats reported the most accidents and near misses.
Conclusions: The research findings point towards the importance of emotion regulation in understanding the mechanisms underlying accidents and near misses in contemporary circus arts. Further, we identified that contemporary circus consists of a heterogeneous group of categories.
Clinical Implications: Practitioners are recommended to tailor interventions surrounding safety in circus arts to the circus discipline and personality specific needs.
Biography: As a lecturer in sport and exercise psychology at Murdoch University, I endeavor to teach and create evidence based programs which support the well-being, mental health, and safety of athletes and circus artists throughout their life-span. I aim to investigate and encourage continuous development of relevant psychological skills and knowledge which will enable expert performers to happily and confidently pursue their ambitions. I spend my free time in the circus, working on my aerial acrobatics skills.
Other authors: Dr Edson Filho School of Psychology, University of Central Lancashire

THE WELL-BEING OF CULTURALLY AND LINGUISTICALLY DIVERSE ARTISTS IN AUSTRALIA

Presenting author: Ms. Trisnasari Fraser
Victoria University, VIC

Background/Purpose: Culturally and linguistically diverse (CALD) artists in Australia make an important contribution to cultural diversity. This study aimed to investigate their well-being. The following questions were posed: 1) how do CALD artists in Australia conceptualise well-being; and 2) what effect on well-being do they experience as a result of (a) their artistic practice and (b) acculturation and Australian culture?
Methods: Interpretative Phenomenological Analysis was used to explore lived experience. Semi-structured interviews were conducted with 10 artists, including musicians, dancers, a writer, singer, visual artist, actor and performing artist, ranging in age from 22 to 67 years. Seven participants were born overseas, and migrated to Australia between 1964 and 2012, from Malta, Sri Lanka, Japan, Ghana, Indonesia, Singapore and Pakistan. Three were second-generation Australians with Turkish and Syrian backgrounds.
Results: Five major themes emerged from the analysis, including Creating art, Culture, Acculturation, Identity and Well-being. Creating art maintained links to cultural heritage which appeared important for pride, links to communities and to enable the sharing of stories interculturally. Creating art gave a sense of purpose, a process to focus on, feelings of pleasure, and sense of belonging, crossing a range of conceptions of well-being. Integration as an acculturation strategy and ethnic identity were both associated with well-being, as was the autonomy to create new identities and communities.
Conclusions: Building on other Australian research, a mixture of passion and mental health concerns such as anxiety emerged due to the personal nature of arts practice. Aspects of artistic identity interacted with cultural identity and expectations. The study's exploratory and idiographic nature limits both the specificity of the implications and generalisability of the findings.
Clinical Implications: Nevertheless, consistent with existing literature, findings suggest clinicians should be aware of cultural and individual variations in conceptions of well-being.
Biography: Trisnasari Fraser is a Registered Psychologist (M App Psych(Community)) with an interest in the well-being and fulfilment of artists, performers and creatives. She engages in therapy and research, working in both private practice and university settings. Her research interests include the psychology of music and mental health in the entertainment industry. She has conducted individual and group therapy for depression, anxiety, grief and adjustment disorder, and provided psychological services in a community program for men's health as well as the education sector.

ANKLE AND FOOT CONTRIBUTIONS TO EXTREME PLANTAR FLEXION IN BALLET DANCERS: A MULTI-SEGMENT FOOT STUDY

Presenting author: Dr Sarah Carter
PhD Candidate, University of Western Australia, WA

Background and Purpose: Ballet dancers require extreme ranges of plantar flexion (PF) when en pointe. Static x-rays en pointe have demonstrated that the ankle contributes approximately 72% of PF, midfoot 10% and the remainder from the forefoot. Static PF measurements may not represent the PF contributions of the ankle and foot during dynamic situations. Therefore the primary purpose of the study was to compare the contributions of the ankle and foot joints in extreme PF using a dance-specific 3D multi-segment foot model.
Methods: Twelve female classical ballet students (mean age 19.6 ± 1.6 years) volunteered for this study. Retro-reflective markers were attached to the dancers' dominant lower limb (TIB), foot (FOOT), hindfoot (HIND), midfoot (MID) and forefoot (FORE). Each dancer performed three repetitions of a rise onto

demi-pointe in first position and active non-weightbearing (NWB) ankle PF. Pearson correlation analyses were used to examine the inter-segmental angles (TIB-FOOT, TIB-HIND, HIND-MID, MID-FORE) measured in both extreme positions of PF.
Results: TIB-HIND and TIB-FOOT PF angles in demi-pointe demonstrated a strong positive relationship ($r = 0.916$, $p < 0.001$). No significant relationships were found amongst any of the segments during active NWB ankle PF. A moderate-strong positive relationship ($r = 0.756$, $p = 0.004$) was found between TIB-HIND PF angles in demi-pointe and active NWB ankle PF.
Conclusions: A dancer's total active NWB ankle PF is not related to their maximal PF in demi-pointe. In addition, ankle/subtalar joint complex contribution is independent to the overall active NWB ankle PF. A dancer's maximal PF in demi-pointe is more predictive of the ankle/subtalar joint complex contribution to the overall PF angle.
Clinical Implications: Clinicians should rely upon goniometer measurements of a dancer's whole foot PF angles in demi-pointe as an indication of their functional range of PF.
Other authors:
Dr Luke S. Hopper, PhD, Western Australian Academy of Performing Arts, Edith Cowan University
Biography: Dr Sarah Carter has been practising podiatry since 2010. In 2013, she completed a Master's of Science in Motion Analysis at the University of Dundee, entitled 'Analysis of the kinetic and kinematic data in lower limbs during highland dancing'. Last year she completed a Joint PhD at the University of Western Australia and Western Australian Academy of Performing Arts, entitled 'Lower leg and foot contributions to turnout in pre-professional female dancers: A clinical and kinematic analysis'. She has previously presented both nationally and internationally, in Hong Kong, Houston and Helsinki at the International Association of Dance Medicine and Science conferences.

SURGERY: A PERFORMING ACT

Presenting author: Mr. Nikos Reissis
British Association for Performing Arts Medicine, UK

Background and Purpose: How ready are we to characterise surgeons as performing artists? Can we see the similarities and the differences? Can surgeons learn from performers and better their performance and limit performance-related injuries? Surgical procedures are live performances with consequences for the recipient but also for the performer. Instruments are handled in operations and operating theatres can be high-stress or high-risk environments. Our purpose is to explore the literature and discuss this fascinating professional parallel.
Approach and Argument: Several published articles have been reviewed and identify risk factors like the ones professional musicians are exposed to. We argue extensive training, deliberate practice, mental preparation, dexterity, illness and absence from work. We see how performance anxiety and hand tremor can have a detrimental effect on performance. We further discuss the competitive environment of surgical practice and we parallelise this with the busy conservatoires and the elite performing artists' pressures and expectations. We finally regard surgeons' injuries at work as a side-effect of their profession that needs significant consideration.
Conclusions: Surgeons, like musicians, are exposed to similar risk factors for injury and health compromise and taking the musicians' paradigm should help measure, improve and evaluate their performance.
Clinical Implications: Several treatment options available for musicians can be translated to the surgical profession. Mutual scientific approach and discussion between surgeons and musicians both at the training or the performing levels can bring valuable experience to light and help both these high achieving professionals to learn from each other.
Other authors:
Dr Hara Trouli, University College London
Biography: Nikos Reissis is a Consultant Orthopaedic Surgeon working for many years in the National Health System and privately in the UK. He holds a PhD in Orthopaedics and is an Honorary Senior Lecturer at University College London where he is teaching, examining and supervising for the MSc for Performing Arts Medicine and the MSc for Musculoskeletal Science. He has attended several international conferences and courses in Performing Arts Medicine and he is an assessing clinician for the British Association for Performing Arts Medicine where he advises performers of all disciplines.

SENSORY CHARACTERISTICS IN YOUNG STRING MUSICIANS WITH PLAYING-RELATED MUSCULOSKELETAL PROBLEMS – A FEASIBILITY STUDY

Presenting author: Dr Sonia Ranelli
Curtin University, Perth, WA

Background/ Purpose: Playing-related musculoskeletal problems (PRMP) have been reported in musicians across the lifespan. Alterations in sensory systems help elucidate pain mechanisms underlying various pain presentations and have been researched in some adult musician populations, but their association with PRMP in young musicians have not yet been investigated. To investigate the feasibility of

an assessment protocol, including a battery of bedside sensory tests and three questionnaires, for a potential future study investigating sensory characteristics in musicians with PRMP and without PRMP.
Methods: The 30-minute battery of sensory testing included testing responses to: warm/cold, touch, vibration, pin prick and pressure, applied to three body regions. Three questionnaires (Young people's Activity Questionnaire-music, short version Disability Arm-Shoulder-Hand outcome measure, short version Depression-Anxiety-Stress-Scale) were completed to ascertain participant specific information; playing-related information; non-music related activities and information about the experience of pain and anxiety. A feasibility survey assessed participant opinion regarding the length and understanding of the study procedures.
Results: Fifteen musicians (nine strings, six non-strings), 9-23 years, participated. Most participants reported all aspects of the testing took too long. Younger children (n=4) reported sensory testing took too long, the same children reporting the questionnaires were difficult to understand. All participants reported they: enjoyed being a part of the study; would participate in a larger study and tell their friends about the study. Due to the small sample size, statistical analysis yielded no significant results. However, string musicians and musicians with PRMP demonstrated different sensory characteristics to non-string musicians and musicians without PRMP.
Conclusions: The assessment protocol was too lengthy and for some, difficult to understand. Future studies in young musicians need to assess the number of sensory tests, choosing the most predictable.
Other authors:
Ms Inga Hesse, BSc(Physiotherapy), Hochschule Osnabrueck, University of Applied Sciences, Osnabrueck, Germany
Dr Brigitte Tampin, PhD Physiotherapist, Advanced Scope Physiotherapist, Sir Charles Gairdner Hospital, Perth Western Australia
Biography: Dr Sonia Ranelli, BSc(Physiotherapy), MSc(Oxon), PhD, is a lecturer and an Early Career Researcher at Curtin University, completing her PhD in 'Playing-Related Musculoskeletal Problems in Children Learning Instrumental Music. She works clinically in the area of hand and upper limb musculoskeletal pain conditions across the lifespan and translates findings from her research into clinical practice; treating young instrumentalists, instrumental music teachers, providing musician health and well-being continuing professional development sessions for music educators and to physiotherapy private clinics. Dr Ranelli was awarded an Endeavour Fellowship in 2016 investigating biomechanical factors associated with problems in young string instrumentalists.

THE IMPACT OF HEALTH PROMOTION AND EDUCATION PROGRAMS IN UNIVERSITY DANCERS

Presenting author: Mrs Isabel Artigues
Institute Arts Barcelona, Spain

Background/Purpose: Wellness programs are being increasingly employed by performing artists. Given their aim of reducing injuries, increasing health promotion and overall improving artists' health, injury tracking, fitness levels and self-reported health, are commonly used as outcome measures. Interventions vary between educational classes, on-site healthcare and support, pre-semester screenings and practical workshops for example. This study reports on a 2-year process involving feedback from students, management and teaching staff, and healthcare providers at a performing arts university in order to develop a wellness program integrated with the university degrees.
Methods: An initial wellness program composed of an annual pre-semester screen was proposed. Alongside implementation with 200 dance students, formal and informal feedback was sought from members across all levels of the university. Further development of the wellness program brought the implementation of a compulsory educational module involving anatomy, physiology and nutrition/mental health education, as well as regular wellness classes (Yoga, Pilates, Gyrokinesis) and an annual Health Promotion Week.
Results: 80% of the student population in the university attended and/or participated in at least one of the strategies within this wellness program. Attendance and participation both increased over the 2-year period. Participant feedback helped refine the content available to the students and influenced positively the internal referral trends to the on-site healthcare team. Furthermore, reflective discussions with teaching and management staff brought to light potential interactions between timetable programming, fitness, and injury patterns among students. This prompted a reconsideration of how students are training and supported at that university, leading to a more efficient screening and more effective health-promotion and wellness program, which ultimately will lead to healthier performing artists.
Biography: Pioneering and accomplished Physiotherapist specialised in Performing Arts Medicine and Healthcare Development, combining diverse clinical experience and published academic research with regular lecturing at higher education institutions in the UK, US and Spain.

Consultant in Healthcare Administration, Business Development and COO/Strategy, helping physical therapy clinics and medical settings grow and optimise. Founder of the onsite health clinic at the Institute Arts Barcelona (Spain).

STEPPING SIDEWAYS: CAREER TRANSITION FROM DANCE TO HEALTH

Presenting author: Mr. Isaac Campbell
Curtin University, Perth, WA

Background/Purpose: Commonly, the narrative of traditional ballets physicalise the more dramatic elements of the human experience; love, hate, death, jealousy, etc. The more modern non-narrative works potentially require even less mental investment from all involved. Weighing up the undeniable physical demands against the potentially minimally required mental stimulation, may lead a dancer to grow their career laterally and consider that prestige around a career doesn't always equate to predilection. The traditional career transition trajectory into choreography, teaching and artistic staff within a company often doesn't sit with most dancers as they tend to leave the industry rather than a role. Thus, full-time pre-professional and professional dancing populations rarely harness career development possibilities, to increase their employability or longevity.
Methods: Within a self-reflective case study, a young, former professional male dancer will examine the process of his transition from a career in dance into physiotherapy. Drawing on the growing body of literature surrounding career transition in performing artists and athletes, this individual journey will include a snapshot of the mindset and climate in which this transition can occur, as well as the facilitators and barriers in transitioning within the industry.
Main Contribution: A common perception within the dance industry is that recurrent injuries and difficulties in gaining employment precipitate a dancer transitioning within their career. A lack of mental stimulation in professional and pre-professional dancers is not as commonly recognised as a stimulus for transition.
Implications: This case study will provide insight toward potential considerations in increasing the longevity and employability of pre-professional and professional dancers. For clinicians and dance teachers this will highlight the importance of facilitating continued mental stimulation across the trajectory of a dancer's lifespan and continued educational opportunities, alongside the importance of physical ability.

Biography: Originally from Geraldton Western Australia, Isaac relocated to Perth to study at John Curtin College of the Arts before being accepted into the Western Australian Academy of Performing Arts. During this time he was guest dancing with the West Australian Ballet, awarded awards for choreography through the Australian Institute of Classical Dance and danced with various international choreographers. Isaac then danced in Germany's west in a neoclassical ballet company before returning home and beginning his physiotherapy degree at Curtin University, Perth.

VARIABILITY AND THE MYTH OF PERFECT PERFORMANCE

Ms. Janet Karin

Background and Purpose: In line with its historical genesis, ballet technique aims to exemplify perfection, or complete mastery of the dancing body, through perfect geometric shapes and movement patterns. These ideals attract those with perfectionistic tendencies. However, human motor control is inherently variable, relying on continual 'fall/recovery' strategies to achieve stability, and subtle variations in motor patterns to avoid neural and physiological stress. Perfectionistic dancers who aim for rigorous control need help in reconciling abstract ideals with the reality of human movement.
Methods: Over decades of working with elite adolescent ballet students, I rehabilitated many perfectionists whose rigid body control had resulted in inadequate performance and injury. More recently, I led a research study into creativity and perfectionism, exploring the role of sensori-kinetic awareness in stimulating variability, creativity and the illusion of perfection in technical exercises. Both approaches were supported by current literature surrounding motor control, variability and perfectionism.Results or
Main Contribution: Participating dancers were educated on variability and trained in unstable situations, allowing them to discover the relationship between variability and the illusion of perfect control. By exploring the impact of the senses, emotion and imagery on movement, they learned to immerse themselves in the movement itself instead of seeking perfection. Quantitative and qualitative research results both showed a significant decrease in perfectionistic cognitions.
Implications: By encouraging variability as essential to optimal neuromotor control, teachers can help dancers create the illusion of perfection while avoiding technical rigidity and deleterious perfectionistic cognitions. Further research into strategies for developing acceptance of variability throughout the early stages of learning ballet technique provide highly beneficial psychological insight for teachers of

perfectionistic students. It would also help perfectionistic students avoid injuries resulting from rigid body control strategies throughout their dancing lives and beyond.

Biography: Janet Karin is an independent educator and researcher focusing on somatic approaches to ballet teaching. Formerly a Principal Dancer of The Australian Ballet, Janet trained many outstanding dancers in Canberra while developing academic dance studies courses and facilitating several international conferences. She was Kinetic Educator at The Australian Ballet School (2001-2016) and President (2013-2015) of the International Association for Dance Medicine & Science (IADMS). Janet now serves as a mentor for doctoral candidates and dance teachers. Her awards include the Medal of the Order of Australia, a 2014 Australian Dance Award, and the 2015 IADMS Dance Educator Award.

PILATES FOR SINGERS: INCREASING BODY AWARENESS TO OPTIMISE VOICE

Presenting author: Mrs Catherine Etty-Leal
Performance Medicine, Melbourne, VIC

Background/Purpose: It is accepted among singers and the literature that singing is a whole-body activity. Studies show that posture effects laryngeal position. Research in professional singers highlights that the ratio of the transversus abdominus muscle to the internal obliques is greater compared to normals. The literature shows that Pilates enhances the transversus abdominus muscle, and improves posture. This presentation will investigate the qualitative effect of a 6-week Pilates course on singers.

Methods: Inclusion: All participants were singers of any voice type, training at a tertiary level or higher. No participants were excluded, N=23. A 6-week mat-based Pilates course was created and completed by all participants. Patient Functional Scale Questionnaires were completed by participants prior to commencing and at the study's completion. A follow-up survey was sent out at 12 weeks.

Results: Across the questionnaires, participants showed that this course increased their ability to integrate their body with their voice and improved confidence.

Conclusions: Pilates can be useful in enhancing a singer's body awareness and voice.

Clinical Implications: Pilates is a useful tool for singers to increase their body awareness and enhance their vocal ability. It is a low-cost intervention that can be used in a group setting or for home programmes.

Biography: Catherine is a Titled Sports and Exercise Physiotherapist with an interest in treating performing artists. She works at Performance Medicine in Melbourne as a vocal, and sports and exercise physiotherapist, treating voice disorders, singers, jaw dysfunction, as well as musculoskeletal conditions of the rest of the body. Catherine graduated from The University of Melbourne with a Bachelor of Physiotherapy in 2010 and has since completed a Masters of Sports and Musculoskeletal Physiotherapy through LaTrobe University. Catherine is a Certified APPI Pilates Matwork and Equipment Instructor and is a presenter for APPI courses throughout Victoria.

WELLNESS MONITORING IN ELITE PERFORMERS: COMPARING PROFESSIONAL BALLET DANCERS AND ATHLETES

Presenting author: Miss Carly Harrison
PhD Candidate, La Trobe University, VIC

Background and Purpose: Significant improvements in ratings of wellness in professional sport have been found following performance periods, demonstrating the sensitivity of wellness changes in training and competition/performance phases. To identify if professional ballet dancer wellness profiles align with professional athletes, this research aimed to compare self-reported wellness profiles within the context of elite high-level performance.

Methods: Fourteen professional ballet dancers (M=26.0 years, SD=2.6) and 14 sex-matched professional athletes (M=27.7 years SD=2.9) recorded daily wellness (muscle soreness, fatigue, stress, sleep quality and quantity) into an Athlete Management System (AMS) on their smart phone over a 4-month period. Wellness variables were rated on a 10-point Likert scale, where higher scores indicate a better quality of wellness.

Results: Dancers reported lower wellness scores for sleep quality, sleep quantity, and stress ($p < .05$ for all), but not fatigue ($p = .50$). Cohen's d effect sizes were 0.80, 1.13, 0.87, and 0.26, respectively. Frequency of muscle soreness in the foot was significantly higher in dancers than athletes, $p < .05$, Cd = 0.76. Dancers reported significantly higher severity ratings for ankle ($p = .012$) foot ($p = .014$) and lower leg pain ($p = .037$) than professional athletes with Cohen's d effect sizes 1.03, 1.00 and 0.07, respectively. Dancers reported significantly higher wellness scores during non-performance periods on fatigue ($p = .02$) and stress ($p < .001$) compared to performance periods.

Conclusions: Dancers reported higher wellness quality for some variables during non-performance periods compared to performance periods. The improved wellness scores during non-performance periods for fatigue and stress are consistent with findings in professional sport, where higher stress and

fatigue levels correlate with performance periods. The AMS effectively captured self-reported wellness scores and provided baseline measures for the ballet industry. Further research on the impact of poor wellness on performance and injury in ballet is warranted.Biography: Carly is a PhD candidate studying at La Trobe University. Carly is employed as an Associate Lecturer at La Trobe University and is an Occupational Rehabilitation Counsellor, assisting people with physical and psychological injury to return to work. Recently Carly completed accredited courses and is a Certified Wellness Practitioner, Meditation and Mindfulness Teacher and completed Acceptance Commitment Therapy modules through Dr Russ Harris. Carly is passionate about holistic wellbeing and early intervention in the performing arts industry.

Other authors:

Dr Susan Mayes, The Australian Ballet

Dr Mandy Ruddock-Hudson, Dr Scott Ruddock, Dr Jillian Cook and Dr Paul O'Halloran, La Trobe University

DUELLING WITH DANCERS' INJURIES: THE BIO, THE PSYCHO AND THE SOCIAL

Ms Danica Hendry, PhD Candidate, Curtin University, Perth, WA &
Ms Melanie Fuller, PhD Candidate, Queensland University of Technology, QLD

Background and Purpose: Focus on the prevention and management of injury has shifted from a purely biomedical model to encompassing a broad range of biological, psychological and emotional factors. In a short, sharp, feisty, but friendly duel, two physiotherapy clinician-researchers will explore these factors' associations with injury occurrence, and influence on injury management and reduction.

Approach: Both presenters will draw upon clinical experience and conduct a review of the relevant literature to discuss their allocated stance on the topic. Topical issues explored will include "Is the issue in the tissue?", "What's the meaning behind a screening?" and "Treat the (wo)man not the scan"

Argument: Presenter one will discuss the biological and physical contributing factors towards pain and injury in dancers as primary sources of a dancer's pain. Presenter two will discuss the psychological and social factors as primary sources of a dancer's pain.

Conclusion: A final conclusion will be drawn from audience interaction, or consensus met on the topic.

Clinical Implications: This friendly duel will encompass topical issues that surround the biopsychosocial model of health and its application to dancers' injuries, considering the multifactorial nature of a dancer's presentation, thus the need for a multidisciplinary team approach. In providing a brief synthesis of the literature, it will inform clinicians on current evidence informed approaches in management and reduction of pain and injury in dancers.

Biography: Melanie Fuller, PhD candidate at QUT, is investigating injury in dance, with the aim to guide load management injury prevention strategies. She is an Australian Physiotherapy Association (APA) titled Sports and Exercise, and Musculoskeletal Physiotherapist, with master's qualifications from La Trobe University. She has worked clinically in pre-professional and professional dance.

Danica Hendry, PhD candidate at Curtin University, is exploring the complex interaction between psychological, lifestyle and physical factors in the development of pain in dancers. She is an APA titled Sports and Exercise Physiotherapist. Danica works clinically in dance and musical theatre from recreational to professional levels.

WORKSHOPS

CHARACTER, PERSONA AND SHAPE: HOW HEALTHIER CREATION OF A ROLE CAN ENABLE HEALTHIER 'LETTING GO' OF A ROLE.

Dr Mark Seton
The University of Sydney, NSW

Participants: Actors (including music theatre) - wear comfortable clothing to move around in.
Purpose: Participants will analyse their current processes for creating character and share where they find challenges in either sustaining or 'letting go' of character. Alternative approaches for creating and 'letting go' of character will be explored using energetic preferences and playing with excerpts of text to observe how scenes can be impactful on an audience without unduly disrupting the actor's ongoing process and wellbeing. There will also be practical discussion about possible strategies to negotiate the 'acclimatising' and 're-acclimatising' needed by actors to manage the 'highs' and lows' of performing.
Approach: It begins with a warm-up and introduction to four neuromuscular co-ordinating patterns. Participants will identify their 'home' pattern/s and, using provided texts, will play with creating character as 'energetic shape' to explore how that may help them negotiate some of the performance issues they have. They will also have opportunity to play with various warm-up and cool-down practices to negotiate ups and downs of the performance cycle.
Evidence: Australian Actors Wellbeing survey (2013) identified 38% of professional actors surveyed experienced significant difficulties in creating and letting go of psychologically, emotionally and physically confronting roles e.g. enacting rapes, domestic violence, psychosis, etc. There are many different 'techniques' for creating character, some of which have some unanticipated side effects. It's therefore important to analyse what may either help or hinder a sustainable creative practice.
Relevance: These practices for creation and 'letting go' of roles have been used with professional actors, who have experienced 'burn out', overwhelm or vicarious trauma, to bring renewed energy, creativity and resilience to their creative practices.
Biography: Dr Mark Seton is an Honorary Research Associate in the Department of Theatre and Performance, The University of Sydney, Australia. In various tertiary insitutions and through his website, Actors' Wellbeing Academy, Dr Seton teaches savvy resilience to actors and other creative professionals, whose capacity for empathy and sensitivity is crucial to their effectiveness and success. He was awarded a Churchill Fellowship in 2009 to conduct a study tour of actor training healthcare practices in the UK. This research triggered an initiative to launch a national study of actors' wellbeing in 2013. Dr Seton is also Vice President of ASPAH.

THESE PRACTICES FOR CREATION AND 'LETTING GO' OF ROLES HAVE BEEN USED WITH PROFESSIONAL ACTORS WHO HAVE EXPERIENCED 'BURN OUT' OR VICARIOUS TRAUMA

DEVELOPING, SUSTAINING AND CORRECTING COORDINATION: IN SERVICE OF A HEALTHY LIFETIME OF PERFORMANCE

Mr Greg Holdaway
BodyMinded: Sydney Alexander Technique, NSW

Participants: This workshop is suitable for anyone interested in widening their approach to rehabilitation and training. Clinicians working with performers, as well as academics and performers themselves, are encouraged to attend.

Purpose: The workshop is thought provoking and will challenge some conventional views and approaches to rehabilitation and training. We will contrast 'direct' and 'indirect' strategies, take a look at dynamic vs static conceptions of alignment and demonstrate the pedagogical power of a 'Yes' vs 'No' approach in effective coaching.

Approach: Participants come prepared to move! Beginning with a warm-up movement activity, we will explore some of the fundamental principles underlying alignment, ease, support, power and endurance. The workshop will provide exercises and demonstrations, and time will be provided for questions of both theoretical and practical nature. Performers are welcome to bring their instrument or performing props, as practical demonstrations with individuals will be offered.

Relevance: Taking a deliberate whole-person approach to training and rehabilitation will help performers and clinicians avoid the pitfalls of overly direct correction and control.

Evidence: Training and rehabilitation methods based on BodyMapping and the Alexander technique are well known in the performing arts arena as providing a means by which performers can create better overall coordination to assist with the management of tension, stress and injury. While formal evidence of effect within the performing arts remains limited, with the exception perhaps of effects on performance anxiety, there are many publications and anecdotal accounts of artists including musicians, actors and dancers using the technique to good effect. Clinical evidence for the effectiveness of the Alexander technique in such areas as chronic back/neck and knee pain, and studies into mechanisms of effect are increasing.

Biography: Greg Holdaway has been training, teaching and investigating human movement and behaviour for over 30 years. He holds a Masters of Exercise and Sport Science (Clinical Exercise Science) Honours from Sydney University. He is fascinated by the relation between conscious and unconscious aspects of behaviour, particularly movement. Greg has extensive experience teaching Alexander technique to performers of all kinds, especially musicians, He maintains a private practice in Sydney, and travels widely to present and teach. He has trained Alexander teachers since 2012, is Director of Training at BodyMinded: Sydney Alexander Technique and Associate Director of the BodyChance programs in Japan.

PARTICIPANTS COME PREPARED TO MOVE!

A SOMATIC MOVEMENT EXPLORATION OF THE FINGER AND HAND TO SCAPULA CONNECTION

Miss Simone Maurer
PhD Candidate, University of Melbourne, VIC

Participants: This workshop is aimed at musicians and music educators. No prior skills are needed. Participants should wear comfortable clothing in which they can move, lie, sit, and stand. They should also be prepared to work briefly with a partner in the workshop.
Purpose: Participants will learn about the kinetic muscular chains connecting the hands to scapula and fingers to scapula. They will see anatomical diagrams, experience the connections on themselves and others, and will leave with knowledge of new ways to support healthy shoulder, arm, and hand movement.
Approach: Participants will be led through a somatic movement experience. Starting with Irmgard Bartenieff's Heel Rock exercise, participants will become aware of kinetic chains through their whole body—identifying possible places of tension. They will then explore the kinetic chains from hand to scapula through palm pressing exercises on themselves and with a partner. Participants will then be guided through exercises to explore the finger to scapula connection, using finger initiation and adaptations of Rudolf Laban's Movement Scales.
Evidence: This workshop is grounded in Laban Movement Analysis and related concepts from Bartenieff Fundamentals and Bonnie Bainbridge Cohen's Body Mind Centering.
Relevance: Repetitive movement of the hands, arms, and shoulders is necessary to play musical instruments but can lead to performance-related injuries. Somatic movement practice can assist musicians with injury prevention by improving body awareness, providing physical warm-up exercises, and supporting healthy movement. Although limited to somatic movement exploration of the arms and shoulders, this workshop provides accessible exercises for musicians at any level.
Biography: Simone Maurer is a PhD candidate in Music Performance at the University of Melbourne specialising in contemporary solo flute repertoire. Her thesis applies Laban Movement Analysis to examine body movements and self-perception of solo flute players in performance. Funded by an Australian Government Endeavour Postgraduate Scholarship, Simone completed a Certification in Laban/Bartenieff Movement Analysis from the Laban/Bartenieff Institute of Movement Studies in New York from September 2018 to May 2019. Simone has a Bachelor of Music majoring in Advanced Flute Performance from the Queensland Conservatorium of Music and a MPhil in Music Studies from the University of Cambridge (UK).

PROMOTING HIP HEALTH IN THE PERFORMING ARTS

Dr Sue Mayes
The Australian Ballet, VIC

Hip joint pain is a common complaint in the performing arts. In 2006, The Australian Ballet implemented a hip strength and stability program and since then there has been no hip surgery or retirement from ballet due to hip injury. All time-loss injury rates related to hip pain have declined since 2006 and there have been none in the past six years. Optimising hip strength is important to support trunk and lower limb control for performing artists. Muscle strengthening exercises will focus on the deep stabilisers such as iliopsoas, adductors and the external rotators. Hip proprioception exercises will also be demonstrated.

Biography: Susan Mayes is an experienced presenter, has published her PhD research on hip joint health in dancers, and has conducted hip workshops throughout Australia and Internationally for over 18 years. The program has been effective as a means of hip injury prevention and management in ballet and has also been effective in non-dancing populations.

PILATES FOR SINGERS: INCREASING BODY AWARENESS THROUGH MOVEMENT

Mrs Catherine Etty-Leal,
Performance Medicine

Participants: Singers (any voice type and level of experience) and actors. No prior skills are required. Participants should be free of any significant injuries/pain, wear comfortable clothing and bring a mat or towel.
Purpose: To explore the voice using various postures and movements to establish how this effects voicing. The aim is to explore the effects of activiating and deactivating myofascial slings, and variable postures on voice. Breathing will be explored as well.
Approach: Participants will complete a modified mat-based Pilates class using voice throughout.
Evidence:
Massery, M., Hagins, M., Stafford, R., Moerchen, V., & Hodges, P. (2013). Effect of airway control by glottal structures on postural stability. Journal of Applied Physiology, 115, 483-490.
MacDonald, I., Blake, E., Rubin, J., Hirani, S., & Epstein, E. (2011). Breath support: whose role is it anyway? An ultrasonic examination into abdominal muscles during phonation in professional voice users.
Patient-reported feedback explaining that Pilates for Singers increased their body awareness and confidence with voicing post a 6 week course. These effects were maintained at 12 weeks follow up.
Relevance: Pilates can be a useful tool for singers to bring greater awareness to their body's positioning and movement on their voice. It is particularly relevant when considering the effects of character postures, costumes and blocking when performers are vocalising during rehearsals or in a show. This course has been conducted in a group setting with qualitative data collection in a small sample size only. A larger sample size and randomised-controlled trial would be useful in determining if there are clinically significant benefits of this approach. Tailored exercise programmes are yet to be researched in this area.
Biography: Catherine is an APA Titled Sports and Exercise Physiotherapist at Performance Medicine in Melbourne. She has a special interest in treating performing artists. She is a vocal physiotherapist and regularly treats people with voice disorders, professional voice users, TMJ disorders and general musculoskeletal conditions. Catherine graduated from The University of Melbourne with a Bachelor of Physiotherapy in 2010 and has since completed a Masters of Sports and Musculoskeletal Physiotherapy through LaTrobe University. She is a certified APPI Pilates Matwork and Equipment Instructor and presents for APPI on courses throughout Victoria.

PARTICIPANTS WILL COMPLETE A MODIFIED MAT-BASED PILATES CLASS USING VOICE THROUGHOUT

CARE AND CARING STRUCTURES IN DANCE PRACTICE

Miss Ebony Muller
PhD Candidate, Deakin University, VIC

Participants: This session invites all interested persons. No dance experience is necessary. Please wear comfortable clothing that you can move in. Bring a water bottle and writing materials.
Purpose: I will facilitate an interactive dance/movement improvisation session that directly incorporates notions surrounding 'care' and its ethics into the embodied structures, conditions and form of the practice. Throughout this session you will begin to identify the ways that 'caring' can create a specific circumstance for an artistic dance process.
Approach: You will engage in a simple but challenging structure including improvised movement, sounding and stillness, followed by time for reflection and group discussion.
Evidence: The practice I will be sharing is the foundation for my doctoral research and its epistemology. Through repeated engagement in this practice with a group of participants, I have identified multifarious ways care can be (and is) brought into the conditions, conventions and structures of the practice, and how caring relations can inform the way we dance, move, sound, improvise and relate to each other within an artistic process.
Relevance: The depth (and differing modes) of care within this practice are contingent on practising repeatedly over time. Therefore, there will be limitations to the tacit knowledge one will be privy to in a single session. However, participants will be able to identify some of the explicit conditions within this practice and may be able to imagine or consider creatively how the caring structures could affect individual performing artists and a related artistic process through their repeated engagement. This work is relevant to the healthcare of performing artists, as it is through embodying the ethics and concepts of 'care' that we may be able to encourage safe practice and increase wellbeing and longevity in performing artists.
Biography: Ebony Muller is a dance practitioner and doctoral candidate in the School of Communication and Creative Arts at Deakin University. Ebony's research centres on the field of feminist ethics, known as the 'ethics of care' and its application within artistic dance practice, specifically dance/movement improvisation and through the methodologies of practice-led research. Ebony is passionate about inclusive and caring dance practice and education. You can find her teaching dance to people with disabilities at BAM Arts Inc.

THROUGHOUT THIS SESSION YOU WILL BEGIN TO IDENTIFY THE WAYS THAT 'CARING' CAN CREATE A SPECIFIC CIRCUMSTANCE FOR AN ARTISTIC DANCE PROCESS

CONNECTING WITH YOUR BLUEPRINT FOR MOVEMENT

Mrs Jane Shellshear,
Andover Educators, NSW

Participants: Suitable for performing artists and those working in movement health in performing arts. Relevant for musicians and music educators. No prior knowledge or special equipment are required**.**
Purpose: Methods to integrate correct anatomical concepts into kinaesthesia and moving strategies are required in order to realise intended design function. Mapping structures of the 'hand' demonstrates this process as it operates throughout the body. Participants experience changes in movement quality due to new embodied understandings of structural design and are able to assess impact on movement health, performance and wellbeing. Guided methods of investigation including observation, palpation, exploration of anatomical models and movement.
Main Contribution: Cells in the primary motor and sensory cortices are organised spatially to represent the anatomical correspondence of parts of the body - a cortical 'map'. Prior to voluntary moving of muscle, motor planning takes place in premotor areas of the brain closely linked to cortical sites of learning, memory and the interpretation of the special sensory systems like the auditory system. There is evidence of maps in these areas as well. Map details influence cortical representation along the entire chain of information flow, from planning to execution. If movement is based on inaccurate knowledge or perception about the anatomy of the body, then pathologic changes can result. This leads to alterations in cortical representation, which can reinforce faulty motor practice. However, executive cortical areas are capable of reorganisation to reflect motor planning. It is therefore possible to change a body map.
Implications: Sensorimotor skills and knowledge of relevant structural anatomy can facilitate physical conditions that result in well formed, healthy patterns of movement, thereby reducing risk of performance related movement disorders. Artistic and technical outcomes are simultaneously improved, making this knowledge highly relevant to performance education and compatible with other modalities addressing performing arts healthcare.
Biography: Jane Shellshear holds a Bachelor of Music in Performance from Sydney University and pursued postgraduate piano studies at the Royal Northern College of Music in Manchester and in London. As Australia's premier Andover Educator she is specially trained to deliver the licensed course "What Every Musician Needs to Know About the Body". Through presentations, workshops and lessons Jane combines her passions for music and movement health to give participants a unique experience of performance enhancement. Jane is the founder of Body Mapping Australia, a member of ASPAH and of the Australian Society of Teachers of the Alexander Technique.

PARTICIPANTS EXPERIENCE A CHANGE IN MOVEMENT QUALITY DUE TO NEW EMBODIED UNDERSTANDINGS OF STRUCTUAL DESIGN

MYOFASCIA, MOVEMENT & VOICE

Ms Annie Strauch
Performance Medicine

Participants: This workshop is for any performer who uses their voice (spoken voice, singing voice). No skills required. Wear clothing that can be moved in easily. No specific props required.
Purpose: The purpose of the workshop is to assist participants to gain a greater awareness and understanding of the connection between their larynx and voice and the rest of their body.
Approach: The participants will be invited to participate in body movements accompanied by vocalisation. These movements and the vocalisation will be prompted by the presenter. They will be asked to think about the impact of their movements on the ease of their voice production, voice quality and ability to access voice qualities such as resonance.
Keywords: movement, vocalisation, body
Evidence: In Speech Pathology and voice pedagogy, voice is commonly taught in the Power-Source-Filter model. Research has also shown that the laryngeal mechanism is affected by head and neck posture (Honda 1999) and that there is a connection between the fascial lines and the larynx in the body (Myers, 2010). The workshop will present a practical application of how the body and larynx are connected.
Relevance: The knowledge of the laryngeal mechanism and how it can be used efficiently and in ways that are supported by the rest of the body is important to any performing artist who uses their voice.
Biography: Annie is a Titled Musculoskeletal and Sports Physiotherapist (B. Pthy (Hons), M. Phty (Musc), M. Phty (Sports)) who has worked with performing artists for 15 years. Annie works at Performance Medicine in the Melbourne clinic.

PARTICIPANTS GAIN A GREATER AWARENESS AND UNDERSTANDING OF THE CONNECTION BETWEEN THEIR LARYNX AND VOICE AND THE REST OF THEIR BODY

THE SHOW MUST GO ON

Film Screening

2:40pm, Sunday 1 Dec

The Show Must Go On is the first film to tell the story of the mental health of the 42,000 people working in the Australian entertainment industry. While 'show business' is often seen as glamorous, fun, exciting and well paid, recent and alarming world-first research from Entertainment Assist and Victoria University paints a darker picture for entertainment workers. Anxiety symptoms are 10 times higher, sleep disorders are 7 times higher and symptoms of depression are 5 times higher than the national average. Suicide attempts in the industry are double the national average.

In the film, Ben shares his personal experiences living with depression and anxiety. Along the way, we are witness to his intimate conversations with key creatives and crew, actors, dancers, musicians, performers (many of them household names) who have likewise struggled, and how they have survived. Participants from all corners of the entertainment industry feature in the documentary including Sam Neill, Michala Banas, Jocelyn Moorhouse, David McAllister AM, Shane Jacobson, Dean Ray, Sarah Walker and many more.

Following a screening of the film, its writer/director Ben Steel will be joined by psychologist Dr Margaret Osborne and ASPAH Vice President, Dr Mark Seton for a panel discussion and questions from the floor.

PUTTING DANCE ON THE SPORTS MEDICINE AGENDA

Co-led by ACRISP, LASEM and ASPAH, with support from SMA

2:40pm, Sunday 1 Dec

Please note: Attendance by invitation only

Dance is a popular activity enjoyed by many, for fun or at the elite level, and for artistic expression combined with physical challenge. Traditionally, dance has identified as part of the arts sector, however, relevance to the sports medicine sector is becoming increasing clear. Due to this cross-cutting relevance of dance, and a growing amount of dance research conducted beyond the education sector, opportunities for Australian leadership in dance research is increasing. While some focussed interest groups do exist (such as ASPAH and regional IADMS), dance in Australia has no overarching formal governance body, so opportunities for demonstrating and strengthening the benefits of dance for medicine, and equally sports medicine for dance, are not currently being realised or driven to their full potential. The broad aim of this project is to bring together representatives from dance, public health and sports medicine to identify current and future opportunities for collaboration in research and practice, across two key areas: Incorporating dance into the physical activity narrative in Australia; and ensuring dancers/dance medicine are understood by sports-medicine clinicians.

DISCUSSION GROUPS

ASPAH's Discussion Groups offer delegates an opportunity to discuss topics of common interest in a friendly atmosphere. To ensure that group members have a chance to speak, to be heard, and to engage with others, each group consists of a maximum of seven participants and a facilitator. Expertise in the group's topic is not required.

GROUP A

Priorities for performing arts medicine training

Facilitator: Dr Hara Trouli

GROUP B

Pain– the performer's frenemy

Facilitator: Janet Karin

GROUP C

Transitioning between and beyond performance careers

Facilitator: Dr Mark Seton

Please note: Each group is limited to seven delegates.. Please secure your place in the group of your choice from 8.30am on Saturday 30 November at the conference registration desk.

First in, best dressed!

SUPPORT ASPAH

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SO WE CAN KEEP SUPPORTING THOSE IN THE PERFORMING ARTS INDUSTRY

We recognise that the health of the performing artist and the quality of their art are inextricably linked. At the same time we understand that the still culturally embedded perspective that artists may need to "suffer for their art" means that, often, wellbeing and artistry are treated as if they are unrelated. In its broadest sense, then, ASPAH's aim is to change this culture so that the health and wellbeing of performing artists is treated with the same importance as their craft.

ASPAH is a registered charity that recognises that all performing artists, young and old, amateur and professional, have unique needs that may not be met by standard models of healthcare. Therefore it promotes:

- Accessible high-quality holistic healthcare for all performing artists
- Education for health workers, teachers, performers and students to improve health and wellbeing
- Research across disciplines relevant to the health and wellbeing of performing artists
- A culture of lifelong preventative healthcare and safety practices for performing artists and performing arts institutions
- Multidisciplinary discourse among health professionals, educators and performing artists
- Increased community awareness of performing arts healthcare issues.

#HelpYourShowGoOn

CONFERENCE FEEDBACK SURVEY

We invite all delegates to provide feedback on this year's conference. Feedback helps us to continue to grow and improve our conference in future years. To provide your feedback scan the QR code or go to: https://www.surveymonkey.com/r/7ML3379

LIKE US ON SOCIAL MEDIA

Follow ASPAH on Twitter (@aspah_aus) and Facebook (@aspahonline) to stay updated with ASPAH events and all the latest news in performing artist's healthcare. Follow #HelpYourShowGoOn to find out more about some of our resources available for performing artists, #ASPAH2019 for all things related to this year's conference and #ASPAH2020 for next year's conference.

ASPAH IS A SMALL ORGANISATION WITH A BIG VISION

Our goal is to provide resources that will support performing artists: their physiological and psychological health and wellbeing, and their ability to meet the challenges of a performing career with confidence and pleasure. We also aim to help healthcare professionals understand the specific health needs of those in the performing arts, and to support researchers and performing arts industry workers.

As ASPAH is a not-for-profit charitable organisation, we rely on the support of our sponsors, donors and advertisers to achieve our vision.

We recognise the generous sponsorship of Harlequin Floors Australia. Harlequin are internationally respected for their work in supporting the performing arts, and we offer our deep gratitude to private donors, Pip Smith AO and Anonymous. We also thank our advertisers and exhibitors: Bloch Australia, Body Centric Physio and Pilates, Body Mapping Australia, Kinetica Physiotherapy, Melbourne Performance Therapy, Performance Medicine, Harlequin Floors Australia and MDM Performance Dancewear.

By supporting ASPAH, you support performing artists and those who care for their health and wellbeing. Please consider contacting admin@aspah.org.au to discuss how you would like to contribute to ASPAH's vision.

ASPAH
Australian Society for Performing Arts Healthcare

HARLEQUIN
www.harlequinfloors.com

FIND YOUR EXCEPTIONAL

At Performance Medicine, we get it. We know that every performer is an amazing and complex mechanism, where every problem is different and every solution is a thing of bespoke attention and care. From stage to backstage to behind the backstage, from professional dancers and singers, to amateur dramatics, we see the bigger picture to performance.

Pioneers of Vocal Physiotherapy in Australia, we distinguish ourselves by being a leading rehabilitation and treatment centre catering to the full spectrum within the performing arts industry. We boast national and international experience on some of the biggest productions including; Kinky Boots, Book of Mormon and Chicago (just to name a few).

Our approach is understanding and treating the full spectrum of today's performer, in a three-sixty degree fashion.

Our services address individual wellness, body and mind through Performance Physiotherapy, Myotherapy, Remedial Massage and Clinical Conditioning. We also have one of the leading Sports Doctors in Melbourne, Dr Kathy Yu on site.

We always strive to improve industry standards and elevate personal performance back to excellence. Come and visit our new St Kilda Road clinic, we would love to discuss your performance career!

Visit us today at ground floor 312 St. Kilda Road, Melbourne 3004
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PERFORMANCE MEDICINE

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