

Vestibular Dysfunction & Management: Clinical Competency Course

VESTIBULAR EDUCATION AUSTRALIA

KATRINA WILLIAMS

Specialist Neurological
Physiotherapist, FACP 2008
Lecturer, University of QLD

LEIA BARNES

Advanced Physiotherapist
(Vestibular), Logan Hospital;
APA Neurological Physiotherapist

NATALIE RANDO

Assistant Professor, Bond
University; APA Neurological
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DR ANN RAHMANN

Lecturer, Australian Catholic
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Brighton Rehabilitation Unit; APA
Gerontological Physiotherapist

For course information and
evidence based updates:
vestibulareducationaustralia.com.au



8th – 13th October, 2018
Bond University, Gold Coast
AUSTRALIA





Dr Ann Rahmann is a lecturer in the Discipline of Physiotherapy at the Banyo Campus of the Australian Catholic University and a senior clinical physiotherapist at the Brighton Rehabilitation Unit in the Metro North Hospital and Health Service District. Ann has continued to work clinically since graduating and has extensive experience in the sub-acute and community sectors across public and private contexts. Ann's clinical and research interests include optimising the rehabilitation and transition back to home of older adults, the assessment and management of people with vestibular dysfunction including those with concussion and aquatic physiotherapy interventions. Ann completed her PhD in 2012 investigating the benefit of early inpatient aquatic physiotherapy after joint replacement surgery. Ann is currently supervising four PhD students, two masters students as well as two undergraduate honours students. Ann is also actively involved in three research projects at Brighton Health Campus. The first is investigating vestibular dysfunction in sub-acute rehabilitation inpatients. The second is investigating the effect of sleeping in a recliner chair on balance and function of deconditioned inpatients and the third will investigate the clinical effectiveness of motor imagery to optimise functional recovery after a period of restricted weight bearing due to lower limb fracture. Ann is an APA Titled Gerontological Physiotherapist.

Natalie Rando has focused her physiotherapy skills and teaching for over 14 years to the fields of Neurological and Vestibular physiotherapy. She holds a Masters in Neurological Physiotherapy, has completed advanced training in the area of vestibular rehabilitation and regularly attends both national and international conferences related to vestibular dysfunction. Natalie previously held the position of Assistant Director of Physiotherapy (Rehabilitation) at the Gold Coast Hospital (2004- 2012), where she instigated and managed the physiotherapy service for Vestibular Clients. For the last 13 years she has delivered curriculum related to vestibular dysfunction at various universities including graduate-entry level at Bond University, Griffith University and University of Queensland, as well as conducting post-graduate level training throughout Australia. Natalie currently holds the position of Assistant Professor of Physiotherapy (Neurology) at Bond University and is an APA Titled Neurological Physiotherapist.

Leia Barnes has over 12 years experience working with individuals with neurological and vestibular disorders in both the public and private sectors. She currently works as an Advanced Physiotherapist in the ENT Service at Logan Hospital, where she functions as a primary contact vestibular physiotherapist, as well as leading the professional vestibular physiotherapy stream. Leia manages a private vestibular caseload at Back in Balance Vestibular Physiotherapy as well as education business Vestibular Courses. Previous roles have included the Assistant Director of Physiotherapy (Rehabilitation) at the Gold Coast Hospital (2013-2016) and Senior Physiotherapist at the Falls and Balance Clinic. With her extensive clinical background, Leia has been invited to speak at multiple conferences, including The Neuro-Otology Society of Australia Annual Meeting, Audiology Australia National Conference and Queensland Acoustic Neuroma Conference. Leia has completed a Graduate Diploma of Neurological Rehabilitation and is an APA Titled Neurological Physiotherapist.

Katrina Williams is a specialist Neurological Physiotherapist FACP 2008 (as awarded by the Australian College of Physiotherapy). She has worked extensively in the fields of neurological and vestibular rehabilitation for over 20 years, with a focus on central vestibular pathologies. She works full-time at the University of Queensland as a Clinical Academic and runs a private practice Upright Physiotherapy and professional Education Group called Neurological Ageing and Vestibular Education – 'NAVE'. She holds multiple degrees in the field of Physiotherapy including a Graduate Certificate in Higher Education and is currently completing her PhD in the area of vestibular symptoms experienced by people with Multiple Sclerosis. She is actively engaged in ongoing research exploring the signs and symptoms of people complaining of dizziness across the spectrum of musculoskeletal to neurological pathologies with her latest research exploring the association of impairments of vestibular peripheral and central integrative function in Migraine associated vertigo patients. Recently she was successful to obtain funding to develop the first vestibular and balance testing research facility in a Queensland University, including a Rotary Chair. This will provide the opportunity for more advanced testing and interpretive research for the dizzy person.



Dr Julia Treleaven is a Lecturer and Senior Researcher at the University of Queensland. In 2004 she completed her PhD focusing on the necks influence on dizziness, head and eye movement control and postural stability in whiplash injuries. Her research continues in this area and has looked at the cervical sensorimotor control in idiopathic neck pain, the elderly and post concussion. She has published over 70 peer reviewed papers and has contributed to several book chapters. Julia also works part-time in private practice assessing and treating patients such as those with whiplash, cervicogenic dizziness and headache and post concussion syndrome.

Dr David Szmulewicz is a Neurologist, Neuro-otologist and medical researcher. He holds a PhD from the University of Melbourne. His clinical and research interests include balance disorders that affect the vestibular system, cerebellum and the combination of the two. He is the head of the Balance Disorders & Ataxia Service at the Royal Victorian Eye & Ear Hospital, and the Cerebellar Ataxia Clinic, Alfred Hospital and neurologist to the Friedreich's Ataxia Clinic, Monash Medical Centre. David is lead investigator on research defining a novel ataxia – Cerebellar Ataxia with Neuropathy and Vestibular Areflexia Syndrome (CANVAS), a project to develop objective ataxia metrics and an objective bedside test of imbalance - the video VVOR.

Dr Brent McMonagle is an ENT Surgeon, otologist and skull-based surgeon. He underwent advanced surgical training in ENT surgery at RCH, Ipswich Hospital, RBWH and PAH, receiving his surgical fellowship in 2004. Brent then undertook additional training in Sydney (St Vincent's Hospital, Sydney Children's Hospital), London (Guys and St Thomas' Hospitals, The National Hospital for Neurology and Neurosurgery Queen Square and King's College Hospital) and Adelaide (Royal Adelaide Hospital, Queen Elizabeth Hospital, Flinders Medical Centre) in the areas of advanced ear surgery, cochlear implantation, lateral skull base surgery, paediatric ENT surgery, advanced sinus surgery, and endoscopic skull base surgery.

Christine Jessop is the Principal at Kids First Physiotherapy, a private paediatric physiotherapy practice located in Brisbane. Christine has a Masters in Paediatric Physiotherapy and has done advanced training in Bobath / NDT. She has also completed the Paediatric Vestibular Rehabilitation Competency Based Course in 2016 in the US under Dr Rose Marie Rine, Dr Sylvette Wiener-Vacher and Dr Jennifer Christy. In 2017 she completed an Advanced Vestibular Rehabilitation course in Sydney. She has been a practising physiotherapist for 24 years with over 20 years of experience working with children. She was a senior clinician at the RCH (Brisbane) where she worked for 14 years. She also worked at the RCH (Melbourne) for 3 years, and a further 3 years in community paediatrics (Australia and UK).

Caroline Balke is a senior audiologist at the Mater Hospital, who graduated from the University of Queensland in 2005. Her primary area of specialty over the past 12 years has been working with both adults and children who have dizziness or balance problems. Caroline has been instrumental in ongoing development vestibular assessment at the Mater Hospital, using current evidence based practice. Caroline is also part of the Mater Cochlear Implant Clinic team, where she does pre-operative cochlear implant candidacy assessments and post-operative rehabilitation.

Dr Vicky Stewart graduated from the University of Queensland (2006) with a Bachelor of Physiotherapy and has recently completed a PhD from ACU titled 'Improving screening and management of vestibular disorders in the hospital setting'. Vicky has completed both competency-based and advanced training with Dr Susan Herdman and regularly attends national and international conferences related to vestibular dysfunction. Vicky previously worked at The Prince Charles hospital (2007-2015) where she established a novel vestibular physiotherapy service. Vicky has 10 years experience treating patients with vestibular disorders and now works at the Gold Coast University hospital as an advanced vestibular physiotherapist.

Ian Parker graduated from UQ with a Bachelor of Physiotherapy (Honours) in 1996, completed his Master of International Public Health in 2009, and is the RBWH Physiotherapy Team Leader Neurosciences and Rehabilitation. He commenced practicing vestibular rehabilitation in 2010, and then set up a vestibular rehabilitation model of care at the RBWH in 2013. Since this time, Ian has been studying the service's outcomes for his PhD at ACU. He guided the Queensland Health Vestibular Collaborative from 2015 to 2017, assisting in vestibular rehabilitation roll-out across the state, and is the current chair of the Queensland Vestibular Network.



Vestibular Dysfunction and management:

Clinical competency course

Location for all sessions each day: Level 3, Bond Institute of Health and Sport, Bond University

Monday 8th October 2018

Vestibular anatomy and function; Oculomotor assessment; Differential diagnosis: peripheral

Monday Day 1			Key topics
8.00 am	Registration and Welcome		
8.30 am – 10.30 am	Review of vestibular anatomy and physiology Facilitator Natalie Rando	Peripheral Vestibular Anatomy & Physiology Central Vestibular Anatomy & Physiology Clinical Neurophysiology of Vestibular Compensation	
10.30 am – 11.00 am	Morning break		
11.00 am – 12.30 pm	Review of common peripheral pathologies Facilitator Ann Rahmann	BPPV Neuritis / Labyrinthitis Meniere's Disease Third Window Vestibular Schwannoma Bilateral Vestibular loss	
12.30 pm – 1.15pm	Lunch break		
1.15pm – 3.30 pm	Assessment of the dizzy patient Facilitator Katrina Williams	Patient interview Oculomotor Assessment VOR Testing Motion sensitivity testing / Visual motion sensitivity Special Tests – Tullio, Hyperventilation, Hennenbert's sign Differential Diagnosis	
3.30 pm – 4.00 pm	Afternoon break		
4.00pm – 5.30 pm	Oculomotor examination and interpretation Facilitators: All faculty	Practical session including <ul style="list-style-type: none"> • Oculomotor – practice and videos • VOR: HIT, HSN, DVA, VORc • Skills check 	



Tuesday 9th October 2018

Benign Paroxysmal Positional vertigo (BPPV) and Vestibular Rehabilitation

Tuesday Day 2			Key topics
8.00 am – 10.00 am	BPPV introduction: The vertical canals theory Facilitator Leia Barnes	Anatomy & physiology review Assessment and Management of Vertical Canals	
10.00 am – 10.30 am	Morning break		
10.30 am – 11.30 pm	BPPV in the vertical canals (skills practical) Facilitators All faculty	Positional assessments Canalith Repositioning and Liberatory Manoeuvres Outcomes and recurrence	
11.30 am – 12.30 pm	BPPV in the horizontal canals theory Facilitator Leia Barnes	Horizontal canal anatomy & physiology Assessment and Management of Horizontal Canals	
12.30 pm – 1.15 pm	Lunch Break		
1.15 pm – 14.00	BPPV in the horizontal canals (skills practice) Facilitators All faculty	Positional Assessments Head Roll Test Bow and Lean Test Canalith Repositioning and Liberatory Manoeuvres	
2.00 pm – 3.30 pm	Principles of Vestibular Rehabilitation: Treatment Strategies and Titrations Facilitator Ann Rahmann	Motor Learning Approach to VBRT Gaze stability/ Gaze shifting exercises Habituation Substitution Integration into gait and balance retraining	
3.30 pm – 4.00 pm	Afternoon break		
4.00pm – 5.30 pm	Vestibular rehabilitation - practical Facilitators: All faculty	Problem-based approach to individualised vestibular rehabilitation Clinical cases with small group discussion to develop rehab programs	



Wednesday 10th October 2018

Concussion, Vestibular migraine, Cervicogenic Dizziness, Mal de Debarquement, PPPD, Clinical Cases

Wednesday Day 3		
Key topics		
8.30 am – 9.30 am	Concussion Facilitator Katrina Williams	Pathophysiology Assessment Physiotherapy treatment perspectives
9.30 am – 10.00 am	Mal de Debarquement Syndrome Facilitator Natalie Rando	Diagnostic Criteria Pathophysiology Assessment Management
10.00 am – 10.30 am	Morning break	
10.30 am – 12.00 pm	Dizziness and the neck Facilitator Dr Julia Treleaven	Pathophysiology Physiotherapy Assessment and treatment perspectives
12.00 pm – 12.30 pm	Persistent, Postural, Perceptual Dizziness Facilitator Natalie Rando	Diagnostic Criteria Pathophysiology Assessment Management
12.30 pm – 1.15pm	Lunch break	
1.15 pm – 2.20 pm	Introduction to vestibular migraine Complex Case Examples Facilitator Leia Barnes	Diagnostic Criteria Pathophysiology Assessment Physiotherapy treatment perspectives
2.20 pm – 2.30 pm	Skype set up time (break)	
2.30 pm – 3.30 pm	Medical management of vestibular migraine Facilitator Dr David Szmulewicz (Neurologist)	Neurologist's Approach to the Dizzy Patient Medical Management of the Vestibular Migraine
3.30 pm – 4.00 pm	Afternoon break	
4.00pm – 5.30 pm	Case-based scenarios: Part 1 Using subjective and objective assessment to clarify clinical hypothesis/hypotheses Facilitators: All faculty	Small tutorial groups Discussion of clinical cases <ul style="list-style-type: none"> • Key subjective assessment findings • Key objective assessment findings • Differential diagnosis



Thursday 11th October 2018

Medical management of the vertiginous patient; Dizziness in older adults and children

Thursday Day 4		
		Key topics
8.00 am – 9.00 am	Medical management of the vertiginous patient Facilitator Dr Brent McMonagle (ENT Surgeon)	Medical and surgical approach to common vestibular conditions
9.00 am – 10.00 am	Dizziness and Ageing Facilitator Ann Rahmann	Clinical implications of assessing dizziness in older adults including falls assessment Prioritised functional assessment Principles of rehabilitation for older adults
10.00am - 10.30am	Morning Break	
10.30 am – 11.30 am	Gait and balance assessment review – practical session Facilitators: All faculty	Revise common clinical assessment tools mCTSIB, TUG/10MW +/- head turns, FGA/4-item, miniBEST /ABC/DHI integration of balance / vestib rehab for falls
11.30 am – 1.00 pm	Case-based scenarios: Part 2 Planning an optimal vestibular rehabilitation program Facilitators: All faculty	Small tutorial groups Discussion of clinical cases <ul style="list-style-type: none"> • Planning an appropriate vestibular rehabilitation program for each case
1.00 pm – 1.45 pm	Lunch break	
1.45 pm – 3.15 pm	Assessment and management of complex clinical cases: Five cases presented in a Standardised Patient format Facilitators: All faculty	Participants will rotate through two out of the five scenarios (40 mins per case) Each group will undertake: <ul style="list-style-type: none"> • Full subjective vestibular assessment • Prioritised objective assessment • Discuss management / treatment options
3.15 pm – 3.45 pm	Afternoon break	
3.45 pm – 4.45 pm	Vestibular physiotherapy in paediatrics Facilitator Christine Jessop	Physiotherapy management of vestibular dysfunction in children
4.45pm – 5.30 pm	Standardised patient debrief Facilitators: All faculty	Each group will present a 15 minute summary of their first Standardised Patient scenario to the whole group



Friday 12th October 2018

Central vestibular Pathology, Vestibular Function Testing, Management in the acute hospital setting

Friday Day 5			
		Key topics	
8.30 am – 9.30 am	Vestibular audiology assessment Facilitator: Caroline Balke	Audiology testing procedures and clinical interpretation	
9.30 am – 10.00 am	Central vertigo pathophysiology Facilitator: Katrina Williams	Key pathophysiology	
10.00 am – 10.30 am	Morning break		
10.30 am – 11.30 am	Central vertigo pathophysiology Facilitator: Katrina Williams	Physiotherapy assessment and management of Central Vestibular Dysfunction	
11.30 am – 12.30 pm	Vestibular assessment and management in acute hospital setting Facilitators: Dr Vicky Stewart	Physiotherapy assessment and management in the ED	
12.30 pm – 1.15 pm	Lunch break		
1.15 pm – 1.30 pm	Patient preparation time		
1.30 pm – 3.00 pm	Clinical session: Vestibular assessment and management Facilitators: All faculty	Assessment and initial physiotherapy management of a person with dizziness <ul style="list-style-type: none"> • in small groups 	
3.00 pm – 3.30 pm	Afternoon break		
3.30 pm – 5.00 pm	Supervised study and skills review in preparation for assessments tomorrow Facilitators: All faculty	Open practice and question / answer session Participants can choose what they would like to revise / practice All faculty available for questions and skill check	



Saturday 13th October 2018

Assessment day

Saturday Day 6		Key topics
8.30 am – 9.30 am	Video case short answer examination <i>Facilitators: Katrina Williams</i>	Video cases Description of presenting oculomotor test and signs; associated management / referral
9.30 am – 10.00 am	Morning break	
10.00 am – 11.00 pm	Multiple Choice examination <i>Facilitators: Katrina Williams</i>	Pathology Diagnostic Management
11.00 am – 11.20 pm	Prep time for first OSCE group and facilitators	Competent / not yet competent
11.20 am – 12.00 pm	OSCE group 1 <i>Facilitators: All faculty</i>	Competent / not yet competent
12.00 pm – 12.40 pm	OSCE group 2 <i>Facilitators: All faculty</i>	Competent / not yet competent
12.40 pm – 1.10 pm	Lunch break	
1.10 – 1.50 pm	OSCE group 3 <i>Facilitators: All faculty</i>	Competent / not yet competent
1.50 – 2.30 pm	OSCE group 4 <i>Facilitators: All faculty</i>	Competent / not yet competent
2.30 pm – 2.45 pm	Afternoon break	
2.45 – 3.30 pm	Final wrap-up: Future Directions <i>Facilitators: All faculty and Ian Parker</i>	
4.00 – 6.00pm	Cocktail Function Bond University Club, Main Campus	