

Provisional Program

DAY 1: MONDAY 26 NOVEMBER 2018

Session 1:	MUSCLE - 9.00am-10.30am
Chairpersons:	TONY BLAZEVICH
SIMON GANDEVIA and	Training-induced changes in muscles
KAREN SØGAARD	JAMES WAKELING
	Prediction of performance from muscle models
	BART BOLSTERLEE
	Regional hypertrophy in the human quadriceps following
	progressive resistance training
	TREVOR ALLEN
	What can isometric contractions tell us about muscle injury and
	rehabilitation?
	JOANNA DIONG
	Involuntary muscle activity reduces passive range of motion at
	known torque
Morning tea	10:45-11:15am
Session 2:	RESPIRATION - 11:15am-12.30pm
Chairpersons:	BILL SHEEL
JANE BUTLER and	The respiratory musculature: impairments and limitations in
(DANNY ECKERT or	health and disease
LYNNE BILSTON – to be	ANNA HUDSON
confirmed)	Age-related adaptions in the neural control of the human
commedy	diaphragm muscle
	DAVID NGUYEN
	Neural drive to the diaphragm in cervical spinal cord injury
	HANNA HENSON
	Sleep apnoea in people with multiple sclerosis
	TIM CARROLL
	Transient, broad field, visual input strongly modulates reactive
	saccade latency
Lunch	12:45-1:30pm
Session 3:	POSTERS 1:30-3:00pm
	See separate poster list
Session 4:	BALANCE - 3.30pm-5:00pm
Chairpersons:	BRIAN DAY
STEPHEN LORD and	Am I the right way up? Disturbances of spatial orientation in
	variants of Alzheimer's disease
DAINA STURNIEKS	ELEFTHERIA GIANNOULI
DAINA STORNIERS	A novel group-based stepping exercise program to improve fall
	risk factors in older adults: first results of a pilot study
	MIRJAM PIJNAPPELS
	Adaptive, reactive and daily life gait in older populations
	MORAG TAYLOR
	The relationship between white matter hyperintensity clusters
	(size and location) and prospective falls in older adults across the
	cognitive spectrum

DAY 2: TUESDAY 27 NOVEMBER 2018		
Session 1:	CONTRACTURE & MORE - 9.00am-10.45am	
Chairpersons:	RICK LIEBER	
ROBERT HERBERT and	Mechanisms of contracture	
GLEN LICHTWARK	AMY ADKINS	
	Early Evidence for a decrease in biceps optimal fascicle length	
	based on in vivo muscle architecture in Chronic Hemiparetic	
	stroke	
	ZEV RYMER	
	Changes in muscle architecture after hemispheric stroke can	
	adversely affect efficiency of muscle contraction in pennate	
	muscles	
	TAYLOR DICK	
	A speed-adaptive myoelectric ankle exoskeleton to improve post-	
	stroke walking performance	
	PETER MALLIARAS	
	People with Achilles tendinopathy display greater force	
	fluctuations than controls at low force levels	
	MATTHEW BRODIE	
	A finite element method for integrated design and testing of 3D	
	printed ankle and foot orthoses for children with cerebral palsy	
	and motor impairment	
Morning tea	10:45-11:15am	
Session 2:	BRAIN STIMULATION & STROKE - 11:15am-12.30pm	
Chairpersons:	JOHN ROTHWELL	
JANET TAYLOR and	Brain stimulation and treatment of motor impairments	
IRENE DI GIULIO	ANN-MAREE VALLENCE	
	Characterizing age-related changes in supplementary motor area-	
	primary motor cortex connectivity.	
	IRENE DI GIULIO	
	Effect of STN-DBS frequency on postural performance in	
	Parkinson's disease	
	CJ HECKMAN	
	Distortions in the synaptic organization of motor commands to	
	proximal and distal muscles following hemiparetic stroke	
	JULIUS DEWALD	
	Increased dependence on contralesional cortico-reticulospinal	
	pathways a form of maladaptive plasticity post hemiparetic	
	stroke?	
Lunch	12:45-end of day	
	Sightseeing and enjoying Sydney followed by conference dinner.	

DAY 3: WEDNESDAY 28 NOVEMBER 2018

Session 1:	MOTOR CONTROL - 9.00am-10.30am
Chairpersons:	RANDY FLANAGAN
MARTIN HÉROUX and	Coming to grips with sensorimotor control
GRAHAM KERR	LEAH BENT
	Stochastic Resonance can enhance cutaneous reflex responses in the
	lower limb
	JAYNE GARLAND
	Do reactions to balance perturbations improve with Fast muscle
	Activation and Stepping Training (FAST) in sub-acute stroke?
	SEAN DUKELOW
	Using robots and other techniques to guide stroke rehabilitation
Morning tea	10:30-11:00am
Session 2:	STANDING AND FALLS - 11:00am-12.30pm
Chairpersons:	IAN HARRIS
KIM DELBAERE and	Evidence-based surgery
MIRJAM PIJNAPPELS	JOANNE KUA
	The effects of a specialized treadmill system on gait speed and gait
	parameters for older adults with high falls risk
	KIM VAN SCHOOTEN
	The effect of central processing and muscle torque development speed
	on balance recovery during standing
	KATE CARROLL
	Footsteps, falls and functional ambulation in children with
	neuromuscular disease
	GRAHAM KERR
	Objective assessment of upper limb tremor distinguishes Parkinson's fallers and non-fallers and is predictive of future falls
Lunch	12:30-1:30pm
Session 3:	YOUNG INVESTIGATORS - 1:30-3:00pm
	KEVIN GILMORE
<u>Chairpersons</u> : JOHN ROTHWELL and	The effects of demyelination in Chronic Inflammatory Demyelinating
JAYNE GARLAND	Polyneuropathy on neuromuscular properties, muscle quantity & quality.
JATINE GARLAND	HARRISON FINN
	Firing of fatigue-sensitive small-diameter afferents of the calf muscles
	impairs maximal contractions of the knee extensor muscles
	SHARI O'BRIEN
	Visuomotor ankle force training in individuals with spastic cerebral palsy
	compared to their typically developed peers.
	ZOE DJAJADIKARTA
	Ankle proprioception in people with Multiple Sclerosis
	LYNDON SMITH
	Impaired sensorimotor control of the hand in congenital absence of
	functional muscle spindles
	PAULO PELICIONI
	Cognitive contributions to the control of balance during stepping in
	young & older adults - a fNIRS study.
Afternoon Tea	2:42pm – 3:25pm
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DAY 3: WEDNESDAY 28 NOVEMBER 2018 (Cont.)

Session 4:	PAIN & FATIGUE - 3.25pm-5:00pm	
Chairpersons:	KAREN SØGAARD	
ANDREW CRESSWELL and	Muscle pain, fatigue and performance in motor impairments	
SIOBHAN SCHABRUN	JANET TAYLOR	
	Muscle fatigue and training: roles for the spinal cord (draft title)	
	CHRIS MCNEIL	
	Peripheral fatigue in young and old females and males	
	SIOBHAN SCHABRUN	
	Motor function and motor cortical reorganization in the transition to	
	sustained pain	
	PAUL HODGES	
	Physical activity reduces dysregulation of the inflammatory mediators in	
	the multifidus muscle after spontaneous intervertebral disc	
	degeneration in SPARC-null mice	
End of day 3	5:00pm	
CONFERENCE CONCLUDES		