

17 - 20 NOVEMBER

MELBOURNE

**ABEC · 2019 ·**

AUSTRALIAN BIOMEDICAL ENGINEERING CONFERENCE

*Technology & Research in Australian Medical Science*

Poster Session 1 - Monday 18th Theme				Title
Timothy	Allison-Walker	Poster	Biosensors, Wearables, NeuroEngineering, Biomedical Signal and image Processing	Laminar-dependence of cortical threshold responses to electrical stimulation for visual prosthetics
Jose	Arganaras	Poster	Biosensors, Wearables, NeuroEngineering, Biomedical Signal and image Processing	Radar-equipped smart-shoe concept design for gait analysis and fall prevention
Behzad	Babaei	Poster	Rehabilitation Engineering and assistive technology, Biomechanics and Computational Bio-Engineering	The relation between mechanical and structural behaviour of superficial and deeper subchondral bone under impact loading
Binbin	Chen	Poster	Biosensors, Wearables, NeuroEngineering, Biomedical Signal and image Processing	Saccade trajectory deviations in multiple sclerosis
Farhad	Goodarzy	Poster	Rehabilitation Engineering and assistive technology, Biomechanics and Computational Bio-Engineering	Cortico-muscular synchronization during finger movement
Raymond	Ho	Poster	Surgical Technology, Implantables and Cardiovascular Devices	Cardiopulmonary Bypass Pump Flow Affects Air Emboli Buoyancy and Growth in the Aortic Arch: Cardiac Surgery Implication
Hamed	Keramati	Poster	Rehabilitation Engineering and assistive technology, Biomechanics and Computational Bio-Engineering	Using a dimensionally reduced model to estimate the movement of the intimal flap in a dissected aorta
Matthew	Lenarduzzi	Poster	Surgical Technology, Implantables and Cardiovascular Devices	Exploration of Microrockets for Biomedical Applications: A Performance Envelope for Suturing
Kevyn	Nyland	Poster	Biosensors, Wearables, NeuroEngineering, Biomedical Signal and image Processing	Development of an improved algorithm for the continuous measurement of pulse pressure variation to predict fluid responsiveness in patients
Luke	Ryan	Poster	Surgical Technology, Implantables and Cardiovascular Devices	Custom experimental setup for ex vivo characterisation of dynamic vascular mechanical properties
Poster Session 2 - Tuesday 19th Theme				Title
Marjan	Azimi	Poster	Rehabilitation Engineering and assistive technology, Biomechanics and Computational Bio-Engineering	An Improved Cannula Design to Reduce Thrombosis Risk in Extracorporeal Membrane Oxygenation
Nicholas	Cooney	Poster	Biosensors, Wearables, NeuroEngineering, Biomedical Signal and image Processing	Analysis of Motion in Diplegic Cerebral Palsy Using a Wearable Activity Tracking Device and Humanoid Robot
Milad	Faizollah	Poster	Surgical Technology, Implantables and Cardiovascular Devices	Low Power Oscillators for Implantable Brain Computer Interfaces
Qiang	Fang	Poster	Rehabilitation Engineering and assistive technology, Biomechanics and Computational Bio-Engineering	A Lower Limb Rehabilitation Motion Recognition Method using Artificial Neural Network
Qiang	Fang	Poster	Rehabilitation Engineering and assistive technology, Biomechanics and Computational Bio-Engineering	A New Stimulus Artefacts Removal Method for Muscle Fatigue Extraction
Catherine	Galvin	Poster		Can knee kinematics predict the future?
Tzu-wei	Lu	Poster	Biomaterials and Tissue Engineering	Development of a water soluble chitosan-based scaffold for bone regeneration
Olivia	Ng	Poster	Rehabilitation Engineering and assistive technology, Biomechanics and Computational Bio-Engineering	Arteriovenous Fistula (AVF) Failure Prediction through Patient-Specific (PS) Modelling