



Regional Australasian Biomechanics Conference 2021

ABC Auckland

April 12, 2021 | 9:30 am to 3:15 pm University of Auckland, Grafton campus, 85 park road (building 505) amphitheater 1

Times	Presenter	Title		
9:30 - 9:40	Julie Choisne	Welcome		
Musculoskeletal Modeling session				
Session chairs: Justin Fernandez and Marco Schneider				
9:40 - 11:00	Nikita Ghosh	Lumbar spine shape variation among healthy adult population		
	Reza Arjmandi	Finite Element Modelling of bony spicules in the cartilage-bone		
		interface		
	Nynke Rooks	A comparison of five computational knee joint models and their		
		model development workflow		
	Laura Carman	Population shape model of children lower limb's bones		
	Salim Bin Ghouth	Musculoskeletal Shape Modelling in Cerebral Palsy Paediatrics		
11:00 - 11:30	Morning tea break			
Sports and clinical biomechanics session				
Session chairs: Angus McMorland and Kelly Sheerin				
11:30 - 12:45	Marco Schneider	ACL attachment sites are dependent on bone shape.		
	Maryam Tayebi	Does playing contact sports alter your brain?		
	Mahsa	Development of a lightweight controllable semi-passive assistive		
	Momtahan	ankle-foot exoskeleton		
11.50 12.45	Hamid Abbasi	Automated Infant Movement Analysis for Early Diagnosis of		
		Cerebral Palsy using Deep-Learning schemes		
	Ricardo Florez	Walking and Muscle Development in Children: Computational		
		and Medical Analysis		
12:45 - 14:00	Lunch break			
Orthopaedic and Tissue session				





Session chairs: Vickie Shim and Ashvin Thambyah			
14:00 - 15:15	Mousa Kazemi	Developing a computational framework for predicting patient- specific high tibial osteotomy (HTO)	
	Emma Brown	The mechanical significance of the zonally differentiated collagen network of mature AC in response to tissue swelling and curling	
	Josh Workman	Utilising reference probe indentation to detect early OA	
	Meeghage	Fascia imaging	
	Randika Perera		
	Vonne van	Traumatic impact loading of flexed ovine lumbar spine segments	
	Heeswijk		
15:15 to	Networking session TBD		