



**Australian & New Zealand
Orthopaedic Research Society**



ANZORS 24th Annual Scientific Meeting

05-07 October 2018

Short Program *(updated on 03.10.2018)*



**Harry Perkins Institute (Perkins North),
6 Verdun St, Nedlands WA 6009, Australia**

Day 1 (Friday October 05) – McCusker Auditorium, ground floor, Harry Perkins Institute (Perkins North), 6 Verdun St, Nedlands WA

08:00-08:30	Coffee and registration		
08:30-08:45	President's welcome: A/Prof Dominic Thewlis		
08:45-09:15 Session chair: Prof Jiak Xu	Keynote: Prof Jerry Feng, Texas A&M University College of Dentistry, Dallas, Texas, USA “A Novel Role of Tendon/Ligament in Joint Formation: A challenge to the current dogma”		
09:15-10:15	First name	Surname	Abstract title
Podium 1	Tao	Wang	SPARC-mediated mechanotransduction in tendon homeostasis
Session chair: Dr Jiao Jiao Li	Bruce	Gardiner	Understanding Achilles tendon remodeling following underuse and overuse
	Yu-Wen	Su	Osteoblast derived-neurotrophin-3 induces cartilage removal proteases and osteoclast-mediated function at injured growth plate in rats
	Rema	Oliver	Evaluation of comparative soft tissue response to bone void fillers with antibiotics in a rabbit intramuscular model
	Benjamin	Mullin	Gene expression study in human osteoclasts identifies regulatory roles for bone mineral density GWAS variants
10:15-10:55 Morning coffee & tea			
10:55-12:07	First name	Surname	Abstract title
Podium 2	Kai	Chen	Pseurotin a, potentially a novel alternative treatment for osteoporosis
Session chair: Dr Tania Crotti	Mohammadh ossein	Hassansha hi	Potency of Icaritin in attenuating methotrexate chemotherapy-induced bone marrow micro-vascular damage and bone loss in rats
	Ziyi	Wang	Novel functions for paraspeckle in RANKL-induced osteoclastogenesis
	Qiang	Guo	Identification of an endolysosomal transporter critical for osteoclast function during bone remodelling
	Qian	Tang	Roles of CXCL12 induction in apoptotic skeletal cells in the development of bone growth defects following dexamethasone therapy: a potential novel therapeutic target
	Vedran	Lovric	Deminerlized bone fibers as a grafting option for spinal fusion
12:07-13:20 Lunch & poster viewing (poster viewing will take place between 12:30-13:20)			
13:20-13:50 Session chair: Prof David Haynes	Keynote: Prof Dietmar Hutmacher, Queensland University of Technology, Brisbane, Australia “Humanization of Mice via Multiple Tissue Engineering Platform Technologies”		
13:50-14:50	First name	Surname	Abstract title
Podium 3	Peilin	Chen	Fabrication of a silver nanoparticle-coated collagen membrane with contained antibacterial and anti-inflammatory activities
Session chair: Prof David Findlay	Iman	Roohani	3D-printing of bioceramic bone scaffolds at room temperature
	Jiao Jiao	Li	Evaluating baghdadite scaffolds as synthetic bone substitutes in sheep: Analysis of material-tissue interactions
	Nicholas J	Gunn	Developing a cell line model of osteocyte infection
	Xingdi	Wang	Development of a novel antimicrobial allograft bone material: preliminary results
14:50-15:30 Afternoon coffee & tea and poster viewing			
15:30-16:42	First name	Surname	Abstract title
Podium 4	Saulo	Martelli	Bone tissue deformation and fracture in the human femur under physiological loading configuration
Session chair: Dr Rami Al-Dirini	Diana	Perriman	A comparison between osteoarthritic and asymptomatic knees using statistical shape modelling
	Joseph	Cadman	A new cannulated compression clamp for short bone fractures: a biomechanical comparison to the lag screw technique
	Sophia	Zhao	The influence of glenohumeral joint lateralisation on muscle leverage after reverse total shoulder arthroplasty
	Michael P	Russo	Investigation of the combinations of loading and facet joint contributions to Lumbar Disc Herniation
	Dhara	Amin	Analysis of internal disc strains during simulation of repetitive lifting motions

18:00-

Young Investigators Pub-dinner

Strictly Masters/PhD students only; free meal; must have indicated attendance during registration at [Little Way](#) (v/gf available), 161 Broadway, Nedlands, WA; 30 min walk from Conference Venue

Map: [googlemap](#)

**Day 2 (Saturday October 06) – McCusker Auditorium, ground floor,
Harry Perkins Institute (Perkins North), 6 Verdun St, Nedlands WA**

08:00-08:15	Coffee & tea		
08:15-09:15	First name	Surname	Abstract title
David Findlay ECR Award Final, Session chairs: Dr Claudia Di Bella, Prof Hala Zreiqat	Saeed	Miramini	How to estimate the friction coefficient of articular cartilages using in-vivo imaging of the joints?
	Marco	Palanca	Body anthropometry and local bone microarchitecture may improve determining hip fracture risk beyond DXA
	Zihui	Li	Facilitating reproducible longitudinal microCT imaging of the mouse knee using a novel holder
	Junjie	Gao	Endoplasmic reticulum mediates mitochondrial transfer in the osteocyte dendritic network
	Jiao Jiao	Li	Understanding the mechanisms of chronic joint disease and developing a cure
09:15-09:45	Keynote: Prof David Little, The University of Sydney, Sydney, Australia “Pharmacologic Interventions in Genetic Bone Disease”		
9:45-10:15 Morning coffee & tea			
10:15-11:15	First name	Surname	Abstract title
PhD Award Final, Session chairs: Prof Dietmar Huttmacher, A/Prof John Costi	Minhao	Gao	Glucocorticoid induces MKP1 mediated mitochondrial dysfunction in osteocytes
	Jacob	Kenny	Identification of genes regulating osteoarthritis development using a mouse phenotype library
	Megan	Thomas	Response of articular cartilage and subchondral bone to a focal loss of joint surface congruity
	Sophie	Rapagna	Cartilage thickness and subchondral bone microarchitecture in varus- and valgus-aligned osteoarthritic tibiae: comparison with controls
	Hamed	Ziaepoor	Rapid prediction of femoral strain using a novel computational model
11:15-12:15	ANZORS AGM All delegates welcome (and encouraged) to attend		
12:30-17:00	Half day Networking Event. (bus transport provided; return back in Perth by 17:00) Pickup: at 12:30 pm, in front of Conference Venue (6 Verdun St Nedlands, WA) Sandalford wines , Swan Valley, WA.		
19:00-	Conference Dinner in the city, includes Awards Announcements Restaurant New Golden Century , 269 James St., North Bridge, WA. Map: googlemap		

Day 3 (Sunday October 07) – McCusker Auditorium, ground floor, Harry Perkins Institute (Perkins North), 6 Verdun St, Nedlands WA

08:15-08:45	Coffee & tea		
08:45-9:45	First name	Surname	Abstract title
Podium 5 Session chair: Dr Jennifer Tickner	Yinghong	Zhou	RANKL-induced M1-like macrophages are actively involved in bone formation
	Chao	Wang	Antioxidant enzyme PRDX1 mediates osteoclastogenesis via suppressing ROS production
	Heng	Qiu	New insights into the role of Methionine 199 in the function of Receptor Activator of Nuclear Factor Kappa-B Ligand (RANKL) and bone homeostasis
	Vincent	Kuek	NPNT is expressed by osteoblasts and mediates angiogenesis via the activation of extracellular signal-regulated kinase
	Young Jung	No	Bioactive synthetic fibre-hydrogel composites designed for tendon and ligament prostheses
9:45-10:15	Keynote: Prof John Antoniou, McGill University, Montréal, Canada “Short link N acts as a disease modifying osteoarthritis drug”		
10:15-10:55 Morning coffee & tea			
10:55-12:07	First name	Surname	Abstract title
Podium 6 Session chair: Prof Jerry Feng	Catherine	Galvin	Healthy ageing does not change knee kinematics. A medical-imaging cross-sectional observation study
	Danè	Dabirrahmani	Fluoroscopic analysis & clinical outcomes of medially stabilised knees
	Sophie	Rapagna	Quantification of bone microarchitecture damage in human femoral press-fit implantation using HR-pQCT and digital volume correlation
	Stuart	Millar	Development and evaluation of a coordinate system for complex tibial plateau fractures using a geometric shape fitting approach
	Diana	Perriman	Weighing in: does size matter in knee kinematics?
	Dhara	Amin	Multiaxial lumbar intervertebral disc mechanics are altered after simulated repetitive lifting movements
12:07-13:20 Lunch & poster viewing (poster viewing will take place between 12:30-13:20)			
13:20-13:50	Keynote: Dr Jennifer Tickner, The University of Western Australia, Perth, Australia “Investigating the role of the bone microenvironment in paediatric acute lymphoblastic leukaemia (ALL)”		
13:50-14:50	First name	Surname	Abstract title
Podium 7 Session chair: Prof John Antoniou	David	Haynes	Epigenetic regulation of human mesenchymal stem cells by inhibition of Histone Deacetylase 5 stimulates osteoblast development and bone formation in vitro
	Yongxian	Li	Icariin increases bone mass in ovariectomized rats with osteoporotic fracture via regulating Notch1 and OPG/RANK/RANKL system
	Lianzhi	Chen	The influence of body mass index on microstructural and pathological changes in osteochondral unit of osteoarthritic tibia plateaus
	Mukai	Chimutengwe nde-Gordon	A prospective study of bone marrow-derived stem cell transplantation for the treatment of osteochondral defects of the knee
	Stuart	Millar	Do current classification systems for tibial plateau fracture describe what we really see?
14:50-15:30 Afternoon coffee & tea and poster viewing			
15:30-16:06	First name	Surname	Abstract title
Podium 8 Session chair: Dr Diana Perriman	Jasvir	Bahl	Reconstruction of the hip joint centre location using statistical shape models compared to functional and regression methods and its effect on muscle moment arms
	Mukesh	Soni	The use of feedback and video engagement on exercise performance during pedaling
	Dermot	O'Rourke	Parametric computational study of the effect of different AORI defect types on primary stability of sleeved revision tibial tray with and without stem
16:06-16:15	Judging panel discussion, inaugural “Translational Research Award”		
16:15-16:20	Announcement of “Translational Research Award”		
16:20-16:30	President’s closing address		

POSTERS on Day 1 (Friday October 05) – Foyer, ground floor, Harry Perkins Institute (Perkins North), 6 Verdun St, Nedlands WA

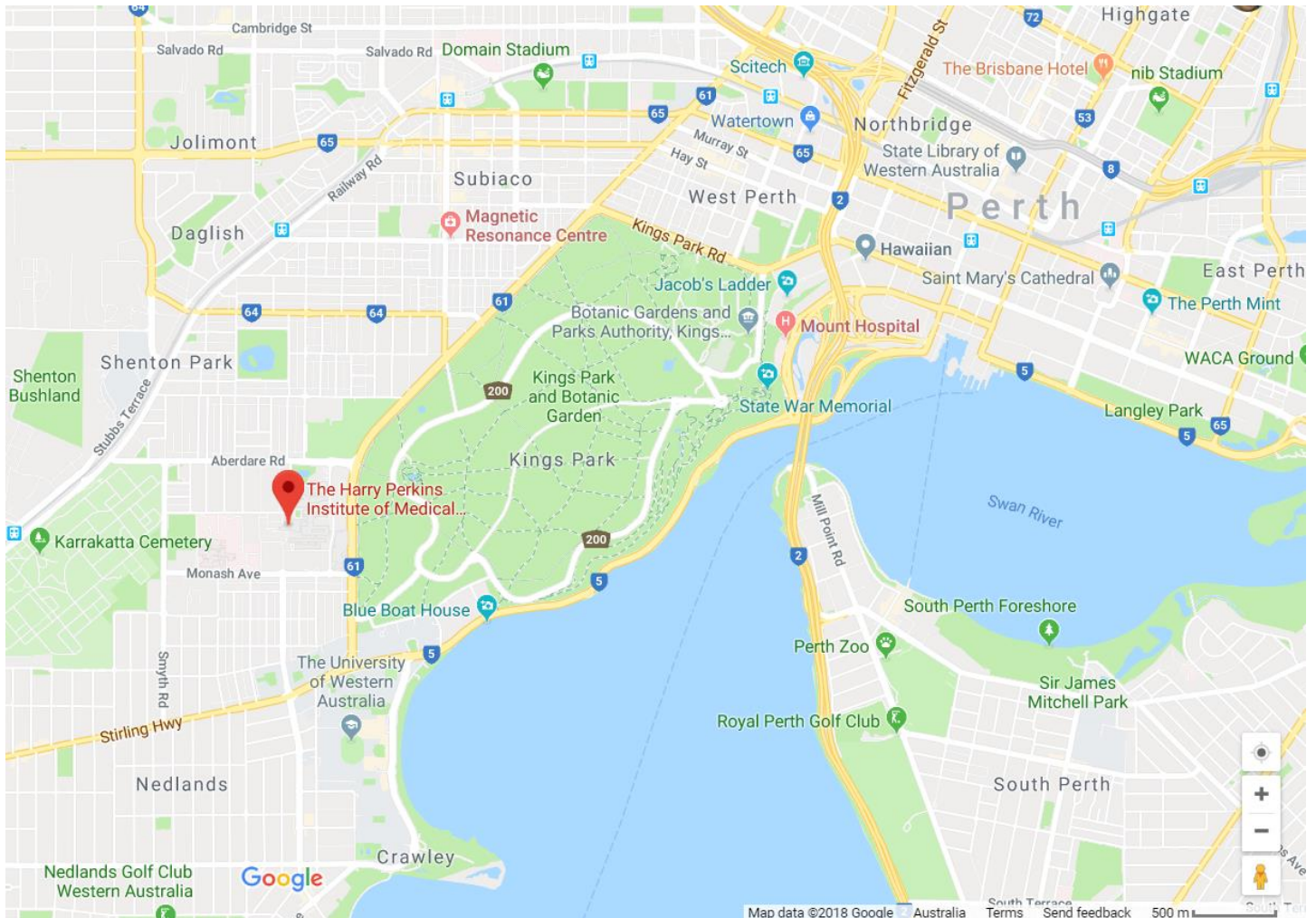
12:30-13:20 Lunch break			
14:50-15:30 Afternoon break			
Poster #	First name	Surname	Abstract title
1	Yuan	Chai	Laser polished fused deposition poly-lactic acid objects for personalized orthopaedic application
2	Ashley Ray	Wilson-Smith	Ongoing validation of the HALO© Digital Goniometer and VALD© Humantrak System
3	Marco	Palanca	The size of simulated lytic vertebral metastases affects the in vitro strain distribution
4	Rami MA	Al-Dirini	Micromechanics of the human proximal femur during physical activity
5	Dawei	Huang	Radiographic analysis of implant position and articular subsidence in tibial plateau fractures
6	XiaoJun	Chen	Association of reduced sclerostin expression with collapse process in patients with osteonecrosis of the femoral head
7	Jetske	Viveen	Three-dimensional micro-architecture of the proximal ulna
8	Dale	Robinson	Load response of an osseointegrated prosthesis for the treatment of unilateral transfemoral amputation
9	Yue	Ding	The mechanism of RIPK3/NLRP3 pathway in aseptic loosening caused by wear particles-induced macrophage activation in vitro
10	Yue	Ding	The mechanism of USP14/ NLRC5/NF-kB in aseptic loosening caused by wear particles-induced macrophage activation in vitro
11	Dermot	O'Rourke	Pre-clinical finite element modelling of patient and surgical variability in the primary stability of a cementless acetabular cup
12	Francois	Fraysse	Objective measures of changes in physical activity following total hip arthroplasty
13	Yongxian	Li	Risk factor analysis for re-collapse of cemented vertebrae after percutaneous vertebroplasty (PVP) or percutaneous kyphoplasty (PKP)

POSTERS on Day 3 (Sunday October 07) – Foyer, ground floor, Harry Perkins Institute (Perkins North), 6 Verdun St, Nedlands WA

12:30-13:20 Lunch break			
14:50-15:30 Afternoon break			
Poster #	First name	Surname	Abstract title
14	Iman	Roohani	A novel modular and strong scaffold for treatment of load bearing bone defects
15	Katrina	Browne	A novel disinfection strategy to prevent surgical site infection
16	Stephanie	Doyle	Melt electrospinning writing as reinforcement scaffolds of biofabricated articular human cartilage
17	Dezhi	Song	Cistanche deserticola polysaccharide attenuates osteoclastogenesis and bone resorption via inhibiting RANKL signaling and ROS production
18	Yue	Ding	The negative role of NOD2 in macrophage-induced aseptic joint loosening caused by wear particles in vitro and vivo
19	Yue	Ding	The mechanism of ZBTB20/ NF-kB signaling pathway in aseptic loosening caused by wear-particle-induced macrophage activation in vitro
20	Sarah	Ellis	Does the shape, size and location of deformity predict outcomes in arthroscopy for femoroacetabular impingement?
21	Yongxian	Li	Cement for treating osteoporotic vertebral compression fractures: Finite Element study and clinical outcomes
22	Samuel	Bennett	Gene mining and integration of the dento-skeletal field of the collaborative cross population
23	Saimurooban	Muralidaran	Inter-rater reliability and concurrent validity of a novel laser-guided goniometer
24	Jian-Ping	Wu	Confocal arthroscopy for detecting early osteoarthritis
25	Corey	Scholes	Defining treatment success in rotator cuff tear: A scoping review in the context of the WHO-ICF framework
26	Sudhir	Kumar	A rare case of a broken right femur implant secondary to Non-Articular Metallosis

Venue

**Harry Perkins Institute (Perkins North),
(McCusker Auditorium, ground floor, left hand side when entering from main doors),
6 Verdun St, 6009 Nedlands WA, Perth, Australia**



[Google map](#)

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