

## **DRAFT** CONFERENCE PROGRAMME

[Please note this may be subject to change]

## Monday 10<sup>th</sup> September

1335-1355

monday to deptember		
0815 onwards 0900	Registration and coffee Welcome to BORS 2018, Prof Mark Wilkinson, BORS President and Prof Sophie Williams for the local organising team	
0915-1045	Session 1: Orthopaedic Biomechanics Chairs Dr Richard van Akel and Amy Garner	
0915 0945-1045	Keynote presentation – Prof Paul Rullkoetter, University of Denver  1. Hip capsular function after arthroplasty Dr Richard van Arkel, Imperial College 2. Cortical Bone Spherical Indentation Modulus Correlates with the Elastic Modulus from Compression Testing and CT-measured Porosity Mr Oliver Boughton, Imperial College 3. Decellularisation affects the strain rate dependent and dynamic mechanical properties of a xenogeneic anterior cruciate ligament graft Dr Jennifer Edwards, University of Leeds 4. Biomechanical Testing for the in vitro Testing of Intervertebral Disc Nucleus Augmentation Devices Dr James Warren, University of Leeds 5. Estimation of viscoelastic bushing parameters of a musculoskeletal cervical spine model in impact scenarios Dr Sabina Gheduzzi, University of Bath 6. Physiological mechanical loading from voluntary wheel running promotes increased plasma membrane disruptions in osteocytes Dr Meghan McGee-Lawrence Medical College of Georgia, Augusta University	
1045-1200	Session 2: Poster teaser presentations ~30 presentations (2 minute pitch + transition time) Chairs / Organisers Dr Claire Brockett / Prof Sophie Williams	
1200-1315	Lunch and BORS AGM, Poster viewing	
1315-1445	Session 3: Translation of Orthopaedic Research into Clinic Chairs Mr Tom Kurien and Jake Bowd	
1315-1335	Keynote presentation – Dr Chaozong Liu, UCL	

Keynote presentation – Dr John Wilkinson, MHRA

1355-1445	<ol> <li>A Collagen-Based Soft Tissue Barrier Membrane with Periosteal Mesenchymal Stem Cell Homing Capability for Bone Defect Repair Ms Heather Owston, University of Leeds</li> <li>Introducing the Z-track method for cells-delivery injection in a model of atrophic non-union to prevent backflow leakage Dr Murthadah Jalal, University of Edinburgh</li> <li>Comparison of Different Tissue Processing Methods for Maximization of Bacterial Recovery</li> <li>Mr Mohamed Askar, University of Nottingham</li> <li>Genome-wide Expression Analysis of Human Osteoblasts on Prosthesis Surfaces following Clinically Relevant Cobalt and Chromium Exposure</li> <li>Dr Karan Shah, University of Sheffield</li> <li>Nanotubes improve Human Dermal Fibroblasts and Keratinocytes attachment on Intraosseous Transcutaneous Amputation prosthesis Ms Elena Giusto, UCL</li> </ol>
1445-1520	Session 4: Orthopaedic Research Outreach Chair Dr Susan Clarke
1445	Keynote presentation – Prof Julia Shelton, QMUL
1505	Keynote presentation – Patient involvement Speaker TBC
1520-1550	Coffee, Mini science-fair
1550-1640	Session 5: Manufacturing in Orthopaedics
	Chairs Dr Tony Herbert and Lekha Koria
1550	Combined Keynote – Prof Eileen Ingham and Prof Ruth Wilcox, Leeds
1620 -1640	1. The effect of pore size on bone marrow mesenchymal stem cell
	morphology, proliferation and mineralisation of bone in vitro.
	Dr Anita Sanghani Kerai UCL
	<ol><li>Nanotechnology based antimicrobial drug delivery system for</li></ol>
	orthopaedic application
	Dr Polina Prokopovich, Cardiff
	3. A biomimetic peptide/glycosaminoglycan hybrid hydrogel for
	nucleus pulposus augmentation therapy utilising minimally invasive
	methods
	Dr James Warren, University of Leeds

1645-1715 Presidential Prize Lecture – Professor Paul Gregg

Chair Prof Mark Wilkinson

1720-1750 Public Engagement Lecture – Prof Kate Robson-Brown, Bristol

Chair Dr Claire Brockett

1845 Coach pick up for dinner

1900 Conference dinner, Thackray Medical Museum

## Tuesday 11<sup>th</sup> September

0900-1030	Session 6: Trauma
	Chairs Dr Jerry Tsang and Alex Seghal
0900	Keynote presentation: Trauma Research - current scope and future horizons. Prof Ian Pallister, Swansea
0930-1030	<ol> <li>Mechanical Characterisation of the Lateral Collateral Ankle Ligaments Under Sprain-like Conditions</li> </ol>
	Dr Anthony Herbert, University of Leeds
	2. The treatment method and results of percutaneous pinning and dynamic external fixator application for unstable distal radius fractures Dr Burak Sena, Uskuda University, Turkey
	3. Stratification of decellularised porcine super flexor tendon for replacement of the anterior cruciate ligament
	Mr Samuel Whitaker, Leeds General Infirmary
	4. Development of a method for proper X-ray viewing of the leg in a clinically-relevant model of atrophic non-union
	Dr Murtadah Jalal, University of Edinburgh
	5. Comparison of vertebral body displacements obtained by DIC and motion capture in a cervical spine impact experiment
	Mr Stuart Boyd, University of Bath
	6. Computational modelling of tendons and ligaments, a pathway to
	understand damage mechanisms
	Dr Marlene Mengoni, University of Leeds
1030-1100	Coffee break, Poster viewing
1100-1250	Session 7: OATech Network
4400 4000	Chair Prof Cathy Holt and Prof Philip Rowe
1100-1200	OATech Research Presentations (details TBC)
1200-1250	The Biomechanical Characterisation of Subjects with Medial and Lateral Knee Focal Cartilage Defects
	Mr Nidal Khatib, University of Cardiff
	2. Epigenetic drugs as potent modulators in osteoarthritis
	Dr Maria de Andres, University of Southampton
	3. The in vivo compatibility, integration and regeneration of a
	decellularised porcine bone scaffold in an ovine model
	Dr Hazel Fermor, University of Leeds
	4. Universal drug delivery platform into cartilage
	Dr Polina Prokopovich, University of Cardiff
1250	BORS/BJR Travelling Fellowships
	Chair Prof Hamish Simpson
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1410-1540 **Session 8: Orthopaedic Outcomes** Chairs Mr Oliver Broughton and Ruben Doyle 1410 Keynote presentation – Prof Ashley Blom, University of Bristol 1440-1540 1. Bone Ageing Atlas Development: The UK Biobank Study Mr Moshen Farzi, University of Sheffield 2. Combining inertial sensors and principle component analysis to distinguish between knee rehabilitation exercises Dr Philippa Jones, University of Cardiff 3. Patellofemoral-arthroplasty improves gait in isolated patellofemoralarthritis, a prospective cohort gait analysis study Dr Aliya Choudury, St Georges 4. An evaluation of survival modelling approaches for personalised risk prediction after hip replacement for osteoarthritis Prof Mark Wilkinson, University of Sheffield 5. Stratifying the immune response to biomaterials: can cobaltmediated inflammation be prevented? Ms Amy Mawdsley, University of Nottingham 6. Relationship Between Differing Measures of Function Following Total Knee Arthroplasty Mr Maurice Griffin, University of Edinburgh 1540 -1600 Awards, Presidential Handover & thank yous - pass on to BORS2019

Chair Prof Mark Wilkinson

**CLOSE** 1600