

Posters

Oral Posters - Joint sessions

- OP1 AGEING EFFECTS ON FEMORAL NECK TRABECULAR BONE: ROLE IN HIP FRACTURE
CD Thomas^[1], PM Mayhew^{[2]}, JG Clement^[1], N Loveridge^[2], C J Burgoyne^[2], J Reeve^[2]*
^[1]Dental Science, Melbourne University, Australia; ^[2]Medicine & Engineering, Cambridge University, UK
- OP2 FRICTION AS A POTENTIAL CAUSE OF PARATENONITIS
PR Landham, L Nokes, C Byrne, D Dowson, C Dent, P Theobald*
Institute of Medical Engineering & Medical Physics, Cardiff University, Cardiff, UK
- OP3 AN OSTEOGENIC SCAFFOLD CARRIER FOR THE DELIVERY OF HUMAN MARROW STROMAL CELLS TO A MURINE CALVARIAL DEFECT
AJ Martin, JL Tremoleda, P Vadillo, N Khan, V Mann, BS Noble*
Musculoskeletal Tissue Engineering Collaboration, MRC Centre for Regenerative Medicine, University of Edinburgh Medical School, Edinburgh, UK
- OP4 DEVELOPMENT OF A COMBINATION VACCINE AGAINST STAPHYLOCOCCAL IMPLANT-RELATED INFECTION
E Edis, BE Scammell, R Bayston*
Division of Orthopaedic and Accident Surgery, University of Nottingham, UK
- OP5 TEMPORAL EXPRESSION OF PHOSPHO1 DURING CHICK LIMB BUD MESENCHYMAL CELL DIFFERENTIATION AND MINERALISATION
VE MacRae^{[1]}, MG Davey^[1], S Narisawa^[2], MC Yadav^[2], J L Millan^[2], C Farquharson^[1]*
^[1]Bone Biology Group, Roslin Institute, UK; ^[2]Burnham Institute for Medical Research, USA
- OP6 CHONDROPROTECTIVE STRATEGIES: INCREASING THE OSMOLARITY OF JOINT IRRIGATING SOLUTIONS
AK Amin^{[1,2]}, JS Huntley^[1], AHRW Simpson^[1], AC Hall^[2]*
^[1]Department of Orthopaedic and Trauma Surgery, University of Edinburgh, UK; ^[2]Centre for Integrative Physiology, School of Biomedical Sciences, University of Edinburgh, UK
- OP7 EVIDENCE FOR ADENOSINE RECEPTOR REGULATION OF OSTEOGENESIS VERSUS ADIPOGENESIS IN MESENCHYMAL STEM CELLS
B Gharibi^{[1,2]}, C Elford^[1], BM Lewis^[2], J Ham^[2], BAJ Evans^[1]*
^[1]Department of Child Health, School of Medicine, Cardiff University, Heath Park, Cardiff CF 14 4XN, UK; ^[2]Centre for Endocrinology and Diabetes Sciences, School of Medicine, Cardiff University, Heath Park, Cardiff CF 14 4XN, UK

- OP8 FROG GLUE ENHANCES ROTATOR CUFF REPAIR EX VIVO
NL Millar^{[1,2]}, TA Bradley^[1], NA Walsh^[1], IR Appleyard^[1], MJ Tyler^[1], GAC Murrell^[1]*
^[1]Orthopaedic Research Institute, St. George Hospital Campus, University of New South Wales, Sydney, Australia; ^[2]West of Scotland Orthopaedic Training Programme, Glasgow, UK
- OP9 GLUTAMATE TRANSPORTER INHIBITORS INFLUENCE OSTEOBLAST GENE EXPRESSION
K Brakspear^{[1]}, P Parsons^[2], DJ Mason^[1]*
^[1]School of Biosciences, Cardiff University, Cardiff, CF10 3US, UK; ^[2]Smith and Nephew Research Centre, York Science Park, York, YO10 5DF, UK
- OP10 COMPARATIVE STUDY ON THE POTENTIAL USE OF DIFFERENT HUMAN CELL TYPES IN CARTILAGE TISSUE ENGINEERING
S Saha^{[1]}, J Kirkham^[1], D Wood^[1], S Curran^[2], XB Yang^[1]*
^[1]Department of Oral Biology, University of Leeds, Leeds LS2 9LU, UK; ^[2]Smith & Nephew Research Centre, York Science Park, Heslington, York YO10 5DF, UK
- OP11 HYPOXIA FACILITATES BONE INVASION BY INCREASING BREAST CANCER CELL EXPRESSION OF MATRIX METALLOPROTEINASE-1
KS Rankin, CH Gerrand, RL Lakey, AP Sprowson, AW McCaskie, MA Birch*
Musculoskeletal Research Group, University of Newcastle upon Tyne, UK
- OP12 THE CARTILAGE MATRIX BIOLOGY OF ANTEROMEDIAL OSTEOARTHRITIS OF THE KNEE
S M McDonnell^{[1]}, R Rout^[1], A P Hollander^[2], I M Clark^[3], R Davidson^[3], T Simms^[2], D W Murray^[1], H S Gill^[1], P A Hulley^[1], A J Price^[1]*
^[1]Nuffield Department of Orthopaedic Surgery, University of Oxford, UK; ^[2]Academic Department of Rheumatology, University of Bristol, UK; ^[3]University of East Anglia, Norwich, UK

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- BORS-OP1 IS THERE A BENEFIT FROM IMMEDIATE BROTH CULTURE OF INTRA-OPERATIVE MUSCULOSKELETAL SPECIMENS?
S Ahmad, AHRW Simpson*
^[1]Department of Trauma and Orthopaedics, Royal Infirmary of Edinburgh and University of Edinburgh, UK
- BORS-OP2 IN VITRO WEAR TESTS OF ORTHOPAEDIC BIOPOLYMERS WITH A VISCO-SUPPLEMENT ADDED TO THE LUBRICANT
TJ Joyce, YH Huang*
School of Mechanical and Systems Engineering, Newcastle University, Newcastle upon Tyne, UK
- BORS-OP3 FUNCTIONAL OUTCOME FOLLOWING HIP RESURFACING: THE IMPORTANCE OF COMPONENT SIZE AND ACETABULAR ORIENTATION
SS Jameson, DJ Langton, AVF Nargol*
Joint Replacement Unit, University Hospital of North Tees, Hardwick, Stockton-on-Tees, UK
- BORS-OP4 *Withdrawn*

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BORS-OP5 INDICATIONS FOR TOTAL KNEE ARTHROPLASTY IN THE VALGUS KNEE- IS THE SIGNIFICANCE OF INSTABILITY TRULY UNDERSTOOD?
A Prasthofer, L Unitt, A Sambatakakis*
Department of Orthopaedics, Solihull Hospital, Solihull, UK

BORS-OP6 DOUBLE BUNDLE ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION USING THE CALAXO OSTEOCONDUCTIVE INTERFERENCE SCREW
A Getgood, M Kent, I McNamara, A Dickinson, H Elmadbouh, T Bhullar*
Edith Cavell Hospital, Peterborough, UK

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BORS-P01 A KINEMATIC ASSESSMENT OF NORMAL ELBOW MOVEMENT IN ACTIVITIES OF MODERN DAY LIVING
A Sinha^[1], J Moorehead^[2], V Bhalai^[1], P Brownson^[1]*
^[1]Department of Orthopaedics, Royal Liverpool and Broadgreen University Hospital, Liverpool, UK; ^[2]Department of Orthopaedics, University Hospital Aintree, Liverpool, UK

BORS-P02 A MURINE MODEL OF INTERNAL PLATE FIXATION
T Savaridas, AY Muir, MS Gaston, BS Noble, AHRW Simpson*
Musculoskeletal Tissue Engineering Collaboration, The University of Edinburgh, UK

BORS-P03 A NEW WAY TO DRILL ACL TUNNELS
A Karim^[1], J Thomas^[1], NP Thomas^[2], G Puddu^[1], AA Amis^[1]*
^[1]Imperial College London, UK; ^[2]North Hampshire Hospital, UK

BORS-P04 A PILOT STUDY OF THE MECHANICAL BEHAVIOUR OF SPINAL METASTASES PRE- AND POST-VERTEBROPLASTY
RJ Oakland^[1], NR Furtado^[1], J Timothy^[2], RM Hall^[1]*
^[1]School of Mechanical Engineering, University of Leeds, UK; ^[2]Neurosurgery, Leeds Teaching Hospitals Trust, UK

BORS-P05 A PRELIMINARY CADAVERIC STUDY INVESTIGATING THE BIOMECHANICAL EFFECTIVENESS OF PROPHYLACTIC VERTEBRAL AUGMENTATION ADJACENT TO VERTEBROPLASTY UNDER CYCLIC LOADING
RJ Oakland^[1], NR Furtado^[1], RK Wilcox^[1], J Timothy^[2], RM Hall^[1]*
^[1]School of Mechanical Engineering, University of Leeds, UK; ^[2]Neurosurgery, Leeds Teaching Hospitals Trust, UK

BORS-P06 A ROLE FOR MEMBRANE TRANSPORT PROTEINS IN GROWTH PLATE CHONDROCYTE HYPERTROPHY; AN IMMUNOHISTOCHEMICAL STUDY
PG Bush, AC Hall*
Centre for Integrative Physiology, University of Edinburgh, UK

BORS-P07 ANTHROPOMETRIC MEASUREMENTS OF KNEE JOINT IN INDIAN POPULATION: CO-RELATION WITH CURRENT KNEE ARTHROPLASTY SYSTEMS
VB Bagaria^[1], NS Harshavardhana^[2], VR Sapre^[1], AS Chadda^[1]*
^[1]NIIDAN Orthopaedic Centre, Nagpur, INDIA; ^[2]Queen's Medical Centre, Nottingham, UK

BORS-P08 ARTHROPLASTY FOR POST TRAUMATIC OSTEOARTHRITIS OF THE INDEX FINGER METACARPOPHALANGEAL JOINT IN YOUNG INDIVIDUAL
J Velpula, V Gupta, M Madhu, D Cohen, L Sanz, A Abraham, A Muhamad, M Waseem*
Macclesfield District General Hospital, Macclesfield, UK

BORS-P09 AUDIT AND RE-AUDIT OF THE USE OF BONE PROTECTION TREATMENT IN ELDERLY PATIENTS WHO ATTENDED WITH FALLS IN HULL ROYAL INFIRMARY
MM Lynn, VM Konala, RK Bachuwar, MH Khan*
Department of Medicine for Elderly, Hull Royal Infirmary, East Yorkshire, UK

BORS-P10 *Withdrawn*

BORS-P11 BIOMECHANICAL EVALUATION OF CEMENT-IN-CEMENT INTERFACE IN HIP REVISION SURGERY
G Rudol^[1], R Wilcox^[2], E Tsiridis^[3]*
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BORS-P12 BONE AND JOINT CIRCULATION REVISITED
*MC Beverly**
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BORS-P13 BONE MORPHOGENETIC PROTEINS 1 TO 7 IN HUMAN BREAST CARCINOMAS EXPRESSION PATTERN AND CLINICAL AND PROGNOSTIC RELEVANCE
SR Davies^[1], G Watkins^[2], A Douglas-Jones^[2], RE Mansell^[2], WG Jiang^[2]*
^[1]Department of Orthopaedics, University Hospital of Wales, Cardiff, UK; ^[2]Metastasis and Angiogenesis Research Group, Department of Surgery, University Hospital of Wales, Cardiff, UK

BORS-P14 CHONDROCYTE DEATH IN MECHANICALLY INJURED ARTICULAR CARTILAGE - THE INFLUENCE OF EXTRACELLULAR CALCIUM
AK Amin^[1,2], JS Huntley^[1], PG Bush^[2], AHRW Simpson^[1], AC Hall^[2]*
^[1]Department of Orthopaedic and Trauma Surgery, University of Edinburgh, UK; ^[2]Centre for Integrative Physiology, School of Biomedical Sciences, University of Edinburgh, UK

BORS-P15 CHROMIUM, COBALT AND TITANIUM METALLOSIS FOLLOWING A FAILING NOTTINGHAM SHOULDER REPLACEMENT
WS Khan^[1], M Agarwal^[2], AG Cox^[3], J Denton^[1], EM Holt^[2]*
^[1]Faculty of Life Sciences, University of Manchester, Manchester, M13 9PT, UK; ^[2]Wythenshawe Hospital, South Manchester University Teaching Hospitals NHS Trust, Manchester, M23 9LT, UK; ^[3]Centre of Analytical Sciences, Dainton Building, University of Sheffield, Sheffield, S3 7HF, UK

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- BORS-P16** COMPARISON BETWEEN CLOSED WOUND DRAINAGE AND NO DRAINAGE IN TOTAL KNEE ARTHROPLASTY
*J Velpula**, *A Malhotra*, *J Singh*, *H Raja*,
T Poonacha, *M Benton*, *P Denn*
 Macclesfield District General Hospital, Macclesfield, UK
- BORS-P17** CORELATION OF PERIOPERATIVE FRACTURES OF THE FEMUR & TIBIA IN COMPUTER ASSISTED TOTAL KNEE ARTHROPLASTY WITH RIGID BODY TRAJECTORY
*M Bhattacharyya**, *B Gerber*
 University Hospital Lewisham, London, UK
- BORS-P18** *Withdrawn*
- BORS-P19** DETERMINING HUMAN SKELETAL MUSCLE VOLUME USING 3D FREEHAND ULTRASOUND
*E Ross**^[1], *TJ MacGillivray*^[2], *AHRW Simpson*^[1],
CA Greig^[3]
^[1]Edinburgh Orthopaedic Engineering Centre, University of Edinburgh, Edinburgh Royal Infirmary; UK^[2]Wellcome Trust Clinical Research Facility, University of Edinburgh, UK;^[3]Department of Clinical and Surgical Sciences, University of Edinburgh, UK
- BORS-P20** *Withdrawn*
- BORS-P21** DOES ECHOCARDIOGRAPHIC CARDIAC FUNCTION CORRELATE WITH FRACTURED NECK OF FEMUR OUTCOME?
*J Velpula**, *A Mallick*, *S Williams*
 Leicester Royal Infirmary, Leicester, UK
- BORS-P22** DOES THE RATE OF DEFORMATION AFFECT THE MECHANICAL RESPONSE OF DURA MATER?
*KC Persson**^[1], *S Evans*^[2], *JL Summers*^[1],
RM Hall^[1]
^[1]School of Mechanical Engineering, University of Leeds, UK;^[2]School of Engineering, Cardiff University, UK
- BORS-P23** *Withdrawn*
- BORS-P24** ELEMENTAL ANALYSIS OF PERIPROSTHETIC TISSUES BY LA-ICP-MS AND ICP-MS
*J Denton**^[1], *J Doyle*^[2], *A Cox*^[3]
^[1]Department Laboratory Medicine, University of Manchester, UK;^[2]Fairfield Hospital, Penine Hospital Trust, UK;^[3]Centre Analytical Sciences, Department of Chemistry, Sheffield University, UK
- BORS-P25** ENHANCED OSTEOBLASTIC DIFFERENTIATION BY STROMAL CELL-DERIVED FACTOR-1 IN HUMAN MESENCHYMAL STEM CELLS
*CY Ho**, *J Hua*, *P Kalia*, *GW Blunn*
 Centre for Biomedical Engineering, Institute of Orthopaedics Musculoskeletal Science, University College London, UK
- BORS-P26** ENHANCING THE WOUND COVERAGE DURING BONE TRANSPORT FOR INFECTED NON UNION OF TIBIA: REPORT OF A SIMPLE TECHNIQUE
*BV Somanchi**, *S Khan*
 Limb Reconstruction Unit, Salford Royal Hospital, UK
- BORS-P27** FACTORS AFFECTING PULLOUT STRENGTH OF CANNULATED CANCELLOUS BONE SCREWS
*NA Ferran**^[1], *A Manoj-Thomas*^[1], *S L Evans*^[2],
DP Thomas^[1]
^[1]Department of Trauma and Orthopaedics, University Hospital of Wales, Heath Park, Cardiff, UK;^[2]School of Engineering, Cardiff University, The Parade, Cardiff, UK
- BORS-P28** *Withdrawn*
- BORS-P29** FEMORAL CANAL PREPARATION AND INTRAMEDULLARY PRESSURE - BROACH DESIGN CONSIDERATIONS
*A Roques**^[1], *K Echlin*^[2], *T Bird*^[1],
D Lawrence-Watt^[2], *A Taylor*^[1]
^[1]Finsbury Development Ltd, Leatherhead, KT22 7BA, UK;^[2]Brighton and Sussex Medical School, UK
- BORS-P30** FEMORAL SUBTROCHANTERIC FRACTURE AND LONG-TERM BIPHOSPHONATE THERAPY: IS THERE AN ASSOCIATION?
*S Das De**, *T Setiobudi*, *S Das De*
 Department of Orthopaedic Surgery, National University Hospital, Singapore
- BORS-P31** FLUID SHEAR STRESSES IN FLEXCELL(TM) DEVICE
*S Abercrombie**^[1], *C-E Ott*^[2], *FH Bleckwehl*^[3],
GN Duda^[3], *Y Ventikos*^[1], *MS Thompson*^[1]
^[1]Institute of Biomedical Engineering, Department of Engineering Science, University of Oxford, UK;^[2]Institute for Medical Genetics, Charite - Universitaetsmedizin Berlin, Germany;^[3]Center for Musculoskeletal Surgery, Charite - Universitaetsmedizin Berlin, Germany
- BORS-P32** HEALING OF A SEGMENTAL BONE DEFECT USING TRUFIT SCAFFOLD - RHBMP-2 CONSTRUCTS
*EA Horner**^[1], *J Kirkham*^[1], *D Wood*^[1],
S Curran^[2], *X Yang*^[1]
^[1]Department of Oral Biology, Leeds Dental Institute, University of Leeds, Leeds LS2 9LU, UK;^[2]Smith & Nephew Research Centre, York Science Park, Heslington, York YO10 5DF, UK
- BORS-P33** *Withdrawn*
- BORS-P34** INFLUENCE OF BONE QUALITY IN THE STABILITY OF IMPLANT FIXATION
*SV Karuppiah**^[1,2], *AJ Johnstone*^[1,2]
^[1]Dept of Trauma & Orthopaedic Surgery, Aberdeen Royal Infirmary, Aberdeen, UK;^[2]Dept of Mechanical Engineering, Robert Gordon University, Aberdeen, UK
- BORS-P35** INTERVERTEBRAL DISC DEFECT FOLLOWING COLLAGENASE ENZYME INJECTION: AN EXPERIMENTAL STUDY IN BOVINE COCCYGEAL INTERVERTEBRAL DISC
*A Rafee**, *T Freemont*
 School of Clinical & Laboratory Sciences, Stopford Building, The University of Manchester, UK
- BORS-P36** LEARNING FROM THE DEER ANTLER MODEL: USING LAMININ-5 TO SEAL SKIN TO TRANSCUTANEOUS ORTHOPAEDIC IMPLANTS
*DD Bhagawati**^[1], *CJ Pendegrass*^[2], *GW Blunn*^[2]
^[1]Department of Orthopaedics, St Mary's Hospital, London, UK;^[2]Department of Biomedical Engineering, University College London, UK

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- BORS-P37** LEWINNEK'S SAFE ZONE AND INCIDENCE OF DISLOCATION AFTER COMPUTER-ASSISTED POSITIONING OF THE ACETABULAR CUP FOR TOTAL HIP ARTHROPLASTY BASED ON JOINT KINEMATICS
*M Bhattacharyya**, *B Gerber*
University Hospital Lewisham, London, UK
- BORS-P38** MENISCAL SUTURE WITH ACL RECONSTRUCTION: LONG TERM OUTCOME
*A Karim**, *JRD Murray*, *H Pandit*, *F Wandless*, *NP Thomas*
North Hampshire Hospital, UK
- BORS-P39** MICRO-CT VOLUME MEASUREMENT FOR WEAR SIMULATION
*RE Vicars**, *J Fisher*, *RM Hall*
Institute of Medical and Biological Engineering, School of Mechanical Engineering, University of Leeds, UK
- BORS-P40** MICROMECHANICAL CHARACTERISATION OF SOFT TISSUE: NEW TEXTURE METHOD AND PRELIMINARY RESULTS
*MS Thompson**, *J Grice*, *D O'Neill*, *H Schiffter*
Institute of Biomedical Engineering, Department of Engineering Science, University of Oxford, UK
- BORS-P41** MODULAR ENDOPROSTHETIC RECONSTRUCTION FOR INFECTED RE-REVISION PROSTHESIS : INITIAL EXPERIENCE
*M Ramappa**, *A Port*, *I McMurtry*
Department Of Orthopaedics, James Cook University Hospital, Middlesbrough, TS4 3BW, UK
- BORS-P42** NEW METHOD OF SCOLIOSIS DEFORMITY ASSESSMENT: ISIS 2 SYSTEM
*A Zubovic**, *N Davies*, *F Berryman*, *NA Quraishi*, *C Lavy*, *G Bowden*, *J Wilson-MacDonald*, *J Fairbank*
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- BORS-P43** OSTEOARTHRITIS HISTOPATHOLOGY SCORING SYSTEMS
*SS Shu**, *RG Pearson*, *BE Scammell*
Orthopaedic & Accident Surgery, University of Nottingham, Nottingham, NG7 2UH, UK
- BORS-P44** OUR ORTHOGERIATRIC PATHWAY SO FAR FOR FRACTURED NECK OF FEMUR PATIENTS
*BE Gerber**, *E Aitken*
University Hospital Lewisham, London, UK
- BORS-P45** PEDOBAROGRAPHIC ASSESSMENT FOLLOWING RUPTURE OF THE TENDO ACHILLIS
*RS Hardcastle**, *K Dunn*, *C Modi*, *ML Costa*
Warwick Orthopaedics, University of Warwick, Coventry, UK
- BORS-P46** PHYSIOLOGICAL FREE BOUNDARY CONDITION MUSCULO-SKELETAL MODELLING OF THE PELVIS AND FEMUR
*ATM Phillips**
Department of Civil and Environmental Engineering, Imperial College London, UK
- BORS-P47** PLATELET RICH CONCENTRATE AND BONE FORMATION: INTERACTION OF PLATELET RICH CONCENTRATE WITH BONE GRAFT MATERIALS
*A Butcher**^[1], *K Ellis*^[1], *R Milner*^[1], *P Carter*^[2], *T Watson*^[3], *A Horner*^[1]
^[1]Smith & Nephew, Trauma and Clinical Therapies, Research Centre, York Science Park, Heslington, York, YO10 5DF, UK; ^[2]Smith & Nephew Inc, Trauma and Clinical Therapies, Memphis, TN, USA; ^[3]Saint Louis University, Dept. of Orthopaedic Surgery, St. Louis, MO, USA
- BORS-P48** PROTECTION OF THE BONE WITH A SKELETALLY-ATTACHED PROSTHESIS FOR TRANSFEMORAL AMPUTATION
*LK Newcombe**^[1'2], *ME Dewar*^[1], *P Frommel*^[1], *GW Blunn*^[2]
^[1]Department of Mechanical Engineering, University College London, UK; ^[2]Centre for Biomedical Engineering, Institute of Orthopaedics and Musculoskeletal Science, University College London, UK
- BORS-P49** QUANTITATIVE DENSITY INFORMATION WITH COMPUTED RADIOGRAPHY
*SP Dawson**^[1], *TJ MacGillivray*^[2], *AY Muir*^[1], *AHRW Simpson*^[1]
^[1]Edinburgh Orthopaedic Engineering Centre, University of Edinburgh, UK; ^[2]Wellcome Trust Clinical Research Facility, Western General Hospital, Edinburgh, UK
- BORS-P50** RAPID PROTOTYPING TECHNOLOGY (RPT) FOR SPINAL DEFORMITY: A CASE REPORT
*NS Harshavardhana**^[1], *BJC Freeman*^[1], *VB Bagaria*^[2], *AM Kuthe*^[3]
^[1]Queen's Medical Center, Nottingham, UK; ^[2]Central India Inst of Medical Sciences, Nagpur, India; ^[3]Visvesvaraya National Inst of Technology, Nagpur, India
- BORS-P51** RECONSTRUCTION OF POSTERO-LATERAL INSTABILITY OF THE ELBOW WITH FCR GRAFT -A PROSPECTIVE STUDY
*J Velpula**, *A Malhotra*, *J Singh*, *M Madhu*, *L Sanz*, *M Waseem*
Macclesfield District General Hospital, Macclesfield, UK
- BORS-P52** REDUCING EXPOSURE TO METAL IONS FOLLOWING HIP RESURFACING: THE IMPORTANCE OF ACETABULAR ORIENTATION
DJ Langton^[1], *SS Jameson**^[1], *TJ Joyce*^[2], *J Webb*^[1], *AVF Nargol*^[1]
^[1]Joint Replacement Unit, University Hospital of North Tees, Hardwick, Stockton-on-Tees, UK; ^[2]Centre for Rehabilitation and Engineering Studies, School of Mechanical and Systems Engineering, Newcastle University, Newcastle upon Tyne, UK
- BORS-P53** REFINEMENT OF THE CLINICAL INDICATIONS FOR DYNAMIC NEUTRALISATION SYSTEM FOR THE SPINE FOR THE TREATMENT OF BACKPAIN
F Dakhil-Jerew, *P Chan**, *Y Yallapragada*, *J Shepperd*
Conquest Hospital, Hastings, UK

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- BORS-P54** RESULTS OF METAL ON METAL HIP ARTHROPLASTY IN PATIENTS YOUNGER THAN 40 YEARS
*BP Wilson**, *AD Pendse*, *S Hassan*, *S Bitar*, *S Al-Naser*, *MS Bhamra*
Rotherham General Hospital, Rotherham UK
- BORS-P55** ROLE OF TRIPOLAR HIP WITH CONSTRAINED ACETABULAR INSERT IN REVISION ARTHROPLASTY: EARLY RESULTS
*M Ramappa**, *A Por*
Department Of Orthopaedics, James Cook University Hospital, Middlesbrough, TS4 3BW, UK
- BORS-P56** SEPTIC ARTHRITIS OF NATIVE HIP JOINTS: GIRDLESTONE AND BEYOND
*BJF Dean**, *PC Matthews*, *K Medagoda*, *BL Atkins*, *AR Berendt*, *I Byren*
Nuffield Orthopaedic Centre, Oxford, UK
- BORS-P57** STAPHYLOCOCCAL BINDING TO BONE: FURTHER UNDERSTANDING OF THE BONE SIALOPROTEIN - BINDING PROTEIN AND SDR PROTEINS
*E Edis**
Division of Orthopaedic and Accident Surgery, University of Nottingham, UK
- BORS-P58** STATISTICAL ANALYSIS OF PELVIC GEOMETRY
*SG Clarke**, *ATM Phillips*
Department of Civil Engineering, Imperial College London, UK
- BORS-P59** SUBCHONDRAL BONE OSTEOBLASTS CAN INDUCE CHONDROCYTE MINERALIZATION DURING OSTEOARTHRITIS AND THIS PROCESS IS RELEVANT TO CARTILAGE DEGRADATION
*I Prasadam**, *R Crawford*, *Y Xiao*
Institute of Health and Biomedical Innovation, Queensland University of Technology, Australia
- BORS-P60** THE COMPRESSIVE PROPERTIES AND FRACTURE TOUGHNESS OF PMMA CEMENT REINFORCED WITH GLASS FLAKE
E Bialoblocka-Juszczak[1,3,4], *RJ Oakland**[1], *N Kapur*[1], *NL Bubb*[2], *D Wood*[2], *M Baleani*[4], *RM Hall*[1]
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- BORS-P61** THE CORRECTION OF THE INTERMETATARSAL ANGLE FOLLOWING FUSION OF THE FIRST METATARSOPHALANGEAL JOINT : WHAT CAN WE EXPECT?
*SKV Pydah**, *EM Toh*, *A Sinha*, *SP Sirikonda*, *CR Walker*
The Royal Liverpool & Broadgreen University Hospital NHS Trust, Liverpool, UK
- BORS-P62** THE EFFECT UPON STANDING LOAD DISTRIBUTIONS WITH LEG LENGTH DISCREPANCY
*M Cartwright-Terry**, *JD Moorehead*, *A Bowey*, *SJ Scott*
Department of Trauma and Orthopaedic Surgery, University Hospital Aintree, Liverpool, UK
- BORS-P63** THE EFFECTS OF CISPLATIN AND DOXORUBICIN ON ADULT AND IMMATURE RAT SKELETON
*CY Ho**[1], *OK Lee*[2,3], *GW Blunn*[1]
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- BORS-P64** THE IMPACT OF BONE FRAGMENT DIMENSIONS ON A VERTEBRAL TRAUMA
*KC Persson**, *S McLure*, *JL Summers*, *RM Hall*
School of Mechanical Engineering, University of Leeds, UK
- BORS-P65** THE M2 DASH- MANCHESTER-MODIFIED DISABILITIES OF ARM SHOULDER AND HAND SCORE
*WS Khan**[1], *B Dillon*[2], *L Clarke*[3], *M Fehily*[4], *M Ravenscroft*[1]
[1]Department of Trauma and Orthopaedics, Stockport NHS Foundation Trust, Stepping Hill Hospital, Poplar Grove, Hazel Grove, Stockport, SK7 2PE, UK; [2]Department of Medical Statistics, South Manchester University Teaching Hospital NHS Trust, Wythenshawe Hospital, Manchester M23 9LT, UK; [3]Department of Trauma and Orthopaedics, Pennine Acute Hospitals NHS Trust, Rochdale Infirmary, Rochdale, Manchester, OL5 4OT, UK; [4]Department of Trauma and Orthopaedics, Royal Bolton Hospitals NHS Trust, Royal Bolton Hospital, Minerva Road, Farnworth, Bolton, Lancashire, BL4 3FY, UK
- BORS-P66** THE STABILITY OF A PIN IMPLANT IN AN OVARECTOMISED RAT MODEL
*KL Skelton**, *N Rushton*, *RA Brooks*
Orthopaedic Research Unit, Addenbrooke's Hospital, University of Cambridge, Hills Road, Cambridge CB2 2QQ, UK
- BORS-P67** UPPER GI-TRACT ENDOSCOPY RESULTS IN PATIENTS WITH ABDOMINAL SIDE EFFECTS ACCOMPANYING BISPHOSPHONATE AND STRONTIUM RANELATE THERAPY
*R Filip**[1], *B Jarosz*[2]
[1]Department of Endoscopy, Institute of Agricultural Medicine, Jaczewskiego 2, 20-950 Lublin, Poland; [2]Department of Pathology, Medical University of Lublin, A Raclawickie, Lublin, Poland
- BORS-P68** USE OF NAVIGATION SYSTEM FOR INTRA-OPERATIVE EVALUATION OF ACCURATE PLACEMENT OF BONE TUNNELS IN RECONSTRUCTION OF THE ANTERIOR CRUCIATE LIGAMENT
*M Bhattacharyya**, *B Gerber*
University Hospital Lewisham, London, UK
- BORS-P69** VERTEBRAL FRACTURE ASSESSMENT (USING DXA) IS A PRECISE METHOD OF MEASURING INTERVERTEBRAL DISC HEIGHT
*CJ Heales**[1], *KM Knapp*[1], *ML Frost*[2], *R Patel*[2], *AEB Moore*[2], *TD Spector*[2], *I Fogelman*[2]
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Oral Posters - BRS

- BRS-OP1** SULFORAPHANE - A NEW THERAPY FOR MULTIPLE MYELOMA?
RM Locklin^[1], PA Hulley^[1], RGG Russell^[1], CM Edwards^[2]*
^[1]Institute of Musculoskeletal Sciences, Botnar Research Centre, Nuffield Department of Orthopaedic Surgery, University of Oxford, Oxford, UK; ^[2]Department of Cancer Biology, Vanderbilt University Medical Center, Nashville, Tennessee, USA
- BRS-OP2** ETHNIC DIFFERENCES IN FIBROBLAST GROWTH FACTOR 23 AND PHOSPHATE EXCRETION IN RESPONSE TO PHOSPHATE LOADING
L Du^[1], L Yan^[1], I Schoenmakers^[1], B Zhou^[2], LM Jarjou^[3], S Nigdikar^[1], GR Goldberg^[1,3], A Prentice^[1,3]*
^[1]MRC Human Nutrition Research, Elsie Widdowson Laboratory, Fulbourn Road, Cambridge, UK; ^[2]Department of Preventive Medicine, Shenyang Medical College, Shenyang, PR China; ^[3]MRC Keneba, The Gambia
- BRS-OP3** A RANDOMIZED CONTROL TRIAL OF ONCE WEEKLY RISEDRONATE FOR PREVENTION OF BONE LOSS OBSERVED IN A SINGLE FLARE-UP OF INFLAMMATORY BOWEL DISEASE
MH Kriel^[1], CSJ Probert^[1], TJ Creed^[2], M Lockett^[3], AJ Bell^[4], D Linehan^[5], JH Tobias^[1]*
^[1]Department of Clinical Sciences at South Bristol, University of Bristol, UK; ^[2]Department of Gastroenterology, Bristol Royal Infirmary, Bristol, UK; ^[3]Department of Medicine, Frenchay Hospital, Bristol, UK; ^[4]Department of Medicine, Weston-Super-Mare General Hospital, Weston-Super-Mare, UK; ^[5]Department of Medicine, Royal United Hospital, Bath, UK
- BRS-OP4** *Withdrawn*
- BRS-OP5** ORAL CALCIUM SUPPLEMENTATION REVERSES THE BIOCHEMICAL PICTURE OF PARATHYROID HORMONE RESISTANCE IN UNDERPRIVILEGED INDIAN TODDLERS
M Z Mughal^[1], A Khadilka^[2], N Hanumante^[3], M Sayyad^[4], N Sanwalka^[5], V Khadilkar^[2], M Vaidya^[6], A Joshi^[3]*
^[1]Saint Mary's Hospital for Women & Children, Manchester, UK; ^[2]Hirabai Cowasji Jehangir Medical Research Institute, Pune, India; ^[3]Poona Medical Foundation Research Center, Pune, India; ^[4]Abeda Inamdar Senior College, Pune, India; ^[5]Pune University, Pune, India; ^[6]Cummins College of Engineering, Pune, India
- BRS-OP6** A RANDOMIZED CONTROLLED TRIAL OF THE EFFECTS OF VITAMIN D SUPPLEMENTATION UPON MUSCLE POWER IN ADOLESCENT GIRLS
KA Ward^[1], G Das^[2], J Berry^[1], SA Roberts^[1], JE Adams^[1], MZ Mughal^[3]*
^[1]University of Manchester, UK; ^[2]Central Manchester Primary Care Trust, UK; ^[3]Central Manchester & Manchester Children's University Hospitals NHS Trust, UK

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- BRS-P01** 3D FINITE ELEMENT ANALYSIS OF X-RAY IMAGES FOR BONE STRENGTH ASSESSMENT
S Pisharody^[1,2], R Phillips^[1], CM Langton^[2]*
^[1]Department of Computer Science, University of Hull, UK; ^[2]Hull and East Yorkshire Hospitals NHS Trust, UK
- BRS-P02** A COMPUTATIONAL MODEL RELATING 2D CELL SPREADING TO 3D SCAFFOLD COLONIZATION FOR SKELETAL TISSUE REGENERATION
BG Sengers^[1], CP Please^[2], M Taylor^[3], ROC Oreffo^[1]*
^[1]Bone & Joint Research Group, University of Southampton, UK; ^[2]School of Mathematics, University of Southampton, UK; ^[3]School of Engineering Sciences, University of Southampton, UK
- BRS-P03** A LONGITUDINAL STUDY OF CHANGES IN BONE MASS IN WOMEN WITH INFLAMMATORY ARTHRITIS USING DIGITAL X-RAY RADIOGRAMMETRY : RESULTS FROM THE NORFOLK ARTHRITIS REGISTER (NOAR)
SR Pye^[1], JE Adams^[2], KA Ward^[2], DPM Symmons^[1], TW O'Neill^[1]*
^[1]ARC Epidemiology Unit, The University of Manchester, Manchester, UK; ^[2]Clinical Radiology, Imaging Science and Biomedical Engineering, The University of Manchester, UK
- BRS-P04** A NOVEL IN VITRO MODEL OF OSTEOARTHRITIS FACILITATES IMPROVED UNDERSTANDING OF HUMAN ARTICULAR CHONDROCYTE BEHAVIOUR
KS Rankin, RL Lakey, CH Gerrand, AP Sprowson, AW McCaskie, MA Birch*
Musculoskeletal Research Group, University of Newcastle upon Tyne, UK
- BRS-P05** A RETROSPECTIVE AUDIT OF THE USE OF PAMIDRONATE FOR FIBROUS DYSPLASIA
L Russell, MS Cooper*
Royal Orthopaedic Hospital, Birmingham, UK
- BRS-P06** ASSAY PERFORMANCE AND SAMPLE EVALUATION FOR RAT/MOUSE PINP ENZYMEIMMUNOASSAY
A Bennett^[1], F Duran^[1], J Burgess^[2], M Lagerklint^[2], V DeMambro^[3], D Tuke^[4], C Kirn-Safran^[4], M Garrity^[1], A Barnes^[1], S Durham^[5]*
^[1]IDS Ltd, Boldon, UK; ^[2]St Joseph Hospital, Bangor, ME, USA; ^[3]The Jackson Laboratory, Bar Harbor, ME, USA; ^[4]University of Delaware, Newark, DE, USA; ^[5]IDS Inc, Fountain Hills, AZ, USA
- BRS-P07** ASSOCIATION BETWEEN RISK FACTORS FOR CARDIOVASCULAR DISEASE (CVD) AND BONE MINERAL DENSITY (BMD) IN POST-MENOPAUSAL OSTEOPOROSIS
R Amin^[1], I Fogelman^[2], P Manghat^[1], AS Wierzbicki^[1], G Hampson^[1]*
^[1]Department of Chemical Pathology, ST Thomas Hospital, London, UK; ^[2]Department of Nuclear Medicine, Guy's Hospital, London, UK

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- BRS-P08** ATP RELEASE FROM OSTEOBLASTS IS INCREASED IN RESPONSE TO MECHANICAL LOADING BY DIFFERENT AMOUNTS WHEN GROWN IN STANDARD MONOLAYER AND NOVEL 3D SCAFFOLDS
RMH Rumney^[1], A Sittichokechaiwut^[2], G Reilly^[2], A Gartland^{[1]}*
^[1]Academic Unit of Bone Biology, University of Sheffield Medical School, Beech Hill Road, Sheffield, S10 2RX, UK; ^[2]The Kroto Research Institute, North Campus, University of Sheffield, Broad Lane, Sheffield, S3 7HQ, UK
- BRS-P09** AUTOMATED SYSTEM FOR MEASUREMENT OF CONDUCTIVITY AND ITS USE AS AN ALTERNATIVE TO CREATININE FOR CORRECTION OF URINARY N-TELOPEPTIDE LEVELS
*SJ Carlisle, A Krishnankutty, K Higgs, MR Jones, K Zak, SR Johnson**
 SPD Development Company, Priory Business Park, Bedford, UK
- BRS-P10** AUTOPHAGY IN OSTEOCLASTS: A POSSIBLE ROLE IN THE PATHOGENESIS OF PAGET'S DISEASE OF BONE
PS McCabe^{[1]}, D Mellis^[1], A Duthie^[1], A Simonsen^[2], T Johansen^[3], MJ Rogers^[1], MH Helfrich^[1], LJ Hocking^[1]*
^[1]Bone and Musculoskeletal Programme, University of Aberdeen, UK; ^[2]Biochemistry Institute for Cancer Research, The Norwegian Radium Hospital, Oslo, Norway; ^[3]Biochemistry, University of Tromso, Norway
- BRS-P11** BONE MARROW DERIVED MESENCHYMAL STEM CELLS EXPRESS PERICYTE MARKERS IN CULTURE AND SHOW ENHANCED CHONDROGENESIS IN HYPOXIC CONDITIONS
WS Khan^{[1]}, AB Adesida^[1], SR Tew^[1], JG Andrew^[2], TE Hardingham^[1]*
^[1]United Kingdom Centre for Tissue Engineering, University of Manchester, Manchester, M13 9PT, UK; ^[2]Department of Trauma and Orthopaedics, Bangor General Hospital, Wales, LL5 2PW, UK
- BRS-P12** BONE MARROW LEVELS OF 25 HYDROXY VITAMIN D ARE NOT DEPRESSED IN CASES OF HIP FRACTURE COMPARED TO CONTROLS
J Power^{[1]}, J Martin^[2], M Parker^[3], N Loveridge^[1], J Berry^[2], J Reeve^[1]*
^[1] Bone Research Group, Department of Medicine, University of Cambridge, UK; ^[2]Vitamin D Laboratory, Department of Medicine, University of Manchester, UK; ^[3]Peterborough District Hospital, UK
- BRS-P13** BONE SUBSTITUTES: ARE THEY USEFUL AS AN ADJUNCT FOR FRACTURE HEALING
JMR Velpula, V Gupta, T Sudhakar, M Madhu, R Ratnam, M Waseem*
 Macclesfield Hospitals, Macclesfield, UK
- BRS-P14** BONE TISSUE STRUCTURE AND FUNCTIONING IN POSTMENOPAUSAL WOMEN ENGAGED IN VARIOUS PHYSICAL EXERCISES
VV Povoroznyuk^{[1]}, LG Shakhlina^[2], TV Orlyk^[1], RO Bannikova^[2], OM Sluisarenko^[1]*
^[1]Institute of Gerontology AMS Ukraine, Kiev, Ukraine; ^[2]National University of Physical Education and Sports, Kiev, Ukraine
- BRS-P15** CAN FALL RISK BE INCORPORATED INTO FRACTURE RISK ASSESSMENT ALGORITHMS?: A PILOT STUDY OF RESPONSIVENESS TO BIPHOSPHONATES
*H Johansson, K Kayan, A Oden, JA Kanis, E McCloskey**
 WHO Collaborating Centre for Metabolic Bone Diseases, University of Sheffield, Sheffield, UK
- BRS-P16** CELL MODIFICATION IN 3D: OSTEOGENIC STIMULATION OF HBMSC AFTER HYDROXYAPATITE COATING IN THE ABSENCE OF CHEMICAL CUES
JC Babister^{[1]}, LA Hails^[2], SA Davis^[2], S Mann^[2], ROC Oreffo^[1]*
^[1]Bone & Joint Research Group, University of Southampton, UK; ^[2]School of Chemistry, University of Bristol, UK
- BRS-P17** CERAMIDE: A NOVEL MEDIATOR OF OSTEOBLAST CELL DEATH
RA Al-Dabbagh, DB Weekes, AE Grigoriadis, F McDonald, PA Hill*
 Departments of Orthodontics and Craniofacial Development, King's College London, Guy's Hospital, London, UK
- BRS-P18** CHARACTERISATION OF AN ANTIGEN SPECIFIC TO THE GOLGI APPARATUS OF BONE CELLS
VJ Green, PM Wilson, AA Walsh, JA Gallagher*
 Human Anatomy and Cell Biology, University of Liverpool, UK
- BRS-P19** CHARACTERISATION, OSTEOGENIC POTENTIAL AND CLINICAL PERFORMANCE OF A SOUTH CHINA SEA CORALLINE HYDROXYAPATITE/CALCIUM CARBONATE
K Fu^[1,2], Q Xu^[3], J Czernuska^[3], GRG Russell^[1], JT Triffitt^[1], Z Xia^{[1]}*
^[1]Botnar Research Centre, Institute of Musculoskeletal Sciences, Nuffield Department of Orthopaedic Surgery, University of Oxford, Nuffield Orthopaedic Centre, Oxford, OX3 7LD, UK; ^[2]Affiliated Hospital, Hainan Medical College, #33 Longhua Road, Haikou, Hainan Province, P.R. China; ^[3]Department of Materials, University of Oxford, Parks Road, Oxford, UK
- BRS-P20** COMPUTER AIDED DIAGNOSIS OF OSTEOPOROTIC VERTEBRAL FRACTURE USING APPEARANCE MODELS AND AN AUTOMATIC SEGMENTATION
MG Roberts, TF Cootes, E Pacheco, JE Adams*
 University of Manchester, UK
- BRS-P21** CREATION OF A 3D SHAPE FOR THE PROXIMAL FEMUR FROM A SINGLE 2D RADIOGRAPHIC IMAGE
S Pisharody^{[1,2]}, R Phillips^[1], CM Langton^[2]*
^[1]Department of Computer Science, University of Hull, UK; ^[2]Hull and East Yorkshire Hospitals NHS Trust, UK

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- BRS-P22** DETERMINANTS OF SERUM FIBROBLAST GROWTH FACTOR-23 (FGF-23) IN CHRONIC KIDNEY DISEASE
P Manghat^[1], J Cheung^[1], D MacDonald^[1], E Asgari^[2], DJA Goldsmith^[2], AS Wierzbicki^[1], I Fogelman^[3], G Hampson^[1]*
^[1]Department of Chemical Pathology, St Thomas Hospital, London, UK; ^[2]Renal Unit, Guy's Hospital, London, UK; ^[3]Department of Nuclear Medicine, Guy's Hospital, London, UK
- BRS-P23** DIFFERENTIAL EFFECTS OF GLUCOCORTICOIDS ON FIBROBLASTS: MECHANISMS UNDERLYING THE ADVERSE EFFECTS OF THERAPEUTIC STEROIDS
RS Hardy^[1], EH Rabbitt^[1], A Filer^[2], PM Stewart^[1], K Raza^[2], CD Buckley^[2], MS Cooper^[1]*
^[1]Division of Medical Sciences, University of Birmingham, Birmingham, UK; ^[2]Division of Rheumatology, University of Birmingham, Birmingham, UK
- BRS-P24** DIFFERENTIATION FATES OF HUMAN MESENCHYMAL STEM CELLS IN IMMUNOCOMPROMISED MICE
Z Xia, RM Lockli, JT Triffitt*
 Botnar Research Centre, Oxford Institute of Musculoskeletal Sciences, University of Oxford, Nuffield Orthopaedic Centre, Oxford OX37LD, UK
- BRS-P25** E11 AND RHOA SIGNALLING DURING OSTEOCYTOGENESIS
M Prideaux^[1,2], AA Pitsillides^[2], N Loveridge^[3], C Farquharson^[1]*
^[1]Roslin Institute, Edinburgh, UK; ^[2]Royal Veterinary College, London, UK; ^[3]University of Cambridge, Cambridge, UK
- BRS-P26** FEMORAL NECK CUT HEIGHT IN THOMPSON HEMIARTHROPLASTY SURGERY
S Wimsey, J Beasley, P Chapman-Sheath*
 Department of Orthopaedic Surgery, Southampton General Hospital, UK
- BRS-P27** FGF-SIGNALLING AS A REGULATOR OF THE TRANSFORMED STATE OF OSTEOSARCOMA CELLS
DB Weekes, T Kashima, AE Grigoriadis*
 Department of Craniofacial Development, King's College London, Guy's Hospitals, London, UK
- BRS-P28** HIGHLY CONTROLLED SURFACE PRESENTATION OF PROTEIN SIGNALLING MOTIFS TO REGULATE BONE FORMATION
E A Mitchell^[1], J H Lakey^[1], M Birch^[2]*
^[1]Institute of Cellular and Molecular Biosciences, Newcastle University, Newcastle upon Tyne, UK; ^[2]Musculoskeletal Research Group, Institute for Cellular Medicine, Newcastle University, Newcastle upon Tyne, UK
- BRS-P29** HUMAN FETAL PROGENITOR CELL RESPONSE TO OSTEOGENIC GROWTH FACTORS AND SERUM-FREE MEDIUM: A CELLULAR MODEL FOR SKELETAL DIFFERENTIATION
SH Mirmalek-Sani^[1], RS Tare^[1], AJ Hayes^[2], B Caterson^[2], NA Hanley^[3], FD Houghton^[3], ROC Oreffo^[1]*
^[1]Bone and Joint Research Group, Developmental Origins of Health and Disease Division, University of Southampton, UK; ^[2]Cardiff School of Biosciences, Cardiff University, Cardiff, UK; ^[3]Human Genetics Division, University of Southampton, UK
- BRS-P30** HYPOXIA INDUCED DEATH PATHWAYS IN HUMAN TENOCYTES
M Liang, RT Benson, AJ Carr, PA Hulley*
 Botnar Research Centre, Nuffield Dept of Orthopaedic Surgery, University of Oxford, UK
- BRS-P31** IMPLANTATION OF CELL MICRO-PELLETS DERIVED FROM HUMAN EMBRYONIC AND ADULT STROMAL STEM CELLS INTO AN ARTICULAR CHONDRAL DEFECT IN THE RAT KNEE JOINT
JL Tremoleda, NS Khan, AJ Martin, V Mann, BS Noble*
 Musculoskeletal Tissue Engineering Collaboration, MRC Centre for Regenerative Medicine, University of Edinburgh Medical School, Edinburgh, UK
- BRS-P32** IN VITRO BONE GROWTH RESPONDS TO TISSUE-LEVEL MECHANICAL STRAIN IN THREE-DIMENSIONAL POLYMER SCAFFOLDS
E Baas^[1], JH Kuiper^[1,2], Y Yang^[1], MA Wood^[1], AJ El Haj^[1]*
^[1]Institute for Science and Technology in Medicine, Keele University, UK; ^[2]The Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, UK
- BRS-P33** INFLUENCE OF 25-HYDROXYVITAMIN D ON BONE HEALTH: RESULTS FROM THE EUROPEAN MALE AGEING STUDY (EMAS)
SR Pye^[1], S Boonen^[2], H Borghs^[2], D Vanderschueren^[2], JE Adams^[3], KA Ward^[3], G Bartfai^[4], F Casanueva^[5], JD Finn^[6], G Forti^[7], A Giwercman^[8], TS Han^[9], IT Huhtaniemi^[10], K Kula^[11], MEJ Lean^[9], N Pendleton^[12], M Punab^[13], AJ Silman^[1], FCW Wu^[6], TW O'Neill^[1] and the EMAS Study Group*
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- BRS-P34** KERATIN 18 IS UPREGULATED IN CELLS FROM PAGETIC LESIONS AND AFFECTS GENE EXPRESSION IN HUMAN OSTEOBLASTS
BG Matthews^[1], U Bava^[1], NJ Horwood^[2], KE Callon^[1], IR Reid^[1], J Cornish^[1], D Naof^[1]*
^[1]Department of Medicine, University of Auckland, Auckland, New Zealand; ^[2]Kennedy Institute of Rheumatology, Imperial College London, London, UK

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- BRS-P35** LOVASTATIN MODULATES CHONDROCYTE CELL CYCLE AND MATRIX OUTPUT
*H Cornell**, *AJ Carr*, *PA Hulley*
Botnar Research Centre and Nuffield Department of Orthopaedic Surgery, University of Oxford, Oxford, UK
- BRS-P36** MUTATIONS IN RANK ASSOCIATED WITH PAGETIC DISEASES CAUSE LACK OF SIGNAL PEPTIDE CLEAVAGE AND FORMATION OF ORGANISED SMOOTH ER WHEN OVEREXPRESSED IN OSTEOCLASTS
*D Mellis**, *K Shennan*, *A Duthie*, *J Greenhorn*, *MH Helfrich*, *MJ Rogers*, *JC Crockett*
Bone & Musculoskeletal Research Programme, Institute of Medical Sciences, University of Aberdeen, UK
- BRS-P37** OSTEOBLAST MATURITY DICTATES RESPONSE TO VASCULAR ENDOTHELIAL GROWTH FACTOR
*G Kirmizidis**, *M Birch*
Musculoskeletal Research Group, Institute of Cellular Medicine, Newcastle University, UK
- BRS-P38** OSTEOBLAST-LIKE CELLS WITH THE LRP5 GAIN OF FUNCTION MUTATION SHOW GENDER-RELATED DIFFERENCES IN BASAL PROLIFERATION BUT NO ENHANCED RESPONSE TO MECHANICAL STRAIN
*B Javaheri**, *A Sinters*, *G Zaman*, *RFL Suswillo*, *LE Lanyon*, *J Price*
Royal Veterinary College, London, NW1 0TU, UK
- BRS-P39** OSTEOCALCIN AS A PROGNOSTIC INDICATOR FOR BONE METASTASIS IN DUCTAL BREAST CANCER
*SR Davies**^[1], *RE Mansell*^[2], *WG Jiang*^[2]
^[1]Department of Orthopaedics, University Hospital of Wales, Cardiff, UK; ^[2]Metastasis and Angiogenesis Research Group, Department of Surgery, Cardiff University School of Medicine, Cardiff, UK
- BRS-P40** OSTEOCYTES HAVE MORE CAVEOLAE THAN OSTEOBLASTS
*C Huesa**, *J Greenhorn*, *RM Aspden*, *MH Helfrich*
University of Aberdeen, Bone Research Programme, UK
- BRS-P41** OSTEOCYTES REPAIR PLASMA MEMBRANE DISRUPTION FOLLOWING PHYSICAL INJURY IN VITRO
*A Voultziadou**, *L Kitto*, *BS Noble*, *V Mann*
Musculoskeletal Tissue Engineering Collaboration (MTEC), MRC Centre for Regenerative Medicine, University of Edinburgh Medical School, Edinburgh, UK
- BRS-P42** PERSISTENCE OF FUNCTIONAL HUMAN OSTEOGENIC STEM CELLS FOLLOWING IN VIVO IMPLANTATION IN A RAT CALVARIAL LESION
JL Tremoleda^[1], *NS Khan**^[1], *SN Racey*^[2], *V Mann*^[1], *AJ Martin*^[1], *BS Noble*^[1]
^[1]Musculoskeletal Tissue Engineering Collaboration, MRC Centre for Regenerative Medicine University of Edinburgh Medical School, Edinburgh, UK; ^[2]School of Applied Sciences, Northumbria University, Newcastle, UK
- BRS-P43** PLATELET-DERIVED GROWTH FACTOR STIMULATES OSTEOPROTEGERIN PRODUCTION IN OSTEOBLASTIC CELLS
*HS McCarthy**^[1], *JHH Williams*^[2], *MJW Davie*^[1], *MJ Marshall*^[1]
^[1]Charles Salt Centre for Human Metabolism, RJA Orthopaedic Hospital, Gobowen, Shropshire, SY10 7AG, UK; ^[2]Chester Centre for Stress Research, Chester University, Parkgate Road, Chester, CH1 4BJ; UK
- BRS-P44** PODOSOME BELTS CORRELATE WITH RESORPTIVE ACTIVITY BY OSTEOCLASTS ON PLASTIC
*JL Ross**, *K Fuller*, *TJ Chambers*
Department of Cellular Pathology, St George's, University of London, UK
- BRS-P45** PRIMARY HUMAN OSTEOBLASTS CONTAIN A GREATER NUMBER OF K2P CHANNELS THAN OSTEOSARCOMA CELL LINES
*AW Gallagher**, *JM Quayle*, *JA Gallagher*
Department of Human Anatomy and Cell Biology, University of Liverpool, UK
- BRS-P46** PROTEOMIC IDENTIFICATION OF PRENYLATED RAB/SMALL GTPASE PROTEINS IN HUMAN OSTEOCLASTS
*A Taylor**, *MJ Rogers*, *FP Coxon*
Bone and Musculoskeletal Research Programme, Institute of Medical Sciences, University of Aberdeen, UK
- BRS-P47** STIFF WRISTS DO BADLY - WHAT DETERMINES RATE OF RECOVERY OF GRIP STRENGTH AFTER DISTAL RADIAL FRACTURE?
G Andrew^[1,2], *A Awad**^[1], *C Hutchinson*^[2], *H Ansari*^[2]
^[1]Ysbyty Gwynedd, Bangor, UK; ^[2]Hope Hospital, Salford, University of Manchester, UK
- BRS-P48** STRUCTURAL-FUNCTIONAL BONE STATE OF THE POSTMENOPAUSAL WOMEN WITH VERTEBRAL FRACTURES
*VV Povoroznyuk**, *NV Grygoryeva*
Department of Clinical Physiology and Pathology of Locomotor Apparatus, Institute of Gerontology AMS Ukraine, Kiev, Ukraine
- BRS-P49** TEMPORAL RELEASE OF ENCAPSULATED OSTEOGENIC AND ANGIOGENIC FACTORS FROM BIODEGRADABLE POLYMER SCAFFOLDS ENHANCE HUMAN BONE MARROW STROMAL CELL BONE REGENERATION
*JM Kanczler**^[1], *P Ginty*^[2], *L White*^[2], *SM Howdle*^[2], *KM Shakesheff*^[2], *ROC Oreffo*^[1]
^[1]Bone & Joint Research Group, Institute of Developmental Sciences, University of Southampton, UK; ^[2]School of Pharmacy & Chemistry, University of Nottingham, UK
- BRS-P50** THE EFFECT OF TRAINING STATUS ON THE METABOLIC RESPONSE OF BONE TO EXHAUSTIVE RUNNING EXERCISE
*JPR Scott**^[1], *JP Greeves*^[1], *C Sale*^[1], *A Casey*^[1], *J Dutton*^[2], *WD Fraser*^[2]
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- BRS-P51** THE EFFECTS OF RECOMBINANT HUMAN GROWTH HORMONE (RHGH) AND INSULIN-LIKE GROWTH FACTOR-I (RHIGF-I) ON HUMAN OSTEOCLASTS
D Janus^[1], JW Gregory^[1], C Elford^[1], MF Scanlon^[2], BAJ Evans^[1]*
^[1]Department of Child Health, School of Medicine, Cardiff University, Heath Park, Cardiff CF 14 4XN, UK; ^[2] Section of Endocrinology and Diabetes Sciences, School of Medicine, Cardiff University, Heath Park, Cardiff CF 14 4XN, UK
- BRS-P52** *Withdrawn*
- BRS-P53** THE MOLECULAR RESPONSE OF HUMAN BONE TO MECHANICAL STIMULATION
V Mann, BS Noble*
Musculoskeletal Tissue Engineering Collaboration, MRC Centre for Regenerative Medicine, University of Edinburgh Medical School, Edinburgh, UK
- BRS-P54** THE POTENTIAL INHIBITORY ROLE OF SUPPRESSOR OF CYTOKINE SIGNALLING-2 IN CHONDROCYTE GH/IGF-1 SIGNALLING VIA THE JAK/STAT PATHWAY
C Pass^[1,2], VE MacRae^[1], SF Ahmed^[2], C Farquharson^[1]*
^[1]Bone Biology Group, Roslin Institute and RDSVS, University of Edinburgh, Roslin, UK; ^[2]Bone and Endocrinology Research Group, Royal Hospital for Sick Children, Glasgow, UK
- BRS-P55** THE RELATIONSHIP BETWEEN MUSCLE STRENGTH MEASUREMENTS AND BONE IN YOUNG ADULT MALES
L Edwards^[1,2], JA Adams^[1], PL Selby^[3], KA Ward^[1]*
^[1]University of Manchester, UK; ^[2]University of Liverpool, UK; ^[3]Central Manchester and Manchester Childrens University Hospital NHS Trust, UK
- BRS-P56** THRESHOLDS FOR THE MEASUREMENT OF CORTICAL THICKNESS IN-VIVO USING COMPUTED TOMOGRAPHY (THE 100 WOMEN STUDY)
KES Poole^[1], CM Rose^[1], PM Mayhew^[1], JK Brown^[2], JG Clement^[3], CD Thomas^[3], J Reeve^[1], N Loveridge^[1]*
^[1]Department of Medicine, University of Cambridge, UK; ^[2]Mindways Software Inc., Austin, USA; ^[3]School of Dental Science, University of Melbourne, Australia
- BRS-P57** ULTRASTRUCTURAL EXAMINATION OF COLLAGEN FROM ALKAPTONURIC TISSUE PROVIDES CLUES TO PATHOGENESIS OF OCHRONOSIS
AM Taylor^[1], IA Prio^[2], BW Wlodarski^[1], PJM Wilson^[1], WD Fraser^[3], LR Ranganath^[3], JA Gallagher^[1]*
^[1]Department of Human Anatomy and Cell Biology, The University of Liverpool, Liverpool, UK; ^[2]Department of Physiology, The University of Liverpool, Liverpool, UK; ^[3]Department of Clinical Chemistry, The University of Liverpool, Liverpool, UK