POSTERS OVERVIEW 27th Congress of the European Society of Biomechanics 26 - 29 June 2022, Porto, Portugal

27 June 2022

PS1 **ADVANCE COMPUTING FOR BIOMECHANICS** SIMUALTION OF CELLULAR PROLIFERATION USING THE RPIM MESHLESS PS 1.2 433 METHOD Araújo Barbosa, Maria Inês

- **BIOMECHANICAL FINITE ELEMENT METHOD MODEL OF THE PROXIMAL** PS 1.3 444 CARPAL ROW AND EXPERIMENTAL CHARACTERIZATION OF THE INTEROSSEOUS Marqués, Rafael
- A NUMERICAL APPROACH TO THE CALLUS FORMATION IN BONE FRACTURE PS 1.4 224 HEALING

Naveiro, José Manuel

AI IN BIOMECHANICS

INTRACRANIAL ANEURYSM PREDICTIONS WITH THE USE OF MORPHOMETRIC PS 1.5 251 FEATURES IN A MACHINE LEARNING APPROACH Aristokleous, Nicolas

ANIMAL AND PLANT BIOMECHANICS

OVERCOMING A "FORBIDDEN PHENOTYPE": THE PARROT'S HEAD SUPPORTS, PS 1.6 519 PROPELS, AND POWERS TRIPEDAL LOCOMOTION Young, Melody W.

	CARDIOVASCULAR BIOMECHANICS
--	-----------------------------

- ESTIMATION OF WALL VISCOELASTIC PARAMETERS FROM THE PRESSURE PS3.2 150 AND DIAMETER CURVE OF A CAROTID ARTERY Rhee, Kyehan
- USING HYPER- OR LINEAR- PROPERTIES DOES NOT AFFECT PREDICTIVE PS3.3 199 CAPABILITY OF VULNERABLE CORONARY PLAQUES Stefanati, Marco
- ANALYSIS OF THE INFLUENCE OF PLAQUES COMPOSITION AND GEOMETRY PS3.4 563 ON DRUG TRANSPORT FROM DRUG ELUTING STENTS Martínez, Miguel A.
- NUMERICAL STUDY OF NON-NEWTONIAN EFFECTS ON THROMBUS PS3.5 629 FORMATION UNDER VENOUS FLOW CONDITIONS Dušková, Veronika
- THE EFFECT OF TISSUE PRESERVATION ON THE MECHANICAL BEHAVIOR OF PS3.6 794 **PORCINE AORTA** Fehervary, Heleen
- NUMERICAL ANALYSIS OF THE HEMODYNAMICS AND PERFORMANCE OF A PS3.7 847 MINIATURE VENTRICULAR ASSIST DEVICE Gabso, Yuval

CELLULAR AND MOLECULAR BIOMECHANICS / MECHANOBIOLOGY



PS5	PS5				
HARD	TISSU	E BIOMECHANICS			
PS5.1	670	ASSESSING BONE ULTRASTRUCTURE VIA NANOSCALE X-RAY COMPUTED TOMOGRAPHY AND QUANTITATIVE POLARIZED RAMAN SPECTROSCOPY <i>Kochetkova, Tatiana</i>			
PS5.2	522	THE EFFECT OF MICROSTRUCTURAL ANISOTROPY ON LOAD-BEARING CAPACITY OF THE ENTIRE HUMAN FEMUR <i>Martelli, Saulo</i>			
PS5.3	637	INTERNAL STRAIN FIELD OF A HUMAN TIBIA WITH TITANIUM TIBIAL TRAY DURING STAIR DESCENT: A MICRO-CT AND DVC ANALYSIS <i>Wearne, Lauren S</i>			
PS5.4	875	UNDERSTANDING BONE MATURITY: PROPERTIES AT THE INTERSTITIAL AND OSTEONAL LAMELLAR LEVEL <i>Zioupos, Peter</i>			
PS5.5	179	GRAFT POSITIONING DURING THE LATARJET PROCEDURE: COMPUTATIONAL ANALYSIS OF SHOULDER STABILITY AND CONTACT <i>Quental, Carlos</i>			

IMPACT / INJURY BIOMECHANICS

EFFICACY OF KARTING NECK BRACES IN REDUCING NECK INJURIES IN PS5.6 212 **ROLLOVER ACCIDENTS: A FINITE ELEMENT STUDY**

- ON THE HINDLIMB BIOMECHANICS OF THE AVIAN TAKE-OFF LEAP PS 1.7 810 Meilak, Erik
- SALBUTAMOL TRANSPORT AND DEPOSITION IN THE CAT AIRWAYS UNDER PS 1.8 704 DIFFERENT BREATHING CONDITIONS AND PARTICLE SIZES Malve, Mauro

SPINE BIOMECHANICS

- **EVALUATION OF TRUNK MUSCLE ANTAGONISM PREDICTIONS BY MULTI-**PS 1.9 332 **BODY MODELS** *Caimi, Alice*
- ASSESSMENT OF SAGITTAL BALANCE IN THE DISTAL JUNCTIONAL PS 1.10 562 PATHOLOGY IN THE LUMBAR SPINE: A RETROSPECTIVE ANALYSIS Montanari, Sara
- THE INFLUENCE OF THE GRADE OF DISC DEGENERATION ON THE PS 1.11 283 **BIOMECHANICAL RESPONSE OF LUMBAR SPINE** Khalaf, Kinda

TISSUE ENGINEERING

- PS 1.12 370 RECREATING ARTICULAR CARTILAGE'S ZONAL FIBRE ALIGNMENT ON 3D ELECTROSPUN SCAFFOLDS Semitela, Angela
- **BIOMECHANICAL CHARACTERIZATION OF TPMS SCAFFOLDS FOR BONE AND** PS 1.13 743 CARTILAGE TISSUE ENGINEERING Santos, Jorge E.
- DESIGN AND EXPERIMENTAL STUDY OF TORSIONAL WAVE BIOREACTOR TO PS 1.14 938 EVALUATE EFFECT ON MELANOMA STEM CELL Hurtado, Manuel

- CHANGES IN NUCLEAR MORPHOLOGY CORRELATE WITH INVASIVENESS IN PS3.8 657 BREAST CANCER CELLS Zbiral, Barbara
- CULTURE OF PORCINE BONE EXPLANTS UNDER COMPRESSIVE LOADING PS3.9 458 *Cramer, Esther Elisabeth Agnes*
- COMPUTATIONAL MODELING REVEALS ROLE OF PROXIMITY-DRIVEN, PS3.10 996 NONCONTACT CELL-CELL INTERACTIONS IN CANCER INVASIVENESS Weihs, Daphne
- CELL'S SENSE OF SLOPE PS3.11 412 Frascogna, Crescenzo
- MICROFLUIDIC PLATFORM TO STUDY THE ROLE OF DYNAMIC MECHANICAL PS3.12 449 LOADING ON CELL FATE AND BEHAVIOR Saporito, Stefania
- LARGE-SCALE QUANTIFICATION OF OSTEOCYTE MORPHOMETRY AND PS3.13 492 PROTEIN EXPRESSION FROM MURINE BONE HISTOLOGY Correia Marques, Francisco

PS4

CARDIOVASCULAR BIOMECHANICS

MECHANICAL ASPECTS OF DRUG-COATED BALLOON ANGIOPLASTY PS4.1 510 DETERMINING THE EFFICIENCY OF THE COATING TRANSFER Stratakos, Efstathios

CLINICAL AND TRANSLATIONAL BIOMECHANICS / IN SILICO TRIALS

PS4.2 299 PROXIMAL FEMUR BONE MINERAL DENSITY IN OSTEOPOROTIC PATIENTS: A **REVIEW OF PLACEBO GROUPS IN CLINICAL TRIALS** Oliviero, Sara

COMPUTATIONAL BIOLOGY

Wei, Wei

- PS5.7 557 **BIOMECHANICAL ANALYSIS OF THE CORRELATION BETWEEN MID-SHAFT** ATYPICAL FEMORAL FRACTURE AND VARUS DEFORMATION Severyns, Mathieu
- PS5.8 525 COMPARISON OF THE LOWER EXTREMITY DYNAMICS OF THE ELDERLY FEMALE, HIII 50TH MALE AND HIII 5TH FEMALE DUMMIES Schäuble, Andreas

IMPLANTS/ORTHOTICS/PROSTHETICS/DEVICES

- NUMERICAL SIMULATION OF STRESS-SHIELDING AT THE BONE-IMPLANT PS5.9 619 INTERFACE UNDER SHEAR LOADING Elsa
- PS5.11 242 **BIOMECHANICAL ANALYSIS OF SEVERAL HINGED TKA FEATURES IN WELL-**ALIGNED AND VALGUS/VALGUS KNEE Bori, Edoardo
- INTRAMEDULLARY NAILS VS. BONE PLATE AT THE PROXIMAL HUMERUS -PS5.12 154 COMPUTERSIMULATION Lehner, Stefan

SPORT BIOMECHANICS

- FORCE AND SWIMMING PERFORMANCE: POOL AND OPEN WATER PS5.13 935 Chainok, Phornpot
- IN SILICO STUDY ON ALLOGRAFT-BASED ACETABULAR RECONSTRUCTION PS15.14745 Goyal, Ajay

PATIENT SPECIFIC MODELLING

BIOMECHANICAL ANALYSIS OF RUNNING AND ASSOCIATED INJURES BASED PS5.15 867 ON A LITERATURE REVIEW Parra Gómez, Laura Daniela

BIOMATERIALS

- HYBRID MEMBRANE AS INNOVATIVE MATERIALS FOR BIOMEDICAL 357 PS2.1 APPLICATIONS Todesco, Martina
- A BIOINSPIRED ORTHOPAEDIC BIOMATERIAL WITH TUNABLE MECHANICAL PS2.2 911 **PROPERTIES BASED ON SINTERED TITANIUM FIBRES** Seitz, Andreas
- EFFECTS OF POLOXAMER ADDITIVES ON STRENGTH, INJECTABILITY OF BETA-PS2.3 176 TRICALCIUM PHOSPHATE CEMENT Kim, Yeeun
- GELATIN/CELLULOSE NANOFIBRIL COMPOSITE: A PROMISING FORMULATION PS2.4 767 FOR INJECTION AND BIOPRINTING PURPOSES Mongeau, Luc
- EFFECT OF CONDUCTION GAPS AND INCREASED COLLECTOR ROTATION SPEED PS2.5 946 ON ELECTROSPUN PCL MATRICES Bissacco, Elisa G
- BIOLOGICAL AND MECHANICAL PROPERTIES OF AN EXPERMINTAL DENTAL PS2.6 499 ALGINATE MODIFIED FOR SELF DISINFECTION Singer, Lamia
- PRELIMINARY APPROACH OF AN ALTERNATIVE SOLUTION FOR THE BREAST PS2.7 244 **IMPLANT SHELL** Teixeira, Ana Margarida

BIOMECHANICS OF MOVEMENT AND POSTURE

- EVALUATION OF MARKER-BASED MOTION CAPTURING TO CHARACTERIZE PS2.8 776 **BASIC HAND MOVEMENTS IN RHEUMATIC PATIENTS** *Coppers, Birte Luise*
- QUANTIFICATION OF POST-OPERATIVE CORRECTION OF FOOT POSTURE PS2.9 885

- GROWTH ORIENTATION, AND NOT HETEROGENEOUS GROWTH RATES, PS4.3 387 DOMINATES ZEBRAFISH JAW JOINT MORPHOGENESIS Godivier, Josepha
- PS4.4 669 NETWORK MODELLING FOR NUCLEUS PULPOSUS CELL ACTIVITY IN EARLY INTERVERTEBRAL DISC DEGENERATION Tseranidou, Sofia
- PLANTAR PRESSURE DATA RECONSTRUCTION BASED ON REDUCED DATA PS4.5 989 **USING COMPRESSIVE SENSING TECHNIQUE** Kamal, Zeynab

COMPUTER AIDED DIAGNOSIS, PLANNING, AND SURGERY

- PS4.6 722 COMPARISON BETWEEN TRANSTIBIAL AND ANTEROMEDIAL PORTAL ACL **RECONSTRUCTION THROUGH FINITE ELEMENT ANALYSIS** *Risvas, Konstantinos*
- PS4.7 778 NON-INVASIVE METHOD OF FRACTIONAL FLOW RESERVE ESTIMATION IN PATIENTS SUFFERING FROM ISCHEMIC HEART Jankowski, Krzysztof

DENTAL BIOMECHANICS

THE INFLUENCE OF THE IMPLANT GEOMETRY CONCEPTS IN BONE STRAINS PS4.8 175 DISTRIBUTION Ramos, António

ERGONOMICS / OCCUPATIONAL BIOMECHANICS / REHABILITATION

PRECISION REHABILITATION: TARGETED ASSISTANCE OF INDIVIDUAL PS4.9 409 **MUSCLES VIA EXOSKELETONS** Durandau, Guillaume

EXPERIMENTAL BIOMECHANICS (OTHERS)

IN VITRO OVINE MODEL CONFIRMS IMPORTANCE OF SCREW POSITIONING PS4.10 782 FOR STABILITY OF BONE-FRACTURE TREATMENT

APPROACH IN THREE DIMENSIONS Dufrenot, Maryama Suzanne

PS6

MUSCULOSKELETAL BIOMECHANICS

MUSCULOSKELETAL ANALYSIS OF ELBOW STABILITY FOR COMMON INJURY PS6.1 177 PATTERNS

Melzner, Maximilian

- FEASIBILITY STUDY TO TRANSFER MUSKULOSKELETAL MODEL DATA TO A 6 DOF PS6.2 857 JOINT SIMULATOR Henke, Paul
- **EFFECT OF CORACOACROMIAL LIGAMENT RELEASE IN SHOULDER** PS6.3 866 **BIOMECHANICS: A PRELIMINARY IN-VITRO STUDY** Santos, Ines
- IMPLEMENTATION OF AN AUTOMATED METHOD FOR THE SELECTION OF PS6.4 918 SUBJECT-SPECIFIC MUSCLE INSERTION POINTS Maioli, Vera

NEUROMUSCULAR CONTROL

A PIPELINE TO CONVERT OPENSIM MUSCULOSKELETAL MODELS INTO PS6.5 601 MUJOCO PRESERVING ANATOMICAL CONSISTENCY Wang, Huawei

OCULAR BIOMECHANICS

- MODELLING THE EYE LENS: INFLUENCE OF CAPSULAR THICKNESS ON LENS PS6.6 263 ACCOMMODATION Ye, Lin
- CHARACTERIZATION OF CORNEAL VISCOSITY USING TORSIONAL WAVES PS6.7 Cortés Cortés, José Manuel
- PS6.8 258 BIOMECHANICAL CHARACTERIZATION AND MODELING OF HUMAN LENTICULES Nambiar, Malavika Harikrishnan

THROUGH NEW ANATOMICAL REFERENCE SYSTEMS Conconi, Michele

- THE KINEMATICS OF THE FOOT DURING DROP JUMPS: A SIX-SEGMENT FOOD PS2.10 915 MODEL APPROACH Fennen, Lena
- TIGHTLY COUPLED INERTIAL AND RADIO-BASED FOOT-WORN SENSORS FOR PS2.11 165 AMBULATORY SPATIAL GAIT ANALYSIS Wouda, Frank Jasper
- EFFECTS OF HANDLE-HEIGHT ON GAIT KINETICS IN OLDER ADULTS WHILE PS2.12 181 WALKING WITH A ROLLATOR Avalos, Marco A
- EFFECT OF SENSOMOTORIC INSOLES ON POSTURAL STABILITYINKIDS WITH PS2.13 243 **CEREBRAL PALSY** Bartošová, Simona

PS3

BIOMEDICAL IMAGING

ULTRASOUND IMAGING OF BONE CORTEX: BEAMFORMING OPTIMIZATION PS3.1 506 FOR OSTEOPOROTIC BONES Grimal, Quentin

Comtesse, Simon

DEVELOPMENT AND VALIDATION OF CUSTOM-MADE MARKER SETS FOR PS4.11 943 MICRO-MOVEMENT ANALYSIS Seitz, Andreas

SPINE BIOMECHANICS

- PS4.12 712 AN INVERSE DYNAMIC ACTIVE HYBRID MODEL TO PREDICT EFFECTS OF THE INTRA-ABDOMINAL PRESSURE ON THE LUMBAR SPINE Remus, Robin
- FORWARD DYNAMIC SIMULATION OF A DETAILED THORACOLUMBAR SPINE PS4.13 814 MODEL UNDER GRAVITATIONAL LOAD Hammer, Maria
- VERTEBRAL BODY TETHERING VS SPINAL FUSION: LOOKING BEYOND THE PS4.14 886 **RADIOGRAPHICAL OUTCOME** Ackermans, Thijs
- MECHANICAL CHARACTERIZATION OF THE NERVE ROOTS BY TENSILE TESTING PS 4.15 545 Leblond, Ludivine

REPRODUCTIVE BIOMECHANICS

A MESHLESS METHOD TO STUDY THE EFFECT OF VEGF DIFFUSION IN PS6.9 221 CAPILLARY NETWORK MORPHOLOGY Guerra, Ana

ROBOTS AND BIOMECHANICS

PS6.10 518 UNUSUAL PHALANGEAL PROPORTIONS IMPROVE GRASPING POTENTIAL IN BIRDS, MAMMALS, AND BIOINSPIRED DESIGN Granatosky, Michael

SOFT TISSUE BIOMECHANICS

- DESIGN AND EXPERIMENTAL STUDY OF ULTRASONIC WAVE BIOREACTOR TO PS6.11 922 **EVALUATE EFFECT ON TUMORS** Hurtado, Manuel
- NUMERICAL AND EXPERIMENTAL EVALAUTION OF THE BULGE TEST IN THE PS6.12 507 CHARACTERISATION OF THE BIOLOGICAL SOFT TISSUES Gasparotti, Emanuele
- ADAPTIVE QUASI-LINEAR MODEL UNIVERSAL MATERIAL PARAMETERS OF PS6.13 295 LIVER TISSUE FOR DIFFERENT LOAD CASES? J. Aryeetey, Othniel

ESB2022 27th Congress of the European Society of Biomechanics 26 - 29 June 2022, Porto, Portugal

28 June 2022

ADVANCE COMPUTING FOR BIOMECHANICS

PS7.1 331 NUMERICAL MODELLING OF THE BREAST RECONSTRUCTION USING SILICONE GEL-FILLED IMPLANTS *Martins, Pedro*

BIOMATERIALS

PS7

PS7.2 753 TEMPORAL DESIGN FOR ADDITIVE MANUFACTURING AND ITS POTENTIAL FOR TUNING THE SURFACE ROUGHNESS *Mahmoodi, Nasim*

BIOMECHANICS OF AGEING

PS7.3 848 A PRELIMINARY STUDY FOR THE ASSESSMENT OF A COMPLEMENTARY THERAPY IN PARKINSON'S DISEASE *Pegolo, Elena*

BIOMECHANICS OF MOVEMENT AND POSTURE

- PS7.4 453 THE EFFECT OF THE OF RUNNING-INDUCED FATIGUE ON THE SYMMETRY OF KINEMATICS AND KINETIC VARIABLES OF KNEE JOINTS IN A COUNTERMOVEMENT JUMP *Gao, Zixiang*
- PS7.5 666 EFFECT OF ACL RECONSTRUCTION ON THE MUSCLE ACTIVITY OF THE KNEE

PS9

CELLULAR AND MOLECULAR BIOMECHANICS / MECHANOBIOLOGY

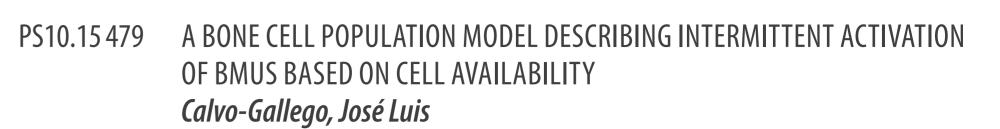
PS9.1 347 MECHANOBIOLOGICAL COMPUTER MODELING OF MANDIBULAR FRACTURE HEALING

Orassi, Vincenzo

- PS9.2 351 DESIGN AND CHARACTERIZATION OF A FLEXIBLE SUBSTRATE FOR CULTURING ADHERENT CELLS UNDER DEFINED UNIAXIAL STRETCH *Putame, Giovanni*
- PS9.3 586 BIOMECHANICAL MODEL REPRODUCING THE ACTIVE RESPONSE OF A CARDIAC SARCOMERE *Peyroteo, Madalena*
- PS9.13 570 DYSREGULATED ENERGY PRODUCTION IMPACT THE OUTCOME OF SCAFFOLD-GUIDED BONE REGENERATION IN TYPE 2 DIABETES *Bastos Dias, Daniela Sofia*

CLINICAL AND TRANSLATIONAL BIOMECHANICS / IN SILICO TRIALS

- PS9.4 618 ANALYZING MECHANICAL CIRCULATORY SUPPORT IN PATIENTS WITH SINGLE VENTRICLE PHYSIOLOGY USING A MULTISCALE MODEL *Yuan, Victoria*
- PS9.5 622 INFLUENCE OF TRANSURETHRAL CATHETERS ON URODYNAMICS MEASUREMENTS IN MALE: A COMPUTATIONAL STUDY *Mascolini, Maria Vittoria*



PS11

3D PRINTING IN BIOMEDICINE

PS11.1 742 DEVELOPMENT AND CHARACTERIZATION OF 3D PRINTED BONE SUBSTITUTES MIMICKING TRABECULAR BONE ARCHITECTURE *Leborgne, Fanny*

IMPACT / INJURY BIOMECHANICS

PS11.2 315 APPLICATION OF MARKERLESS POSE ESTIMATION TO RUGBY COLLISION TRACKING

Simms, Ciaran

- PS11.3 381 EVALUATION OF FINITE ELEMENT HEAD MODELS USING 3D PRINTED SURROGATE - PRELIMINARY CONTROL OF BOUNDARY CONDITIONS *Jonca, François*
- PS11.14760 PREDICTIVE SIMULATION OF SINGLE-LEG LANDING SCENARIOS FOR ACL INJURY RISK FACTORS EVALUATION *Risvas, Konstantinos*

IMPLANTS / ORTHOTICS / PROSTHETICS / DEVICES



DURING SELECTED ACTIVITIES Zalewska, Paulina

- PS7.6 766 A NEW METHOD FOR DETERMINING THE KNEE AXIS OF ROTATION FOR MOTION CAPTURE *O'Regan, Eimear Bernadette*
- PS7.7 773 DYNAMIC ANALYSIS OF GAIT MOTION IN OSTEOARTHRITIC WOMEN *Tassani, S.*
- PS7.8 785 RECORDING WRIST CIRCUMDUCTION WITH DIFFERENT SENSORS FOR CLINICAL ASSESSMENT *Vergara, Margarita*
- PS7.9 905 MOTOR CONTROL IN A POPULATION OF YOUNG SUBJECTS WITH IDIOPATHIC SCOLIOSIS: THE MOTOR-CHILD STUDY *Stagni, Rita*
- PS7.10 157 DETECTING A NEW CATEGORY OF FLEXION CONTRACTURE PATIENTS IN TOTAL HIP ARTHROPLASTY *Vergari, Claudio*
- PS7.11 188 WEIGHT-BEARING SYMMETRY IN HEALTHY AND ACTIVE WORKERS: AN OCCUPATIONAL STUDY WITH INSTRUMENTED INSOLES *Alves, Sónia A.*
- PS7.12 334 HAND POSTURE AND FOREARM MUSCLE ACTIVITY DURING REACHING AND TRANSPORTATION TASKS: EFFECT OF PRODUCT WEIGHT AND TASK HEIGHT *Jarque-Bou, Néstor J.*
- PS7.13 455 MIMU KINEMATICS FOR MONITORING RECOVERY FROM ANKLE FRACTURE *Mattila, Olli-Pekka*
- PS 7.14 855 PRE-OPERATIVE MOVEMENT ANALYSIS OF KNEE OSTEOARTHRITIC PATIENTS *K. Mukherjee*

- PS9.6 636 EDGE LOADING TESTING OF HIP REPLACEMENTS: TECHNIQUES FOR EFFICIENT AND ACCURATE MODELLING *Etchels, Lee William*
- PS9.7 655 LATERAL MENISCUS ANTERIOR ROOT AVULSION INCREASES CONTACT PRESSURES: A FINITE ELEMENT STUDY *Peña-Trabalón, Alejandro*

COMPUTATIONAL BIOLOGY

PS9.8 337 EXPLOITING CELL MODULARITY TO CREATE REPURPOSABLE DIGITAL TWINS *Manifacier, Ian*

ERGONOMICS / OCCUPATIONAL BIOMECHANICS / REHABILITATION

- PS9.9 838 BALANCE RECOVERY PREDICTION UNDER THE INFLUCENCE OF DIFFERENT ACTUATION MODELS *Harant, Monika*
- PS9.10 964 ASSESSING INTUITIVE DESIGN OF ASSISTIVE DEVICES TO IMPROVE HUMAN BIOMECHANICAL DEFICIENCIES: AN EYE-TRACKER STUDY *Vergara, Margarita*

EXPERIMENTAL BIOMECHANICS (OTHERS)

- PS9.11 363 DESIGN OF AN IN VIVO BIOMECHANICAL CHARACTERISATION DEVICE FOR UNRUPTURED INTRACRANIAL ANEURYSMS: CALIBRATION STUDY ON PHANTOM ARTERIES *Plet, Guillaume*
- PS9.14 741 APPROACH TO HUMAN JOINT ANALYSIS IMPLEMENTING ACCELEROMETERS FOR OUTDOOR MOTION STUDIES *Hinojosa Virviescas, Jorge Andres*

NEUROMUSCULAR CONTROL

- PS11.4 532 POSTERIOR CRUCIATE LIGAMENT TENSION AND TIBIAL COMPONENT MALROTATION IN TOTAL KNEE REPLACEMENT Sass, Jan-Oliver
- PS11.5 695 BIOMECHANICAL ANALYSIS OF SURGICAL ALIGNMENT AND DESIGN IN TOTAL KNEE ARTHROPLASTY *Innocenti, Bernardo*
- PS11.6 696 ASSESSING THE FIRST RESONANCE FREQUENCY OF SCREWS IN BONE BLOCKS FOR ESTIMATION OF SCREW FIXATION *Timmermans, Maikel*
- PS11.7 201 A COMPUTATIONAL METHODOLOGY FOR THE INVESTIGATION AND COMPARISON OF THE ASSEMBLY EFFECTIVENESS DURING TOTAL HIP ARTHROPLASTY *Messellek, Ali Cherif*
- PS11.8 226 ON MEASURING IMPLANT FIXATION STABILITY IN ACL RECONSTRUCTION *Varga, Peter*
- PS11.9 425 COMPUTATIONAL TOOLS FOR BIO-COMPATIBLE GYROID FOAMS *Pais, Ana*
- PS11.10621 TOPOLOGY OPTIMIZATION OF A UNIVERSAL ARTIFICIAL TALUS IMPLANT *EI-Rich, Marwan*

SPINE BIOMECHANICS

PS11.11951 DEVELOPMENT OF A FULLY-PARAMETRIC THORACOLUMBAR SPINE MODEL AND CALIBRATION OF T6-T7-R7 FSU *La Barbera, Luigi*

SPORT BIOMECHANICS

PS11.12 983 VECTOR CODING ASSESSMENT OF LOWER LIMB JOINT ANGULAR COORDINATION ON LONG, SHORT AND NO COUNTERMOVEMENT *Rodrigues, Carlos*

PS8

BIOMEDICAL IMAGING

- PS8.1 311 INFANT GASTROCNEMIUS GROWTH IN THE FIRST TWO YEARS OF LIFE *Florez, Ricardo*
- PS8.2 631 IMAGE-BASED CHARACTERIZATION OF LARGE VESSELS INTEGRATING IN-VITRO AND IN-SILICO METHODS *Fanni, Benigno Marco*
- PS8.3 641 CRANIAL BONE MICROARCHITECTURE IN A MOUSE MODEL FOR SYNDROMIC CRANIOSYNOSTOSIS *Hut, Julia Elizabeth*
- PS8.4 944 IMAGE-BASED IN-VIVO ESTIMATION OF AORTIC LOCAL STIFFNESS AND HEMODYNAMICS *Vignali, Emanuele*
- PS8.5 247 IMPLEMENTATION OF A WAVELET-BASED PROCESSING METHOD ADAPTED TO DIFFRACTION ULTRASOUND COMPUTED TOMOGRAPHY OF BONE TISSUES *Lasagyues, Philippe*

MUSCULOSKELETAL BIOMECHANICS

- PS8.6 349 REPRODUCIBILITY OF MUSCLE FORCES ESTIMATION DURING POST-STROKE GAIT USING OPENSIM *Giarmatzis, Georgios*
- PS8.7 404 COMPARING CALCULATED AND MEASURED MUSCLE ACTIVITY OF THIGH MUSCLES IN DYNAMIC MOTION *Auer, Simon*
- PS8.8 748 VALIDATION OF REMOTE METHODS FOR MEASURING FOOT ARCH HEIGHT AND SHAPE *Uhan, Jerneja*
- PS8.9 854 FINITE ELEMENT MANDIBLE MODEL OPTIMIZATION FOR LARGE MANDIBULAR DEFECT REGENERATION

PS9.12 533 HUMAN BRAIN AND MUSCLE ACTIVITIES COUPLING DURING ISOKINETIC CONTRACTIONS WITH INCREMENTAL MOTOR OUTPUT *Glories, Dorian*

PS10

CARDIOVASCULAR BIOMECHANICS

- PS10.1 701 2D FLUID-STRUCTURE INTERACTION MODELING OF THE LEFT ATRIUM IMPACT OF MITRAL VALVE STIFFENING *Meskin, Masoud*
- PS10.2 756 AN IMPEDANCE PUMP FOR ASSISTING FAILING FONTAN CIRCULATION *Anatol, Joaquín*
- PS10.3 187 HEMODYNAMICS OF AN IDEALIZED MECHANICAL HEART VALVE PREDICTIONS BY FVM AND SPH *Laha, Sumanta*
- PS10.4 441 PATIENT-SPECIFIC SIMULATION AIMED AT EVALUATION OF THE NEOINTIMA GROWTH EFFECT ON ANASTOMOSIS HEMODYNAMICS *Ivanova, Yana*
- PS10.5 529 THE EFFECT OF STENT GRAFT CURVATURE ON MIGRATION RISK IN ABDOMINAL AORTIC ANEURYSM ENDOVASCULAR REPAIR *Brand, Moshe*

HARD TISSUE BIOMECHANICS

- PS10.6 373 CHARACTERISATION OF THE SPECIFIC GEOMETRIC ANISOTROPY OF TRABECULAR PLATES AND RODS *Rogalski, Nicolas*
- PS10.7 480 A PK-PD MODEL OF ALENDRONATE FOR THE TREATMENT OF POSTMENOPAUSAL OSTEOPOROSIS *Ruiz-Lozano, Rocío*
- PS10.8 503 POROSITY AND MATRIX MINERAL CONTENT DETERMINE THE VARIATION OF

TISSUE ENGINEERING

PS11.13 793 POROUS GEOMETRY OF TISSUE ENGINEERING SCAFFOLD INFLUENCES ITS INTERNAL MICROFLUIDIC ENVIRONMENT Bedding, Matthew Joshua Ashley

PS12

OCULAR BIOMECHANICS

- PS12.1 273 HOW REFRACTIVE POWER OF THE EYE MAY EFFECT THE CHANGE OF FOCUS Debowy, Fabian Krzysztof
- PS12.2 346 EFFECTS OF CORNEAL PRESERVATION ON THE MECHANICAL PROPERTIES OF PORCINE CORNEAS *Büchler, Philippe*
- PS12.3 392 ANALYSIS OF THE CILIARY MUSCLE MOVEMENT DURING ACCOMMODATION USING ARTIFICIAL INTELLIGENCE *Cabeza Gil, Iulen*

PATIENT-SPECIFIC MODELLING

- PS12.4 771 COMPUTATIONAL METHOD FOR EVALUATING FRACTURE-FIXATION STABILITY OF COMPLEX BONE FRACTURES *Comtesse, Simon*
- PS12.5 783 SIMULATING THE IMPACT OF DIABETIC FOOT INSOLES: A FINITE ELEMENT ANALYSIS

Sawacha, Zimi

- PS12.6 290 UNCERTAINTIES QUANTIFICATION ON ARTERIES RECONSTRUCTED FOR CORONARY STENT DEPLOYMENT SIMULATIONS *Antonini, Luca*
- PS12.7 475 BIOMECHANICAL MODELING OF THE ANOMALOUS AORTIC ORIGIN OF THE CORONARY ARTERY *Ceserani, Valentina*

Parente, Marco

- PS8.10 914 TOWARDS THE MEASUREMENT OF ELBOW JOINT FORCES IN MAN: A FINITE ELEMENT STUDY *Basiouny, Marim*
- PS8.11 402 A NOVEL METHOD FOR ARTIFICIAL INTELLIGENCE BASED GROUND REACTION FORCE MEASUREMENT FROM VIDEO *Templin, Tylan*
- PS8.12 472 HOW DO THE MUSCULOSKELETAL MODELING PARAMETERS AFFECT THE ESTIMATION OF THE TIBIOFEMORAL CONTACT FORCES? *Bernardes, Williane*
- PS8.13 599 PRIMITIVE-DRIVEN MUSCULOSKELETAL MODELLING OF HUMAN LOCOMOTION: TOWARDS MODEL-BASED CONTROL OF BIONIC LEGS *Damonte, Federica*
- PS8.14 614 EXPERIMENTAL AND NUMERICAL CHARACTERIZATION OF THE ACTIVE BEHAVIOUR OF MOUSE ROTATOR CUFF MUSCLES *Martins, Pedro*

COMPRESSION STRENGTH OF CORTICAL BONE FROM ELDERLY DONORS Grimal, Quentin

- PS10.9 624 HYDROXYAPATITE CRYSTAL THICKNESS AND ORIENTATION AT THE BONE IMPLANT INTERFACE: SPATIAL AND TEMPORAL EVOLUTIONS *Le Cann, Sophie*
- PS10.10862 CONCURRENT IMAGING AND DIFFRACTION OF TRABECULAR BONE CONSTRUCTS WITH IN SITU SCANNING AND COMPRESSION *Gupta, Himadri Shikhar*
- PS10.11978 A COARSE GRAINED MODEL OF MINERALISED COLLAGEN FIBRIL BIOMECHANICS: UNDERSTANDING THE ROLE EXTRAFIBRILLAR MINERALIZATION *Tavakol, Mehdi*
- PS10.12 211 EPIPHYSEAL BONE HEALING WITHIN CONTINUUM BONE REMODELING *Schmidt, Ina*
- PS10.13 268 BONE REMODELLING ALGORITHM. A VOXEL BASED APPROACH *Roces García, Jorge*
- PS10.14400 PRELIMINARY INVERSE ANALYSIS FOR CRACK PROPAGATION MECHANICAL PARAMETERS ON LONG HUMAN CORTICAL BONE *Kurtz, Théophile*

PS12.8 495 AN ULTRASOUND-BASED MODELING FRAMEWORK FOR THE ASSESSMENT OF PERIPHERAL ARTERIAL DISEASE *Gillissen, Milan*

SOFT TISSUE BIOMECHANICS

- PS12.9 735 EXPERIMENTAL PROCEDURE AND FINITE ELEMENT ANALYSIS TO MAP MECHANICAL CONSTITUTIVE PARAMETERS OF ARTIFICIAL MENISCUS *Marchiori, Gregorio*
- PS12.10878 EX-VIVO HUMAN TONGUE MUSCLE MECHANICAL CHARACTERIZATION *Nazari, Mohammad Ali*
- PS12.11 908 FINITE ELEMENT MODELING OF THE COUPLING BETWEEN THE EARCANAL AND THE TEMPOROMANDIBULAR JOINT *Demuynck, Michel*
- PS12.12 628 TRACHEOBRONCHIAL MATERIALS COMPUTATIONAL DEFINITION *Ruben, Rui B.*
- PS12.13656 HIS ANGLE, FOOD VISCOSITY AND LSG: HOW THEY AFFECT GASTROESOPHAGEAL REFLUX. A FLUID-STRUCTURE STUDY *Toniolo, Ilaria*

POSTERS OVERVIEW 27th Congress of the European Society of Biomechanics 26 - 29 June 2022, Porto, Portugal

29 June 2022

PS13 3D PRINTING IN BIOMEDICINE 3D-PRINTER ENABLING CUSTOMIZED ANATOMIC MODELS PS13.1 589 Jaksa, Laszlo **ADVANCE COMPUTING FOR BIOMECHANICS** A VIRTUAL LABORATORY FOR THE DETERMINATION OF MINIMAL FUSION PS13.2 537 **AREAS IN TIBIA PSEUDARTHROSIS** Roland, Michael GENERATIVE DESIGN OF ORTHOSIS FOR PATIENTS WITH DEGENERATIVE PS13.15198 SCOLIOSIS Landinez Leon, David Felipe

A VORONOI-BASED HOMOGENIZATION METHOD FOR TRABECULAR PS13.16483 MICROACHITECTURE BASED ON PATIENT-SPECIFIC MICRO-CT Li, Zeyang

BIOMATERIALS

- DEVELOPMENT OF SOL-GEL TIO2/HYDROXYAPATITE COMPOSITE PS13.3 865 OSTEOINDUCTIVE COATINGS Rodrigues, José
- LOW-COST METHODOLOGY FOR PVA PHANTOM MANUFACTURING AS SOFT PS13.4 578

C	AL AN	D TRANSLATIONAL BIOMECHANICS / IN SILICO TRIALS
	844	SILICO AND IN VITRO TESTS TO ASSESS MECHANICAL HEMOLYSIS IN HEMODIALYSIS CATHETERS <i>Guidetti, Ilaria</i>
)	973	VENTRICULAR SEPTAL DEFECT FROM IN SILICO STUDY TO CLINICAL PRACTICE BELGHITI <i>Belghiti Alaoui, Myriem</i>

DENTAL BIOMECHANICS

PS15

CLINI

PS15.1

PS15.2

- FRACTURE RESISTANCE OF ZIRCONIA REINFORCED LITHIUM SILICATE DENTAL PS15.3 375 **RESTORATIONS AFTER THERMOCYCLING** Vasiliu, Roxana Diana
- STRESS RELAXATION PHENOMENA IN POLYMERIC ORTHODONTIC LIGATURES PS15.4 900 Milewski, Grzegorz

ERGONOMICS / OCCUPATIONAL BIOMECHANICS / REHABILITATION

- DIABETIC SHOE UPPER PRESSURES: RESULTS OF A PROOF CONCEPT PS15.5 711 Martins, Pedro
- A THUMS BASED MULTIBODY MODEL FOR DRIVING SIMULATIONS WITH SEAT PS15.6 731 **INTERACTION**



PS17				
MUSCULOSKELETAL BIOMECHANICS				
PS17.1 780	THE RELATIVE BITE FORCE AND GAPE POTENTIAL OF PSITTACIFORMES <i>Dickinson, Edwin</i>			
PS17.2 950	BIOMECHANICAL ANALYSIS OF STRESS CHANGES IN MEDIAL ANKLE LIGAMENTS CAUSED BY ADULT ACQUIRED FLAFOOT DEFORMITY <i>Hinojosa Virviescas, Jorge Andrés</i>			
PS17.3 293	DEVELOPMENT OF A MUSCULOSKELETAL MODEL FOR THE DETERMINATION OF MUSCLE ACTIVITY IN THE HEALTHY SHOULDER <i>Bauer, Leandra</i>			
PS17.4 754	THE EFFECT OF SUBSTRATE SIZE ON GRIP AND PULL FORCES IN PARROTS <i>Dickinson, Edwin</i>			
PS17.5 310	MUSCLE TORQUE GENERATORS FOR DIGITAL HUMAN MODEL CONTROL - MEASUREMENT PROTOCOL FOR DATA AQUSITION <i>Obentheuer, Marius</i>			
PS17.6 485	NORMATIVE DATA SET OF THE KNEE EXTENSORS' RATE OF FORCE DEVELOPMENT USING A FIXED HAND-HELD DYNAMOMETER <i>Yona, Tomer</i>			

ENHANCING DYNAMIC CONSISTENCY OF MULTIMODAL MOTION DATA IN PS17.7 883 MUSCULOSKELETAL SIMULATION

TISSUE SIMULANT Miquélez Garrido, Beatriz

- PS13.5 322 CORROSION RESISTANCE OF THE GRADE 2 TITANIUM AFTER THERMOPLASTIC DEFORMATION Bańczerowski, Jakub
- DEVELOPMENT AND MODELLING OF FUNCTIONALLY GRADED BIOINSPIRED PS13.6 665 HIP IMPLANT IN REDUCING STRESS SHIELDING Chaozong, Liu

BIOMECHANICS OF MOVEMENT AND POSTURE

- PS13.7 777 DESIGN, DEVELOPMENT, AND TESTING OF A NOVEL WEARABLE DEVICE FOR **REHABILITATION AFTER ANKLE SPRAIN** Breitman, Nitzan
- PS13.8 759 EFFECTS OF BREATHING ON SPINE POSTURE AND STABILITY Tassani, S.
- MECHANICAL BEHAVIORS OF THE SACROILIAC JOINT PS13.9 265 Kwak, Dai-Soon
- CALIBRATION WAND DESIGN FOR MOTION ANALYSIS PS13.10685 Rácz, Kristóf
- PARROTS ACHIEVE GREATER MECHANICAL EFFICIENCY ON ARBOREAL PS13.11941 SUBSTRATES Young, Melody W.
- MUSCULOSKELETAL SOFTWARE FOR TEACHING BIOMECHANICS AT PS13.12169 UNDERGRADUATE AND MASTERS LEVEL Shippen, James

BIOMEDICAL IMAGING

PS13.13770 COLOR-DOPPLER BASED HEMODYNAMICS OF AORTIC PHANTOMS Antonuccio, Maria Nicole

Roller, Michael

- EVALUATION OF OPTIMAL PROCEDURES FOR MEDICAL STAFF HANDLING PS15.7 907 WITH PATIENTS IN NURSING CARE Horak, Zdenek
- PS15.8 868 ON THE PERFORMANCE OF CABLE-DRIVEN MOBILE LOWER LIMB **REHABILITATION EXOSKELETON: THREE VERSUS FOUR CABLES** Rich, Marwan El
- SOFT DESIGN FOR AN REHABILITATION EXOSUIT: A PRELIMINARY APPROACH PS15.9 195 André, António Diogo

EXPERIMENTAL BIOMECHANICS (OTHERS)

- PS15.10294 WHICH POSTERIOR SLOPE SHOULD BE USED WITHIN A MEDIAL STABILISED TKA DESIGNS: AN IN VITRO WEIGHT-BEARING KNEE RIG STUDY Woiczinski, Matthias
- A VISCOELASTOPLASTIC MODEL TO INTERPRET DENTAL CEMENTS RESPONSE PS15.12856 TO A NANOINDENTATION TEST Serino, Gianpaolo
- FINITE ELEMENT ANALYSIS OF MECHANICAL BEHAVIOR OF A JAW PLATE PS15.13564 **DURING THE IMPLANT BIODEGRADATION PROCESS** Ansoms, Pieter

PS16

HARD TISSUE BIOMECHANICS

- PREDICTING FRACTURE LOCALIZATION IN TRABECULAR BONE PS16.1 829 Pani, Martino
- AGE AT DEATH ESTIMATION BASED ON BONE TISSUE PROPERTIES BEFORE PS16.2 870 AND AFTER SKELETAL MATURITY Zioupos, Peter

IMPACT / INJURY BIOMECHANICS

Wechsler, Iris

- ESTIMATION OF THE FREE ENERGY BARRIER OF THE STEP OF PI RELEASE IN PS17.8 956 **MYOSIN VI CYCLE** Manevy, Robin
- KNEE EXTENSORS' RATE OF FORCE DEVELOPMENT MEASUREMENT USING A PS17.9 484 HAND-HELD DYNAMOMETER AND A 3D PRINTED ADAPTER Yona, Tomer
- MONITORING LOWER LIMB ASYMMETRY DURING REHABILITATION OF ACL PS17.10633 **RECONSTRUCTED PATIENTS USING DINABANG DEVICE** Santos, Dario
- PS17.11279 A PROCEDURE TO PERSONALIZE A MUSCLE FATIGUE MODEL FOR SOLVING THE MUSCLE RECRUITMENT PROBLEM Michaud, Florian
- COMPARING THE EFFICIENCY AND ACCURACY OF SEVERAL CONTACT PS17.12286 METHODS FOR HUMAN-ENVIRONMENT INTERACTION Mouzo, Francisco
- PS17.13639 AN INNOVATIVE APPROACH TO INVESTIGATE THE TIBIOFEMORAL ELASTICITY **DURING GAIT WITH IN-VIVO 3D COMPLIANCE MATRIXES** Martelli, Saulo

NEUROMUSCULAR CONTROL

DIFFERENT MUSCLE EXCITATION PATTERNS AND MODEL-BASED MUSCLE PS17.14890 FORCES IN PARKINSON'S DISEASE Romanato, Marco

PS18

OCULAR BIOMECHANICS

PS18.1 873 CORNEAL STIFFNESS – IMPORTANT PARAMETER IN INTRAOCULAR PRESSURE MEASUREMENT Hučko, Branislav

RELIABILITY ANALYSIS OF MAGNETIC RESONANCE MEASUREMENTS OF PS13.14746 FATTY INFILTRATION IN ADULTS WITH SPINAL DEFORMITIES Beaucage-Gauvreau, Erica

PS14

CARDIOVASCULAR BIOMECHANICS

- FLUID-STRUCTURE INTERACTION ANALYSES OF BLOOD FLOWS IN LARGE PS14.1 910 ARTERIES Jodko, Daniel
- TRILEAFLET VS BILEAFLET MECHANICAL AORTIC VALVE ASSESSMENT OF PS14.2 232 THEIR BLOOD ANTICOAGULATION PERFORMANCE Nieroda, Anna
- ADHESION PROPERTIES OF A MONOLAYER OF ENDOTHELIAL CELLS ON PS14.3 476 MICROFLUIDICS DEVICES Peña, Estefania
- A NOVEL FSI FRAMEWORK FOR HIGH-FIDELITY SIMULATION OF PS14.4 376 HEMODYNAMICS IN INTRACRANIAL ANEURYSMS Goetz, Aurèle
- ANALYSIS OF THE INFLUENCE OF THE ARTERIAL WALL MECHANICS IN A PS14.5 511 MECHANOBIOLOGICAL MODEL OF ATHEROSCLEROSIS Hernández-López, Patricia
- A NEW TECHNIQUE OF RECONSTRUCTING 3D GEOMETRIES FROM CT IMAGES PS14.6 705 - A CFD STUDY Meskin, Masoud
- A FLUID-STRUCTURE INTERACTION APPROACH FOR PATIENT-SPECIFIC PS14.7 931 THORACIC AORTIC WALL STRESS ANALYSIS USING SIMVASCULAR Valente, Rodrigo Baptista

CELLULAR AND MOLECULAR BIOMECHANICS / MECHANOBIOLOGY

PS16.4 896 ANALYSIS OF EYE LOAD DURING BALL IMPACT Bacova, Tereza

IMPLANTS / ORTHOTICS / PROSTHETICS / DEVICES

- MEASURING SPINAL ROD FORCES FOR SCOLIOSIS AND/ OR FRACTURE PS16.5 906 **FIXATION IN VIVO** Mangaleshwaran, Meera
- DESIGN AND TRANSLATION OF A MODULAR HIP IMPLANT DEVICE FOR SOFT PS16.6 991 TISSUE TENSION AND MOTION TRACKING EVALUATED IN A SHEEP MODEL **DURING HIP ARTHROPLASTY** Wei, Jonathan CJ
- MECHANICAL PROPERTIES OF GYROID UNIT CELLS FOR BIOMEDICAL PS16.7 426 APPLICATIONS Pais, Ana
- A PROTOCOL FOR EVALUATING HAND PROSTESIS CONTROL PS16.8 772 Llop Harillo, Immaculada
- NUMERICAL STUDY FOR PRIMARY STABILITY ASSESSMENT IN PS16.9 267 **OSSEOINTEGRATED TRANSFEMORAL PROSTHESES** Mirulla, Agostino Igor
- NUMERICAL APPROACH TO IMPROVE SOCKET-LINER SYSTEM USING PS16.10335 TAILORABLE 3D PRINTED METAMATERIALS Plesec, Vasja

SOFT TISSUE BIOMECHANICS

- ANALYSIS OF THE EFFECT OF SKINFOLD THICKNESS ON MYOTONOMETRIC PS16.11714 SIGNAL CHARACTERISTICS Banerjee, Shib Sundar
- STUDY OF TORSIONAL WAVE BEHAVIOR DUE TO DEPTH CHANGE IN PS16.12961

PATIENT-SPECIFIC MODELLING

- EFFECT OF SUBJECT-SPECIFIC MASS DISTRIBUTION ON JOINT PS18.2 675 **BIOMECHANICS DURING GAIT** El Rich, Marwan
- INFLUENCE OF MODIFIED MUSCULOSKELETAL MODEL ON THE HIP LOADING PS18.3 679 IN CEREBRAL PALSY PATIENT Piszczatowski, Szczepan
- PATIENT-SPECIFIC DESIGN OF HIGH TIBIAL OSTEOTOMY PLATES USING PS18.4 688 DENSITOMETRIC CALIBRATION Chowdhury, Shafath
- MECHANICAL FRACTURE ENVIRONMENT IN LOWER EXTREMITY NON-PS18.7 543 UNIONS - AN INDIVIDUALIZED SIMULATION-BASED STUDY Andres, Annchristin
- MORPHOLOGICAL AND HAEMODYNAMIC CHARACTERISATON OF TURNER PS18.8 796 SYNDROME AORTAE Johnston, Lauren

ROBOTS AND BIOMECHANICS

THE FEASIBILITY OF BESPOKE REHABILITATION ROBOT HANDGRIPS TO MEET PS18.9 343 THE SPECIFIC NEEDS OF STROKE PATIENTS Li, Lutong

SPINE BIOMECHANICS

- IN VITRO STUDY OF THE INFLUENCE OF VERTEBRAE GEOMETRY ON THE PS18.10808 BEHAVIOUR OF LUMBAR ARTHROPLASTY PROSTHESES Zot, François
- PS18.11816 INTRA-OPERATIVE MEASUREMENT OF THE SPINE: TOWARDS IN VIVO

- IN SILICO ULTRASOUND STIMULATION OF OSTEOCYTE IN BONE LACUNO-PS14.8 550 CANALICULAR NETWORK Baron, Cécile
- PS14.10250 ACOUSTIC LENS DESIGN FOR IN-VITRO CELL STIMULATION: A NUMERICAL STUDY Doveri, Elise
- COMPUTATIONAL MODELLING OF CELL RESPONSE TO VARIOUS MECHANICAL PS14.11755 STIMULI Orlova, Lucie
- CLOSED-LOOP BIAXIAL CELL STRETCHING SYSTEM FOR CONTROLLING CELL PS14.12411 MECHANO-TRANSDUCTION PROCESSES Crimaldi, Luigi
- COMPARISON OF DIFFERENT TENSEGRITY MODELS OF THE LIVING CELL PS14.13 389 UNDERGOING COMPRESSION Arduino, Alessandro

HYDROGEL PHANTOMS Shamimi Noori, Hirad

DETERMINING TIP RADIUS IN AFM NANOINDENTATION PS16.13611 Stylianou, Andreas

BIOMECHANICAL DATA OF PATIENTS WITH IDIOPATHIC ADOLESCENT SCOLIOSIS Erb, Felix

SPORT BIOMECHANICS

PS18.13 792 A METHODOLOGY TO DETERMINE THE EFFECTS OF THE PITCHER-GROUND INTERACTION ON FASTBALL PITCH VELOCITY Tuttle, Noelle

THE EFFECT OF CRYOTHERAPY ON BALANCE RECOVERY AT DIFFERENT PS18.14440 MOMENTS AFTER LOWER EXTREMITY MUSCLE FATIGUE He, Yuqi