

Tuesday, June 9 and Wednesday June10, 2015

P1	<b>Using a Computer-Assisted and Robot-guided Laser Osteotome (CARLO) in bone surgery - considerations on ergonomics, system accuracy and biological response</b> <i>M. Augello, K.W. Beck, P. Cattin, A. Bruno, P. Jürgens</i>
P2	<b>The ceramic ZircaPore® implant surface - in vitro / in vivo experiences</b> <i>F. Berghänel, C. Strehler</i>
P3	<b>Tribo-electrochemical wear resistance against bone of biomedical alloys</b> <i>A Bermúdez, A Esguerra-Arce, J. Esguerra-Arce, S Mischler</i>
P4	<b>Development of an extracellular matrix (ECM)-mimetic nanoparticle-based platform to deliver growth factors for inner ear regeneration</b> <i>P.S. Briquez, A. de Titta, C. Takeda, J.A. Hubbell</i>
P5	<b>Understanding shear-stress sensitive nano-containers for targeted drug delivery</b> <i>M. Buscema, A. Zumbuehl, T. Pfohl, F. Porta, J. Huwyler, B. Müller</i>
P6	<b>Density improvement of selective laser melting titanium structures for regenerative medicine</b> <i>P. Chavanne, O. Bill, R. Schumacher</i>
P7	<b>Automatic matching of grating-based phase tomography dataset with histology</b> <i>N. Chicherova, P.C. Cattin, G. Schulz, K. Fundana, B. Müller, S.E. Hieber</i>
P8	<b>Encapsulation of adipose-derived stem cells in fibrin gels for transplantation at a nerve injury site</b> <i>A.C. de Luca, P.G. di Summa, W. Raffoul, S.P. Lacour</i>
P9	<b>Micro computed tomography for the investigation of tooth hard tissues</b> <i>H. Deyhle, P. Thalmann, I. Dziadowiec, F. Beckmann, G. Schulz, B. Müller</i>
P10	<b>Division-linked phenotypic changes and chondrogenic potential of chondrocytes</b> <i>R. Duhr, I. Martin, D. Wendt</i>
P11	<b>Fretting corrosion of coatings against bone</b> <i>J. Esguerra-Arce, A. Esguerra-Arce, S. Mischler, Y. Aguilar, O. Gutiérrez</i>
P12	<b>Optimization of fibrin gels for cell encapsulation.</b> <i>C Fonta, AC de Luca, SP Lacour</i>
P13	<b>Silk membrane-fleece in combination with genipin-enhanced fibrin hydrogel for annulus fibrosus repair</b> <i>D.A. Frauchiger, S.C.W. Chan, L.M. Benneker, B. Gantebein</i>
P14	<b>Absorption-based micro computed tomography measurements of a human knee joint</b> <i>C. Götz, H. Deyhle, M. Müller-Gerbl, B. Müller, G. Schulz</i>
P15	<b>Enhanced blood coagulation on ceramic versus titanium implant surfaces</b> <i>S. Guimond, M. Rottmar, U. Tobler, S. Berner, K. Maniura-Weber</i>
P16	<b>Effect of a mechanical loading coupled with cell therapy in a bone tissue-engineering scaffold</b> <i>T.C. Hausherr, L.A. Applegate, D.P. Pioletti</i>
P17	<b>Three-dimensional imaging of brain tissue by grating-based micro computed tomography using synchrotron radiation</b> <i>S.E. Hieber, C.N. Bikis, A. Khimchenko, G. Schulz, G. Schweighauser, J. Hench, B. Müller</i>
P18	<b>Development of a novel tissue culture model for degenerative disc disease</b> <i>M. Hlavna, S. Zollinger, K. Wuertz</i>
P19	<b>Preparation of zonal cartilage equivalents via bioprinting technology</b> <i>E. Hoch, A. Weber, T. Hirth, G.E.M. Tovar, K. Borchers</i>
P20	<b>Energy shift of the pink beam at the beamline ID19 measured with a grating interferometer and a liquid phantom</b> <i>A. Khimchenko, B. Müller, G. Schulz</i>
P21	<b>Dental caries: Biomimetic treatment and tooth model development</b> <i>L. Kind, C. Mangeng, S. Stevanovic, B. Bellon, S. Winkler, U. Pieves</i>

P22	<b>A new <i>in vivo</i> MRI method to non-invasively monitor and quantify the perfusion capacity of 3D-biomaterials grown on the chorioallantoic membrane of chick embryos</b> <i>F. Kivrak Pfiffner, C. Waschkes, Y. Tian, A. Woloszyk, M. Calcagn, P. Giovanoli, M. Rudin, J. Buschmann</i>
P23	<b>A new light comes up in the world of periodontal therapy- P11 peptides and their <i>in vitro</i> evaluation on human hard and soft tissue cells</b> <i>F. Koch, U. Pieles, S. Mathes, U. Graf</i>
P24	<b>Comparing vascular casts of murine kidneys with and without tissue corrosion</b> <i>W. Kuo, P. Thalmann, G. Schulz, A. Marmaras, E.P. Meyer, A. Lang, S.E. Hieber, U. Olgaç, B. Müller, V. Kurtcuoglu</i>
P25	<b>Development of methodology for nanoindentation testing of cartilage of rats</b> <i>C Lavet, I Badoud-Georges, J Nohava, P Ammann</i>
P26	<b>The effect of bleaching agents on the surface hardness and biological test upon composite materials</b> <i>M Moldovan, C Prejmorean, V Popescu, I Cojocar, C. Saroşil, D.Prodan, I.Baldea</i>
P27	<b>Probing cell-matrix interactions in RGD-decorated macroporous PEG hydrogels for <i>in vitro</i> chondrocyte culture</b> <i>JJ Zhang, A Mujeeb Y Du, Z Gel</i>
P28	<b>Amido, urea and thiourea ethanalamine monolayers</b> <i>D. Mueller, A. Zumbuehl</i>
P29	<b>Nanomechanical characterization of polydimethylsiloxane films</b> <i>B. Osmani, T. Töpfer, F. Weiss, F. Wohlfender, V. Leung, C. Bippes, B. Müller</i>
P30	<b>Bioprinting of three-dimensional sulfated polysaccharide structures for local growth factors delivery</b> <i>G. Pagliccia, M. Kest, F. Formica, G. Gelardi, M. Zenobi-Wong</i>
P31	<b>A method compensating for ICP-MS signal instabilities to accurately determine calcium phosphate</b> <i>D Pasche, C Stähli, N Döbelin, M Bohner</i>
P32	<b>Interaction of ultra-high purity magnesium with artificial body fluids for biodegradable implant applications</b> <i>M. Pawelkiewicz, L. Leoty, A. Bruinink, P. Uggowitzer, P. Schmutz</i>
P33	<b>Age-related biomechanical changes in articular cartilage and osteoarthritis</b> <i>P.R. Moshtagh, A.A. Zadpoor, N. Korthagen, H. Weinans</i>
P34	<b>Hydrophobicity of PDMS affects collagen I assembly, stem cell early signaling events and osteogenic differentiation – an underappreciated confounding factor</b> <i>T. Razafiarison, J.G. Snedeker</i>
P35	<b>Novel synthetic surfaces to study stem cell receptors &amp; signaling</b> <i>M. Rusch, L.C. Bouchez</i>
P36	<b>Long-term effects of knitted silk-collagen sponge scaffold on anteriorcruciate ligament reconstruction and osteoarthritis prevention</b> <i>W.Shen, D.Pioletti, Hong-Wei Ouyang</i>
P37	<b>The effects of age on bone implant integration: <i>in vivo</i> monitoring in a rat model</b> <i>V.A. Stadelmann, C. Guenther, U. Eberli, K. Camenisch, S. Zeiter</i>
P38	<b>Phosphate Test 2.0 - A high throughput, hands-off approach using microwave chemical digestion</b> <i>E. Stalder, A. Zumbuehl</i>
P39	<b>Searching the counterpart of histology in micro tomography data to approach the regenerative capacity of bone grafting materials</b> <i>A.K. Stalder, B. Ilgenstein, S.E. Hieber, B. Müller</i>
P40	<b>Nucleus pulposus contain progenitor-like cells able to differentiate into osteogenic and adipogenic lineages <i>in vitro</i></b> <i>A. Tekari, S.C.W. Chan, D.A. Frauchiger, K. Wuertz, D. Sakai, L.M. Benneker, S. Grad, B. Gantenbein</i>
P41	<b>Combination of micro computed tomography and histology for the investigation of bone grafting</b> <i>P. Thalmann, A.K. Stalder, B. Ilgenstein, N. Chicherova, H. Deyhle, F. Beckmann,</i>

	<i>B. Müller, S.E. Hieber</i>
<b>P42</b>	<b>Viscoelastic properties of polydimethylsiloxane studied by cantilever bending</b> <i>T. Töpfer, B. Osmani, F. Weiss, B. Müller</i>
<b>P43</b>	<b>Surface treatment of polyetherketoneketone for load-bearing implants</b> <i>P. Urwyler, A. Pascual, H. Schift, B. Müller</i>
<b>P44</b>	<b>Incompatibility of dental alloys: Evaluation by ec-pen corrosion measurements</b> <i>F.M. Weiss, F. Schmidli, M. Jungo, B. Müller</i>
<b>P45</b>	<b>Novel model to study intervertebral disc degeneration under simulated microgravity condition</b> <i>S.L. Wuest, M. Horn, R. Baumann, M.Egli</i>
<b>P46</b>	<b>A novel method for <i>in vitro</i> evaluation of apatite forming ability of chemically treated titanium metals</b> <i>W. Zhao, J. Lemaître, P. Bowen</i>
<b>P47</b>	<b>Synthesis and characterization of hyaluronan amphiphilic derivatives for biomedical applications</b> <i>D. Petta, D. Eglin, D.W. Grijpma, M. D'Este</i>
<b>P48</b>	<b>Improvement of mechanical properties of 3D printed hydroxyapatite scaffolds by culture of osteoblast-like cells under perfusion flow</b> <i>N. Rimmer, F. Burgio, A. Rohner, P. Chavanne, S. Zimmermann, P. Gruner, R. Schumacher, M. de Wild, A Papadimitropoulos, I. Martin, M. Beaufils-Hugot, U. Piele</i>